Amy Phenix
Harry M. Hoberman *Editors*

Sexual Offending

Predisposing Antecedents, Assessments and Management

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Preface

Sexual offending is a profound international problem that wreaks havoc on the lives of far too many persons. The Association for the Treatment of Sexual Abusers (ATSA) in policy papers from May 2011 provided a perspective of sexual assault as a public health problem. Over 20 years ago, in 1995, the American Medical Association declared sexual abuse a "silent-violent epidemic;" clearly it remains one today. Close to 20 % of women and 6 % of males have reported the experience of coerced sex at some time in their lives, with a significant majority of those victims being sexually assaulted prior to age 18. Sexual offending of both adults and children is known to increase the risk of a wide range of medical and psychosocial issues for those who are its victims, including depression, substance abuse, posttraumatic stress disorder suicide attempts, maladaptive personality traits and disorders as well as physical injuries, sexually transmitted diseases, and risky sexual behavior. Secondary victims of sexual offending include family members and friends who are also often traumatized themselves when a loved one is victimized by sexual assault.

Significant scientific progress has been made in the past 20 years regarding the nature of sexual offending, particularly reoffending, and the bases for principles and practices of both evaluating and intervening to reduce the frequency and impact of sexual offending. Some regard the progress to date as a glass half-empty, while others as one half-full. The intent of this book on sexual offending is to offer a range of perspectives on multiple and important aspects of the predisposing conditions of this particular form of violent offending as well as to offer viewpoints and guidelines on a diversity of assessment practices and management issues, as well as on special populations of sexual offenders. In addition, relative to many books in the field of sexual offending, this book was informed by the decision to provide chapters authored both by well-known figures in the field of sexual offending and also by experienced, knowledgeable professionals who provide services regarding sexual offenders in their daily practice in the field but who committed to providing state-of-the-art reviews and discussions of relevant topics regarding sexual offending. We sought to include a unique breadth of chapter topics that would provide an updated, exceptional viewpoint on aspects of sexual offending, including some not addressed by other books in the field. In all of these ways, we sought to develop a volume that would be informative and useful to the great majority of the varied and increasing types of professionals—practitioners, advocates, and policymakers involved in addressing the pressing and persisting problem of sexual offending.

We hope that this book can play some role in the reduction or even prevention of sexual violence by informing and enhancing both practice and policy in the field of sexual offending.

Morro Bay, CA, USA — Amy Phenix
Wayzata, MN, USA — Harry M. Hoberman

Acknowledgments

I would like to acknowledge the large number of truly special professional friends and acquaintances who have been constant or intermittent sources of support, information, argument, and constructive feedback on my professional endeavors through the years. It is a blessing to be part of such a generous professional community that accepts and encourages critical thinking and striving to do one's best work. In particular, I thank my friends Jim and Michael for many things.

I would like to dedicate this book specifically to Dawn Koehler, as well as to my children, whose endless patience, support, and understanding during the 5+ years it took to bring this project to fruition is so greatly appreciated. Hopefully, one day each of you will have a genuine mental image of me that is something other than one of sitting at a desk reading research articles, reviewing records, or writing at the computer. It is already clear that each of you has already or will soon succeed in enacting distinctive lives of character, achievement, and amusement. All of you have enriched my life far beyond my expectations, and I thank each of you for your love, which means the world to me.

Harry M. Hoberman

I would like to express great appreciation to my husband, Doug Epperson, for his tireless support for my personal and professional endeavors.

Amy Phenix

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Author Bios

Dale Arnold, Ph.D., is currently assigned to the Forensic Services Division of the California Department of State Hospitals. He also maintains a part-time private practice in Pismo Beach, California, and has 19 years experience in the evaluation and treatment of sexual offenders in a variety of settings. In addition, Dr. Arnold has provided education and training in the evaluation and treatment of sexual offenders to forensic examiners and attorneys alike. His area of interest is the application of empirical findings to contemporary sexual offender risk assessment methodology.

Kelly M. Babchishin, Ph.D., received her doctorate in Experimental Psychology from Carleton University (Ottawa, Canada) in 2013. She is currently completing a Banting postdoctoral fellowship (Canadian Institutes of Mental Health Research) with the University of Ottawa Institute of Mental Health Research and the Department of Epidemiology and Biostatistics, the Karolinska Institute Department of Medical Epidemiology and Biostatistics in Sweden. Her current research involves identifying causal candidates for the onset of sexual offending behaviours. Other research interests include change in sexual offending behaviours across the lifespan, pedophilia, and online sexual offenders. She has authored 31 articles in peer-reviewed journals. In 2015, she was appointed as an Editorial board member of *Sexual Abuse: A Journal of Research and Treatment*.

Judith V. Becker, Ph.D., is a professor of psychology at the University of Arizona. She has held her position at the University of Arizona since 1990 and previous to that she was a professor at the University of Tennessee Medical School and Columbia University, College of Physicians and Surgeons. She is a past president of the Association of Treatment for Sexual Abusers and the International Academy of Sex Research. She has published over 100 articles in peer-reviewed journals in addition to numerous book chapters. She is also a coauthor of two books *Treating Sex Offenders: An Evidence-Based Manual* (2012) and *Sex Offending: Causal Theories to Inform Research, Prevention, and Treatment* (2008). She has given numerous talks both nationally and internationally. Her current research interests include juvenile and adult sex offending prevention, assessment, treatment, and diagnosis as well as issues related to forensic psychology and sex offending in general. She is an instructor of courses including Abnormal Psychology, Child Abuse and Neglect, Forensic Psychology, and Forensic Assessment. She has also been working as a clinician in the field of forensic psychology since 1975 where she has engaged in the treatment and assessment of forensic populations in addition to serving as an expert witness. Over the course of her career, she has been the recipient of research funding to assess and treat both perpetrators of sexual violence and victims of sexual abuse/violence/assault.

Anthony Beech, D.Phil., F.B.Ps.S., C.Psychol., is the Head of the Centre for Forensic and Criminological Psychology at the University of Birmingham, UK. He has authored over 160 peer-reviewed articles, 50 book chapters, and authored/edited seven books in the area of forensic science/criminal justice. His particular areas of research interests are improving risk assess-

ment, exploring the neurobiological bases of offending, reducing online exploitation of children, and increasing psychotherapeutic effectiveness of the treatment given to offenders. In 2009, he received the Significant Achievement Award from the Association for the Treatment of Sexual Abusers in Dallas, Texas, and the Senior Award from the Division of Forensic Psychology, British Psychological Society, for recognition of his work in this area.

Gerry D. Blasingame, Psy.D., is a licensed marriage and family therapist specializing in the family violence field. He has worked with persons with various developmental disabilities for over 20 years. He has written several articles, chapters, and books involving assessment and treatment of persons with intellectual and other developmental disabilities who have sexual problems or offending behaviors.

Brooke E. Burbank, J.D., graduated from Colorado College with a B.A. in Studio Art. She received a J.D. from Northeastern University School of Law in Boston, Massachusetts, in 1996. She began work at the King County Prosecuting Attorney's Office, in Seattle, WA, immediately after graduation and was a Senior Deputy Prosecuting Attorney until February 2008, prosecuting offenders in several felony units, including the Domestic Violence Unit and the Special Assault Unit. From 2001 to 2008, she worked in the SVP unit, civilly committing dangerous sexual offenders. She joined the Office of the Attorney General in February of 2008, where she managed the 21-member unit responsible for civilly committing sexual predators in the State of Washington from 2008 to 2013. She is currently handling appellate matters for the Office of the Attorney General.

Franca Cortoni a clinical and forensic psychologist, is Associate Professor at the School of Criminology of the Université de Montréal and Research Fellow at the International Centre of Comparative Criminology. Since 1989, she has worked with and conducted research on male and female sexual offenders. Dr. Cortoni has published extensively and made numerous presentations at national and international conferences on both male and female sexual offender issues. Among others, she has coedited a book on female sexual offenders and a book on criminal violence (in French). Dr. Cortoni is Associate Editor for *Sexual Abuse: A Journal of Research and Treatment* and a member of the editorial board of the *Journal of Sexual Aggression*.

Marianne Davis, Ph.D., is a forensic psychologist employed by the California Department of State Hospitals as a Sexually Violent Predator Evaluator. Prior to becoming a State employee, she was in private practice and on the evaluator panel for the California Department of Mental Health's Sex Offender Commitment Program, performing sexually violent predator evaluations. The majority of her current forensic work focuses on the assessment of sex offenders. She has also worked in a correctional setting, assessing risk for violence in inmates serving indeterminate sentences, and at the Center for Forensic Psychiatry in Ann Arbor, Michigan, performing pretrial evaluations of criminal defendants. She obtained her doctoral degree from the University of Missouri, Columbia, in 1996.

Grant Duwe is Director of Research for the Minnesota Department of Corrections, where he conducts program evaluations, forecasts the state's prison population, and develops risk assessment instruments. His recent work has been published in Journal of Offender Rehabilitation, Journal of Sexual Aggression, Journal of Criminal Justice, and Criminal Justice Policy Review.

Kim English, M.S., is the Director of the Office of Research and Statistics in the Division of Criminal Justice, Colorado Department of Public Safety. Her responsibilities include forecasting adult prison and juvenile commitment populations, developing actuarial scales for use by the parole board and the identification of sexually violent predators, analyzing parole board decision-making, and conducting program evaluations and policy analyses as directed by the

General Assembly and the governor's office. Ms. English has been the principal investigator on a number of studies funded by the National Institute of Justice, including two studies of probation and parole management practices pertaining to adult sexual offenders. She coauthored "Managing Adult Sex Offenders in Community Settings: A Containment Approach," published by the American Probation and Parole Association. She has consulted for the National Institute of Justice, the National Governor's Association, the National Institute of Corrections, the Center for Sex Offender Management, and the Office of Juvenile Justice and Delinquency Prevention. She is currently a member of the National Academies of Sciences' panel to modernize the nation's crime statistics.

Douglas L. Epperson, Ph.D., is Professor of Psychology and Dean of the College of Liberal Arts at California Polytechnic State University in San Luis Obispo, California. He received his Ph.D. degree in psychology from The Ohio State University, and he is a licensed psychologist and a Fellow of the American Psychological Association's Society of Counseling Psychology. Dr. Epperson was the lead developer and author of two empirically developed and validated sexual offender risk assessment tools: the *Minnesota Sex Offender Screening Tool—Revised (MnSOST-R)*, and the *Juvenile Sexual Offense Recidivism Risk Assessment Tool—II (JSORRAT-II).* He has served as a consultant or trainer on risk assessment for many state departments of corrections and divisions of juvenile justice.

Stephanie Fisher, Ph.D., received her doctorate in clinical psychology from the Victoria University in Wellington, New Zealand. Her dissertation addressed how views of offenders impact on punishment and rehabilitation decisions. After graduation, she is a clinical psychologist in New Zealand**.**

Pamela Freske, Ph.D., A.B.P.P., L.P., is a licensed psychologist employed by the Minnesota Department of Corrections (MN DOC) since 2004. Dr. Freske earned her Ph.D. in Clinical Psychology at Washington State University and has worked in the Minnesota Correctional Facility—Lino Lakes Sex Offender Treatment Program, the MN DOC Risk Assessment/ Community Notification Unit, and the MN DOC Behavioral Health Services. She is Board Certified in Clinical Psychology and is currently Associate Director of Behavioral Health. Dr. Freske has served as cochair of the Minnesota Association for the Treatment of Sexual Abusers (MnATSA) conference committee for the past 2 years and is a member of the MnATSA Board of Directors. She also serves on the Minnesota Psychological Association's (MPA) ethics committee.

Robert Friedman an attorney, is the agency head of Capital Collateral Regional Counsel—North in Tallahassee, Florida. His office represents death-sentenced inmates in their state and federal capital post-conviction proceedings.

Theresa A. Gannon, D.Phil., C.Psychol. (Forensic), is Professor of Forensic Psychology and Director of the Centre for Research and Education in Forensic Psychology (CORE-FP) at the University of Kent, UK. Theresa also works as a Practitioner Consultant Forensic Psychologist specializing in sexual offenders and firesetters for Kent Forensic Psychiatry Services, UK.

Theresa has published over 100 chapters, articles, books, and other scholarly works in the areas of male- and female-perpetrated sexual offending. She is particularly interested in research relating to both the treatment needs and overall supervision of sexual offenders. This includes offense-related cognition and emotion, rehabilitation models (i.e., the Good Lives Model), offense-process models of offending behavior, polygraph-assisted supervision and truth facilitation, and attitudes toward offenders. Theresa is lead editor of several books including *Aggressive Offenders' Cognition: Theory, Research, and Treatment* (John Wiley) along with Professor Tony Ward, Professor Anthony Beech, and Dr. Dawn Fisher and *Female Sexual Offenders: Theory, Assessment and Treatment* (Wiley-Blackwell) along with Dr. Franca Cortoni. Theresa is also coeditor of several books that discuss or integrate sexual offending

with other forensic topics and psychological factors including *Public Opinion and Criminal Justice* (Willan) along with Dr. Jane Wood, *Crime and Crime Reduction: The Importance of Group Processes* (Routledge) along with Dr. Wood, and *What Works in Offender Rehabilitation: An Evidence-Based Approach to Assessment and Treatment* (Wiley-Blackwell) along with Professor Leam Craig and Dr. Louise Dixon.

Theresa serves on the editorial boards of several journals including *Aggression and Violent Behavior*, *British Journal of Forensic Practice, International Journal of Offender Therapy and Comparative Criminology,* and *Sexual Abuse: A Journal of Research and Treatment.* Theresa is also Editor of *Psychology Crime and Law.*

Leslie J. Garrison, J.D., is a 1988 graduate from the University of Oregon School of Law. She holds a B.A. in Sociology with a focus on Criminology. Ms. Garrison began her legal career at The Defender Association in Seattle, Washington, where she practiced in the areas of misdemeanors, felonies, and traditional mental health commitment. She initially began representing men detained pursuant to Washington's sexually violent predator law in 1992. In 1998, her work focused solely on sexually violent predator cases. She supervised the Sex Offender Commitment division at The Defender Association from 2001 to 2011. In 2011, Ms. Garrison and three former public defenders formed Odyssey Law Group, PLLC, which handles exclusively sexually violent predator cases.

Ms. Garrison has expanded her practice and now handles collaborative and traditional family law matters in addition to her work with Odyssey Law Group, PLLC. Ms. Garrison has served on the Washington Pattern Instruction Committee—subcommittee for sexually violent predator jury instruction, the training committee for Washington's sexually violent predator Joint Forensic Unit, the Judicial Screening Committee of the King County Bar, and the Juvenile Court Steering Committee—and served as an Adjunct Disciplinary Counsel for the Washington State Bar Association. She has presented at numerous Continuing Legal Education programs for attorneys and judges pertaining to civil commitment of sex offenders.

R. Karl Hanson, Ph.D., C.Psych., is one of the leading researchers in the field of sexual offender risk assessment and treatment. Originally trained as a clinical psychologist, he spent several years providing direct service to offenders before starting a research position with the Canadian Federal Government (Public Safety Canada). His mandate has been to advance policy-relevant knowledge concerning the assessment and treatment of offenders. Most of his research has focused on sexual offenders, with a secondary interest in men who have been physically abusive to their intimate partners. He has published more than 150 articles, including several highly influential reviews, and has developed the most widely used risk assessment tools for sexual offenders (Static-99R, Static-2002R, and STABLE-2007). He is a Fellow of the Canadian Psychological Association and the 2002 recipient of Significant Achievement Award from the Association for the Treatment of Sexual Offenders.

Andrew J. Harris, Ph.D., is Associate Dean for Research and Graduate Programs in the College of Fine Arts, Humanities, and Social Sciences and Associate Professor of Criminology and Justice Studies at the University of Massachusetts Lowell. He received his doctorate in public administration from New York University's Robert F. Wagner School of Public Service and holds a Master of Public Policy and Administration from Columbia University. Before his academic career, Dr. Harris spent more than 16 years developing and managing criminal justice and human service policies and programs in New York City and Massachusetts. He has served as a consultant to state policy boards, public behavioral health agencies, community-based service providers, and state and municipal correctional systems on issues related to mental health populations and the criminal justice system. He has written and conducted policy research in the areas of substance abuse, behavioral health, prisoner reentry, correctional health care, and sex offender management.

Grant T. Harris was adjunct associate professor of psychology at Queen's University in Kingston, Ontario, and adjunct professor of psychiatry at the University of Toronto. He was a Fellow of the Canadian Psychological Association and received the Career Contribution Award from its Criminal Justice Section. Dr. Harris published over 170 scholarly works on the topics of violence risk assessment, psychopathy, sexual aggression, and the assessment and treatment of offenders and psychiatric clients. Sadly, Dr. Harris died of a massive stroke in October 2014.

Margaret Peggy Heil is a licensed clinical social worker. She is currently employed at the Colorado Division of Criminal Justice, Office of Research and Statistics. She has over 25 years' experience administering behavioral health programs in corrections and has provided training and consultation in sex offender treatment and management. Her prior experience also includes participating as a therapist representative on the Colorado Sex Offender Management Board and an executive board member for the Association for the Treatment of Sexual Abusers' and the Colorado Coalition Against Sexual Assault. She has been involved in a number of sex offender studies and has authored professional articles and book chapters related to sex offenders.

L. Maaike Helmus received her doctorate in forensic psychology in 2015 from Carleton University in Ottawa, Ontario, Canada. While completing her graduate studies, she served as a researcher with Correctional Services Canada. Her research interests focus on the assessment and treatment of sexual offenders. She has been deeply involved in the recent advances in structured risk assessment tools, such as STABLE-2007/ACUTE-2007, Static-99R, and Static-2002R. As a graduate student, she received numerous grants and academic awards that include the Joseph-Armand Bombardier Canada Graduate Scholarship and the Association for the Treatment of Sexual Abusers (ATSA) predoctoral research grant.

Harry M. Hoberman, Ph.D., L.P., is a forensic and clinical psychologist licensed in several states. While on the faculty of the University of Minnesota in the Departments of Psychiatry, Psychology, Pediatrics, and Child Development, he was the principal investigator on several funded research projects related to psychosocial risk factors and mental health service utilization as well as developing and implementing integrative psychosocial treatment protocols for various conditions. He is a past recipient of the U.S. Government Executive Branch's Distinguished Service Award. Currently, he practices exclusively as a forensic psychologist through Forensic Psychology Evaluations and Professional Consultations. He specializes in risk assessment of violent behavior and has contracts with various states and the Federal government to conduct evaluations regarding mental abnormalities, volitional/emotional impairment, and the probability of recidivism. In addition, Dr. Hoberman conducts forensic evaluations and provides expert witness testimony related to a broader set of psycholegal constructs and issues. Dr. Hoberman was twice elected to the Executive Board of the Association for the Treatment of Sexual Abusers (ATSA), authored a public policy statement on risk assessment for ATSA, and served on the public policy committee of that organization for over 10 years.

Rebecca L. Jackson, Ph.D., is the Clinical Director of the Florida Civil Commitment Center, Florida's only sex offender civil commitment facility. Previously, she was a Chief Psychologist with the South Carolina Sex Offender Civil Commitment Program and an Associate Professor and the Director of the Forensic and Correctional Mental Health Counseling program at Palo Alto University. Her primary professional interests are in the areas of psychopathy, risk assessment, and sexual offending. In addition to her published work, she has presented and delivered training regionally and nationally on these topics. In 2008, she received the Theodore Blau Award for Early Career Contributions to Clinical Psychology.

Jain Ashok, M.D., M.P.H., is Associate Professor in the Department of Emergency Medicine at the University of Southern California/Keck Medical School. Dr. Jain is Board Certified in

Internal Medicine, Emergency Medicine, Occupational/Environmental Medicine, and Medical Toxicology. Dr. Jain is Consultant Toxicologist, Los Angeles County Medical Examiner, Department of the Coroner. Prior positions include Director, Division of Toxicology and Occupational Environmental Medicine at USC, and Co-Medical Director, Los Angeles County Drug and Poison Information Center. Dr. Jain has been an expert witness for high-profile criminal and civil cases involving industrial, general toxicology, and emergency medicine occupational and environmental cases.

As a supervising physician and medical toxicologist at USC/Los Angeles County Medical Center, the busiest emergency department in the United States, Dr. Jain has experience in medico-legal evaluation of victims of drug-facilitated rape.

Meg S. Kaplan, Ph.D., a clinical psychologist, is currently the Director of the Sexual Behavior Clinic at the New York State Psychiatric Institute and an Associate Professor of Clinical Psychology in the Department of Psychiatry at Columbia University, College of Physicians and Surgeons. She received her Ph.D. in Human Sexuality from New York University in 1979 and has conducted clinical research in psychosexual disorders since then. Dr. Kaplan was on the Board of the Association for the Treatment of Sexual Abusers and is the current Director of the Special Classification Review Board at Avenel Correctional Facility in New Jersey. Early in her career, she worked as a parole officer for the State of New York for 10 years. She reviews for numerous publications and has over 50 publications in the sexual disorders field.

Drew A. Kingston, Ph.D., C.Psych., received his doctorate in clinical psychology at the University of Ottawa and completed his residency at the Royal Ottawa Health Care Group. He is a registered psychologist in the province of Ontario and is currently the senior psychologist and the Director of Groups and Program Evaluation at the St. Lawrence Valley Correctional and Treatment Centre, a secure treatment unit for incarcerated mentally disordered offenders. Dr. Kingston is on the editorial board of *Sexual Abuse: A Journal of Research and Treatment* and serves as an ad hoc reviewer for several journals. He has published a number of articles and book chapters in the areas of hypersexuality, exhibitionism, pedophilia, and sexual sadism, the impact of pornography on sexual aggression, and the sexual offense cycle.

Richard B. Krueger, M.D., is a psychiatrist and Medical Director of the Sexual Behavior Clinic at New York State Psychiatric Institute. He is President of the New York State Chapter of the Association for the Treatment of Sexual Abusers. He is an Associate Clinical Professor of Psychiatry in the Department of Psychiatry, Columbia University, College of Physicians and Surgeons. He received his M.D. degree from Harvard Medical School in 1977 and is board certified in internal medicine, psychiatry, forensic psychiatry, and addiction psychiatry. He consults on individuals who have committed sexual crimes for the New York State Office of Mental Health and his research interests and publications have focused on the psychopharmacological treatment of compulsive and aggressive sexual behavior. He was a member of the Paraphilias Subcommittee of the Sexual and Gender Identity Disorders Workgroup of the Diagnostic and Statistical Manual, Fifth Edition (DSM-5), which revised the criteria for paraphilias in DSM-5, and he is a member of the Sexual Health and Disorders Committee of the World Health Organization, which is making recommendations for the paraphilic disorders for the International Classification of Diseases, 11th Edition, (ICD-11).

Jill S. Levenson is currently an Associate Professor of Social Work at Barry University in Miami, FL. She is also a licensed clinical social worker with over 25 years of practice experience in interpersonal violence. She has treated victims, survivors, and family members of child maltreatment and sexual abuse. Since 1992, she has provided assessment and treatment services to sex offenders on probation in an outpatient setting, as well as to individuals with other types of problematic sexual behaviors. Dr. Levenson received her Ph.D. in Social Welfare from Florida

International University in 2003. She earned her Master's degree in Social Work from University of Maryland in 1987 and her BA in Sociology from the University of Pittsburgh in 1985.

Dr. Levenson's primary areas of research interest involve studying the impact and effectiveness of social policies and therapeutic interventions designed to reduce sexual violence. She has been a coinvestigator or consultant on five grants funded by the U.S. Department of Justice. Most recently, her research endeavors have focused on the prevalence and impact of adverse childhood experiences and their relationship to adult health, mental health, and criminal outcomes. She has published over 80 peer-reviewed articles and book chapters and has coauthored three books on the treatment of sex offenders and their families. She is well known as an international expert on sexual aggression and is frequently quoted in the media.

Christopher Lobanov-Rostovsky has worked for the Division of Criminal Justice within the Colorado Department of Public Safety as the Program Manager for the Colorado Sex Offender Management Board since 2006, where he is responsible for overseeing the development of standards for the treatment and management of sexual offenders, approving treatment providers, and providing legislative and policy input. Mr. Lobanov-Rostovsky holds a Master Degree in Social Work from the University of Michigan and has been a Licensed Clinical Social Worker (LCSW) since 1990. Prior to his current position, Mr. Lobanov-Rostovsky worked as a clinician and evaluator adult sex offenders and juveniles who commit sexual offenses. Mr. Lobanov-Rostovsky also works as a private consultant for a variety of federal, state, tribal, and private agencies in developing and enhancing sex offender management services, including providing training and technical assistance, program assessment, literature reviews, peer review of grant solicitations and reports, and legislative and policy development. More specifically, Mr. Lobanov-Rostovsky has worked since 2009 with the National Criminal Justice Training Center at Fox Valley Technical College as a consultant on the implementation of the Sex Offender Registration and Notification Act (SORNA) for tribal jurisdictions and has overseen the Native American Sex Offender Management (NASOM) project to identify the research support for needed sex offender treatment, management, and reentry services. Mr. Lobanov-Rostovsky has also been co-project consultant lead for the National Criminal Justice Association (NCJA) on the Sex Offender Management Assessment and Planning Initiative (SOMAPI) to identify research-supported sex offender management and treatment practices. Further, Mr. Lobanov-Rostovsky has published a number of articles and chapters related to federal and state sex offender management public policy. Finally, Mr. Lobanov-Rostovsky served on the Board of Directors for the Association for the Treatment of Sexual Abusers (ATSA) from 2008 to 2015 and is cochair of ATSA's public policy committee.

Caroline Logan is the Lead Consultant Forensic Clinical Psychologist in the Specialist Services Network of Greater Manchester West Mental Health NHS Foundation Trust in the North of England. She is also Honorary Research Fellow in the Institute of Brain Behaviour and Mental Health at the University of Manchester. She has worked in forensic settings for almost 20 years, working directly with clients who are at risk to themselves and others and, in a consultancy role, with the multidisciplinary teams and local and national organizations that care for and manage them. She is a former Board Member of the Scottish Risk Management Authority, the Dangerous and Severe Personality Disorder Programme Expert Advisory Group, and the Project Board of Resettle, the Liverpool clinical risk and case management service for high-risk offenders. She is currently a member of the Advisory Panel for the Close Supervision Centres and Managing Challenging Behaviour Strategy in the Her Majesty's Prison Service Directorate of High Security. She is a coauthor of the *Risk for Sexual Violence Protocol*, a structured professional judgement approach to sexual violence risk assessment and management and a coauthor of the Department of Health guidelines *Best Practice in Managing Risk in Mental Health Services*. Dr. Logan has research interests in the areas of personality disorder, psychopathy, and risk and a special interest in gender issues in offending, on which she has published two books and many articles.

Wesley B. Maram, Ph.D., is currently clinical director of Orange Psychological Services, a sex offender treatment program for parolees, probationers, and individuals with intellectual disability, and an independent evaluator for California Department of State Hospitals Sex Offender Commitment Program. He was formerly Assistant Clinical Professor (volunteer) UCLA Forensic Psychiatric Fellowship Program and provided psychophysiological evaluations for Patton State Hospital sex offender program. He received his Ph.D. in psychology from United States International University, San Diego, and has served on the Executive Committee for California Coalition on Sexual Offending as Chair and Vice Chair. He is an award winner of the Faye Honey Knopp Award. He specializes in the evaluation and treatment of sexual abusers and is a recognized expert witness in criminal and civil court proceedings.

Saprina Matheny, L.I.C.S.W., obtained her MSW from The College of St. Catherine/University of St. Thomas in St. Paul, Minnesota. She has provided outpatient adult sex offender treatment and inpatient and outpatient adolescent sex offender treatment and participated in the evaluations of adult and adolescent offenders. Currently, she works at the Human Development Center, a community mental health center, as the Director of Trauma Services providing services to adolescent and adults. Ms. Matheny also works for the Ambit Network, a National Child Traumatic Stress Network at the University of Minnesota. She coordinated the Dialectical Behavioral Therapy program and began a Trauma Assessment and Family Treatment Program. Ms. Matheny sits on the Multidisciplinary Team for Firstwitness, the local child advocacy center.

Robert J. McGrath, M.A., is Clinical Director of the Vermont Department of Corrections statewide network prison and community sex offender treatment programs. Among his publications, he is coauthor of the books *Supervision of the Sex Offender* and *Current Practices and Emerging Trends in Sexual Abuser Management*. He is also a codeveloper of three risk assessment instruments, the *Vermont Assessment of Sex Offender Risk-2* (*VASOR-2)*, the *Sex Offender Treatment Intervention and Progress Scale (SOTIPS),* and the *Risk of Sexual Abuse of Children Checklist (ROSAC).* He currently serves or has served on treatment advisory boards of several sex offender programs in the United States and the national sex offender treatment programs in Canada, England, and Hong Kong.

Andrew J. McWhinnie is the National Advisor to the Associate Director General, Chaplaincy Services, Correctional Service of Canada for Circles of Support and Accountability. Operating as Andrew McWhinnie Consulting, he is also a therapist specializing in male sexual dysfunction. Andrew earned his Master's Degree in Psychology (specializing in the Psychology of Criminal Conduct) at Carleton University in Ottawa. In the 15 years, Andrew has authored and coauthored well over 35 articles and book chapters on topics related to Restorative Justice, Recidivism, Civil Commitment, and Sex Offender Reintegration methodology. With respect to the reentry of high-risk sexual offenders to communities through Circles of Support and Accountability (CoSA), Mr. McWhinnie's corporate client list is global in scope and practice. He provides training and technical assistance to CoSA project grantees in the United States under a grant program with the U.S. Department of Justice, Office of Justice Programs, the Sex Offender Management, Apprehension, Registration and Tracking (SMART) office.

William D. Murphy, Ph.D., is a Professor in the Department of Psychiatry at the University of Tennessee Health Science Center in Memphis, Tennessee. He specializes in the evaluation and treatment of adult sex offenders and adolescents who have engaged in sexually abusive behavior. Dr. Murphy has provided consultation and training in these areas and also has published a number of articles and chapters in the field. He is the past president of the Association for the Treatment of Sexual Abusers and serves on the Editorial board of *Sexual Abuse: A Journal of Research and Treatment.* He works with Tennessee's Department of Children's Services focusing on effective management of sexually abusive youth and juvenile justice

youth through implementation of best practices including evidence-based assessment and interventions.

Mohan Nair, M.D., is a board-certified forensic psychiatrist and psychopharmacologist. Dr. Nair trained at the University of California and Harvard and has been on the clinical faculty at UCLA and the University of Hawaii. He has been actively involved in the evaluation and treatment of sex offenders for the last 25 years. He has testified extensively in civil and criminal proceedings on sex offending and sexual victimization. Dr. Nair's publications of relevance to this area include chapters on stalking in Principles and Practice of Forensic Psychiatry (Ed.) Richard Rosner, 2003; and psychopathy in International Handbook of Psychopathic Disorders (Ed.) A. Felthous A. & H. Sass, 2007.

Mark E. Olver, Ph.D., is Associate Professor, Registered Doctoral Psychologist (Saskatchewan, Canada), and Director of Clinical Psychology Training at the University of Saskatchewan, Canada, where he is involved in program administration, graduate and undergraduate teaching, research, and clinical training. Prior to his academic appointment, Dr. Olver worked as a clinical psychologist in various capacities, including providing assessment, treatment, and consultation services to young offenders in the Saskatoon Health Region and with adult federal offenders in the Correctional Service of Canada. Dr. Olver's research interests include offender risk assessment and treatment, young offenders, psychopathy, and the evaluation of therapeutic change. He is the codeveloper of the Violence Risk Scale-Sexual Offender version (VRS-SO) and he provides training and consultation services internationally in the assessment and treatment of sexual, violent, and psychopathic offenders.

Jesus Padilla earned his doctoral degree in psychology in 1994. He subsequently worked within State Hospital systems treating, evaluating, and conducting research on sex offenders. He was a member and then chair of the team that designed the treatment program for California's Sexually Violent Predators and was cochair of the research committee within this team. He presented research findings to California's Department of Mental Health, the American Psychological Association, and the California District Attorney's Association. To our dismay, Dr. Padilla is now deceased.

Cameron C. Page, J.D., has practiced law in California since 1977. He began civil practice for 2 years in Santa Barbara, followed by 9 years as a Public Defender. Beginning in 1989, he was a Deputy District Attorney with San Bernardino County, in a variety of assignments, including narcotics, arson, and career criminal and gang prosecutions. He was the supervising attorney in their Civil Commitment Unit for 12 years, handling all types of civil commitment cases (e.g., Sexually Violent Predators, Mentally Disordered Offenders, and Insanity Extension proceedings). He was actively involved in California District Attorney's Association, serving twice as Cochair of the SVP Committee. He also participated in training state evaluators for court testimony in both Sexually Violent Predator and Mentally Disordered Offender proceedings. Mr. Page is now retired.

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Marnie E. Rice was a Fellow of the Royal Society of Canada, Canada's senior national body of distinguished Canadian scientists and scholars. She worked at the Mental Health Centre, Penetanguishene (now called Waypoint Centre for Mental Health Care) for 35 years, as a clinical psychologist, researcher, and, for 14 years, Director of Research. Most recently, she was Research Director Emerita at Waypoint, where she continued her research part-time. She was also Professor of Psychiatry and Behavioural Neurosciences (part-time) at McMaster University, Professor of Psychiatry (adjunct) at the University of Toronto, and Associate Professor of Psychology (adjunct) at Queen's University. She had over 150 scientific publications, including six books. She was the recipient of many awards, including the American Psychological Association's Award for Distinguished Contribution to Research in Public Policy and the Career Contribution Award from the Criminal Justice Section of the Canadian Psychological Association. She was a Fellow of both the American and the Canadian Psychological Associations. Dr. Rice was a mentor, adviser, and source of encouragement to many professionals in several fields. Sadly, she passed away this past summer.

Robert G. Riedel, Ph.D., is a forensic and clinical psychologist. He was a professor of psychology and department chair at various colleges. Dr. Riedel is professor emeritus and former chair of the Social Sciences Department at Southwestern State University in Minnesota. He has taught courses and/or published various areas including psychological testing and measurement, statistics, and aging. Currently, he practices exclusively as a forensic psychologist, primarily in the evaluation of sexual offenders.

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Skye Stephens, M.A., is a doctoral candidate in clinical psychology at Ryerson University. To date her research has focused on the role of sexual deviancy in the onset and maintenance of sexual offending and victim selection in sexual offending, with her dissertation focused on hebephilia and sexual offending. She is also interested in the criminal trajectories of sexual offenders and the treatment efficacy for those found not-criminally responsible on account of mental disorder. Her clinical interests lie in the assessment and treatment of adolescents and adults in conflict with the law.

Jill D. Stinson, Ph.D., is a clinical psychologist and Assistant Professor with the Department of Psychology at East Tennessee State University. Her research interests include self-regulation and maladaptive regulatory behaviors, sex offenders with serious mental illness, rural reentry needs for sexual and violent offenders, and Safe Offender Strategies, an original sex offender treatment protocol. Dr. Stinson's clinical interests additionally include Dialectical Behavior Therapy and the treatment of individuals with suicidality and self-harm behavior. She has published two books and numerous articles and chapters, presented at national and international conferences devoted to forensic mental health and sex offender prevention and treatment, and serves on a variety of professional and administrative committees within the field of sex offender treatment and management.

David Thornton, Ph.D., is currently research director for Wisconsin's program for sexually violent persons and a professor in the department of clinical psychology at the University of Bergen in Norway. He has developed and managed treatment programs for sexual offenders in both correctional and forensic mental health settings and in both the United Kingdom and the United States. He has published on evidence-based standards for effective correctional programs and on the importance of therapist style in sexual offender treatment. He has been involved in the development of static actuarial risk assessment for sexual offenders, contribut-

ing to the development of scales such as Static-99, Static-2002, Static-99R, Static-2002R, and Risk Matrix 2000. He has been involved in the development of psychological risk assessment, creating the Structured Risk Assessment (SRA) framework and contributing to the development of various implementations of this scheme such as the Structured Assessment of Risk and Need (SARN) and the SRA-Forensic Version (SRA-FV). David Thornton has published three books, 14 chapters in edited books, over 50 papers in peer-reviewed scientific journals, and 11 Internet publications.

Greig Veeder has been working in the mental health field since 1974. He worked with adolescents at the Menninger Clinic and delinquent boys sentenced state group homes prior to working with batterers in the Abusive Men Exploring New Directions (AMEND). He began treating adult sex offenders in 1983 and founded Teaching Humane Existence (T.H.E.), the first program in Colorado to use the "containment approach" and one of the original "offense specific" sex offender treatment programs in the state. In 1984, he began using shared living arrangements (SLAs) for offenders, a positive therapeutic milieu that creates residential settings in the community. He introduced the therapeutic use of polygraph to Colorado. He served as board members to the Colorado Association for Sex Therapy and the Rape Assistance and Awareness Program. He contributed to the first edition of standards of practice promulgated by the Association for the Treatment of Sexual Abusers (ATSA) and served for 7 years on the Colorado Sex Offender Management Board. He received his Masters Degree in Social Work from the University of Denver in 1980.

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Pamela M. Yates is a psychologist and researcher who has worked extensively in correctional and forensic settings as a clinician, researcher, program developer, program evaluator, and trainer. She has worked with youth and adults, including adult sexual offenders, violent offenders, and individuals with substance abuse problems, as well as with victims of violence. She has developed treatment programs for various offender groups, including accredited programs for sexual offenders, and is a certified trainer in various actuarial risk assessment instruments. Her research and clinical interests and publications include assessment and treatment of sexual offenders, the Good Lives and Self-Regulation Models of offending, risk assessment, program evaluation, and treatment effectiveness. She has written and coauthored numerous reports and presentations in the areas of offender rehabilitation, sexual offending, sex offender assessment and treatment, psychopathy, sexual sadism, denial, phallometric assessment, treatment effectiveness, and program accreditation and evaluation.

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An Integrated Theory of Sexual Offending

Tony Ward, Stephanie Fisher, and Anthony Beech

Introduction

The empirical and theoretical achievements in the sexual offending field have been considerable, and researchers have formulated a number of rich and insightful accounts of sexual offending (Ward, Polaschek, & Beech, 2006). The foci of these theories have been broad and included biological, psychological, and social/cultural levels of analysis. An important implication of this theoretical work is that a satisfactory explanation of sexual abuse is likely to be multifactorial in nature and allows for a diversity of etiological pathways leading to the onset and maintenance of sexual offending. The types of causes canvassed in the research literature include *genetic predispositions* (Siegert & Ward, 2003); *adverse developmental experiences* (e.g., abuse, rejection, attachment difficulties; Beech & Ward, 2004); *psychological dispositions/trait factors*, e.g., empathy deficits, attitudes supportive of sexual assault, deviant sexual preferences, emotional skill deficits, and interpersonal problems (Thornton, 2002); *social and cultural structures and processes* (Cossins, 2000); and *contextual factors*, such as intoxication and severe stress (Hanson & Harris, 2000, 2001).

In the spirit of advancing theory construction, we propose that it is timely to present a comprehensive etiological framework that is capable of encompassing the clinical phenomena evident in offenders and all the causal mechanisms asserted by leading theorists. Our aim is to knit together a number of areas said to be causally implicated in the occurrence of sexual abuse into an integrated theory of sexual offending (ITSO). It is a broad etiological framework that arguably has the capacity to inform the construction of more specific theories of particular types of sexual offending (e.g., rape, child sexual abuse). It is important to note here that the research in this area is based on those few sexual offenders who are actually detected and for those offenses that they actually report; there are limitations in this area and so the development of theory in this area is based on only the available information.

In brief, according to the ITSO, sexual abuse occurs as a consequence of a number of a network of causal factors: biological (evolution, genetic variations, and neurobiology), ecological (social and cultural environment, personal circumstances, physical environment), and core neuropsychological systems. The ITSO, we will argue, is able to explain how clinical phenomena observed in sexual offenders arise from the interaction between these diverse sets of factors. It also has the ability to absorb competing theories of sexual offending and to generate new and exciting lines of research.

The Integrated Theory of Sexual Offending

The ITSO has both horizontal and vertical depth and therefore is able to provide a comprehensive framework to account for the development of sexual offending. *Horizontal depth* refers to the ecological and multisystemic nature of the theory while *vertical depth* denotes the ability of the ITSO to provide a multilevel analysis of sexual offending. According to our approach [after Pennington (2002)], a neuroscientific account of human behavior/psychopathology requires consideration of four levels of analysis, an *etiological level*, *brain mechanisms*, *neuropsychological* analysis, and a *symptom* level. The *etiological level* is concerned with the influence of genetic and environmental factors in causing psychopathology, while the *brain mechanisms level* is concerned with the effects of etiological factors on the development of the brain and its subsequent

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functioning (e.g., prolonged abuse; Sapolsky, 1997). *Neuropsychological* analysis is concerned with the brain-based psychological systems generating human behavior, (e.g., spatial perception and language production), and the *symptom* level of analysis is concerned with the clinical phenomena thought to characterize the various forms of psychopathology under investigation (e.g., deviant sexual arousal, mood disturbances, hallucinations). It is the third level given above, *neuropsychological* functioning, that is particularly important from an explanatory perspective as it directly informs researchers of the possible psychological mechanisms generating offenders' psychological symptoms and problems. Following Pennington, we propose that all four of these levels are mutually constraining, and theories at the different levels need to be consistent with each other (Tables 1 and 2).

We will now systematically outline the ITSO, which is shown in schematic form in Fig. 1.

We propose that there are three sets of factors which converge to cause sexual offending and its associated problems: *biological* factors (influenced by genetic inheritance and brain development), *ecological* niche factors (i.e., social, cultural, and personal circumstances-learning), and *neuropsychological* factors. According to the ITSO, sexual offending occurs through the ongoing convergence of *distal* and *proximal* variables, which then interact in a dynamic way. Genetic predispositions and social learning have a significant impact upon brain development and result in the establishment of three interlocking neuropsychological systems (Pennington, 2002), each associated with distinct functions and brain structures: *motivation/emotional*; *perception and memory*; and *action selection and control* (Luria, 1966).

We would further argue that genes, social learning, and neuropsychological systems work together to generate the clinical problems evident in offenders, i.e., deviant arousal, offense related thoughts and fantasies, negative/positive emotional states, and social difficulties. These state factors, as shown in Fig. 1, directly result in sexually abusive actions. The consequences of sexually abusive behavior (on an offender) then act to maintain and entrench the offender's vulnerabilities, and this occurs through the impact of these vulnerabilities on the offender's environment and psychological functioning, i.e., the consequences of sexual offending will function to maintain and/or escalate further sexually deviant actions. This maintenance or escalation is hypothesized to occur through the modification of environmental factors and the reduction or enhancement of the individual's psychological functioning (e.g., their mood, sexual arousal and satisfaction, feelings of powerlessness). For example, an offender might reduce their negative mood state through the use of a maladaptive emotion regulation strategy, such as using coerced sex to regulate their negative mood. The reduction of the negative mood state through the use of this maladaptive strategy is then likely to negatively reinforce the strategy used, while the improvement in mood as a result of these actions will function as a positive reinforcer for the maladaptive strategy. So, the use of coerced sex will be positively reinforced by the improvement in the offender's mood, increasing the likelihood that the offender will repeat this behavior.

Therefore, in our theory brain development (influenced by biological inheritance and genetics) and social learning interact to establish individuals' level of psychological functioning. This functioning may be compromised in some way by poor genetic inheritance, biological damage, or developmental adversity to make it difficult for the individual concerned to function in an adaptive manner. This compromised functioning may lead to problematic psychological functioning and subsequent clinical symptomatology. We will now examine each of these areas in more detail.

Table 1 Neuroscientific account of human behavior

Etiological level	Concerned with the influence of genetic and environmental factors in causing psychopathology
Brain mechanisms	Concerned with the effects of etiological factors on the development of the brain and its subsequent functioning
Neuropsychological analysis	Concerned with the brain-based psychological systems generating human behavior
Symptom level	Concerned with the clinical phenomena thought to characterize the various forms of psychopathology under investigation

Table 2 Factors that converge to cause sexual offending

Biological factors	Influenced by genetic inheritance and brain development
Ecological niche factors	Social, cultural, and personal circumstances, and learning
Neuropsychological factors	The nature of the physical processes associated with the functioning of the brain including motivation, emotions, goals, beliefs, action directed behavior, information processing

Brain Development

The first source for offense related vulnerabilities is brain development. There are a wide variety of biological variables associated with abnormal brain development, ranging from the existence of biologically inherited mating strategies that are maladaptive (i.e., the acquisition of aggressive or problematic strategies—Buss, 1999), the modulation of sexual behavior by hormonal activity in normal and abnormal contexts, and, for example, the biological processes associated with attachment (Nelson & Panksepp, 1998).

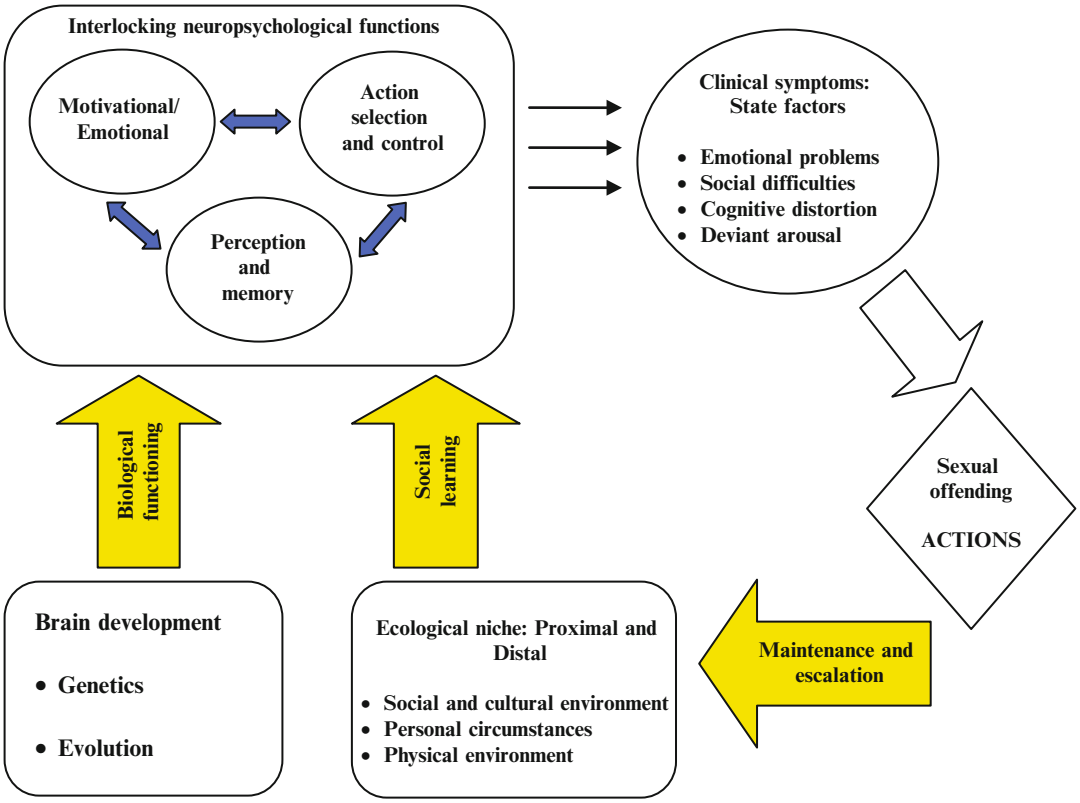

Fig. 1 A schematic representation of the integrated theory of sexual offending. The authors would like to thank Elsevier Science for permission to use figure 1, originally published in Ward, T., & Beech, T. (2006). An integrated theory of sexual offending. Aggression and Violent Behavior, 11, 44–63

The Role of Evolution in Brain Development

The fundamental idea in evolutionary theory is that organisms slowly evolve over time and through a process of natural selection either adapt to environmental challenges or become extinct. The process of change is gradual, comprised of small, incremental modifications in existing organs or characteristics, which can lead to the emergence of new characteristics or even a new species. Through the processes of natural selection and sexual selection, animals that are the winners in the evolutionary struggle develop specific physical and psychological adaptations that enable them to meet these challenges.

There are three fundamental elements in Darwin's (1859) theory of natural selection. First, individual members of a species vary with respect to their physical and psychological traits. Second, some members of a species will demonstrate variations which make them better able to survive or adapt to changing environmental conditions. Third, those individuals who are better equipped to survive will be more likely to breed and in doing so will pass on these characteristics to their offspring. Consequently, these inherited characteristics will become more common within that species. In addition to natural selection, Darwin also discerned one other important process in evolution—*sexual selection*. This is the idea that male and female members of a particular species will demonstrate distinct preferences in their choice of mates based upon the physical or behavioral characteristics of potential partners. Some of these genetically based predispositions may be linked to the sex of the individual, and so there are gender linked vulnerabilities. These gender linked vulnerabilities include the tendency for males to engage in impersonal sex (Brennan & Shaver, 1995) and for males to rape if they cannot attract a sexual partner (Thornhill & Palmer, 2000).

Genetic Determinants of Brain Development

An evolutionary approach to human behavior that is able to incorporate the malleability of human beings and their capacity for culture is gene-culture coevolution theory (Odling-Smee, Laland, & Feldman, 2003). This is a flexible evolutionary model claiming that genetic, individual learning, and cultural processes propel the evolution of human beings. Because of this, the explanation of human traits is likely to involve these three sets of processes (Odling-Smee et al., 2003). *Genetic factors* may result in a predisposition to seek certain types of basic goods (e.g., relationships, sexual satisfaction, autonomy, mastery), while *learning events*,

within a particular cultural context, provide *socially constructed* ways of achieving these valued experiences, activities, and outcomes. For our integrated theory, this means that the causes of sexually aggressive behavior are likely to have a naturalistic basis, and that motivational and cognitive biases lead individuals to seek basic human needs in socially unacceptable ways. An important aspect of this idea is the powerful influence of genetic and cultural processes; neither dominates the other, giving both biological and social learning oriented researchers an important role in accounting for sexually abusive behavior.

Neurobiological Functioning

The neurobiological level of analysis is concerned with the nature of the physical processes associated with the functioning of the brain, such as type and levels of neurotransmitters, the existence of neural pathways, and the integrity of neural structures. There are at least two ways such brain processes impact on the neuropsychological systems underpinning human actions: (a) functional systems may be *disrupted* by brain-based abnormalities, and (b) the *calibration* of the systems may be directly influenced by physical processes. An example of a functional system being disrupted is when high levels of stress hormones, such as cortisol, compromise the operation of the action selection and control system, and this may manifest itself as the individual behaving impulsively (Bremner et al., 1997; Sapolsky, 1997). An example of the second type of relationship is when the individual experiences persistently high levels of stress hormones and this in turn increases the salience and availability of sexual goals and strengthens their influence on the individual, and this may manifest itself as the person becoming preoccupied with sexual goals and needs.

Neurobiological research reveals that structural brain damage and/or neurotransmitter malfunction can impact adversely upon sexual behavior. For example, we suggest that for some individuals the motivation/emotional system can be compromised by dysfunctional neurotransmitter mechanisms. This may lower the threshold for sexually aggressive behavior by increasing the strength, salience, and duration of sexual goals and desires, and additionally, by weakening the action selection and control systems. Put simply, the presence of extremely intense sexual feelings might override an individual's ability to control his sexual behavior.

Ecological Niche: Proximal and Distal Factors

A second source for offense related vulnerabilities is the ecological niche (social and cultural roles of the offender) and habitat (environment in which a person lives) that the individual is exposed to. In certain circumstances, vulnerabilities in these areas may cause a person to commit a sexual offense in the absence of any significant psychological deficits or vulnerabilities. We have used the term "ecological niche" to refer to the set of potentially adverse social and cultural circumstances, personal circumstances, and physical environments confronting each person as he or she develops throughout their life, e.g., growing up in a low socioeconomic status family.

The content and functional integrity of a person's psychological system is determined by a combination of biological inheritance and social learning. Once acquired, psychological vulnerabilities related to sexual offending are thought to function as a predisposition, making it more probable that an individual will struggle to effectively meet specific environmental challenges and therefore make it more likely that he or she will commit a sexual offense at some future time. These psychological vulnerabilities can be regarded as a more *distal* dimension of risk. An individual's current ecology or physical environment is also an important contributor to the etiology of sexual offending through making available potential victims, and by creating the specific circumstances that trigger the psychological deficits involved, this is a *proximal* or current dimension of risk. For example, the experience of fighting in a war (Henry, Ward, & Hirshberg, 2004), being subject to social circumstances such as the erosion of one culture by another, or the death of a partner may sometimes lead to individuals committing a sexual crime that they would under other circumstances have found abhorrent. In these kinds of extreme circumstances, individuals can behave in ways they would not normally consider and may even engage in actions that they would view as utterly reprehensible in their normal environments.

In other words, sometimes the major causal factors resulting in sexual offending reside in the ecological niche rather than within the person. The offending may be quite opportunistic, or the consequence of circumstances that effectively erode an individual's capacity to behave in an ethical, and typical, manner (Marshall & Barbaree, 1990). Consideration of these factors leads us to an understanding that sexual offending emerges from a network of relationships between individuals and their local habitats and niches and is not simply the consequence of individual psychopathology. Furthermore, an individual's unique circumstances are hypothesized to influence his/her psychological and social development by virtue of their influence on core functional systems. For example, Watkins and Bentovim (1992) report evidence that the long-term effects of childhood sexual victimization are psychological disorder, with marked risk for the development of alcohol and drug misuse. In a similar vein, Beitchman et al. (1992) state that the long-term effects of childhood sexual victimization include disturbed adult sexual functioning, poor social adjustment, confusion over sexual identity, inappropriate attempts to reassert masculinity, and recapitulation of the abuse by the victim on new victims. Each of these problems is associated with impaired psychological skills and competencies.

Table 3 Neuropsychological functioning

The motivation/emotional system	The perception and memory system	The action selection and control system
Associated with the cortical, limbic, and brainstem brain structures	Associated with the hippocampal formation and the posterior neocortex	Associated with the frontal cortex, the basal ganglia, and parts of the thalamus
Allows goals and values to influence both perception and action selection	Major function is to process incoming sensory information and to construct representations of objects and events, and make them available to the other two systems	Major function is to help the organism plan, implement, and evaluate action plans, and to control behavior, thoughts, and emotions in service to higher-level goals
Also allows adjustment of motivational state to fit changing environmental circumstances	Problems in this system can lead to maladaptive beliefs, attitudes, and problematic interpretations of social encounters	Implement plans designed to achieve the individuals' goals
Example: Person may, through poor learning, lack the skills to be able to develop interpersonal relationships, and this deficit may result in social isolation and psychological deficits which could lead to sexual offending	Example: A person with maladaptive beliefs will likely activate problematic goals and emotions, which can make it difficult for the individual to control his sexual behavior, possibly leading to sexual offending	Example: A person with problems in this system will present with problems of self-regulation such as impulsivity, failure to inhibit negative emotions, and inability to adjust plans to change

Neuropsychological Functioning

Both biological inheritance and social learning can have a significant impact on individuals' developing brains and have an impact upon on the three interlocking neuropsychological systems: *motivation/emotional*, *perception and memory*, and *action selection and control* (Luria, 1966; Pennington, 2002) that arguably underpin psychological functioning. Although the systems may be differentially compromised in some ways, it is likely that problems in any of the systems will adversely affect the others in some respects. We will now examine each of these systems and consider how they can be involved in specific aspects of dysfunction in more detail (Table 3).

The Motivation/Emotional System

This system is associated with the cortical, limbic, and brainstem brain structures. According to Pennington (2002), a major function of this system is, '…to allow goals and values to influence both perception and action selection rapidly and to adjust motivational state to fit changing environmental circumstances' (p. 79). Problems in an individual's genetic inheritance, cultural upbringing, or negative individual experiences may lead to defects in the motivational/emotional system. For example, someone who was brought up in an emotionally impoverished environment might find it difficult to identify his emotions in an accurate manner and also become confused when confronted with emotionally charged interpersonal situations. Such an individual might become angry and act in an antisocial manner on occasions. Another type of problem could be related to the range of needs or goals sought by such a person. Poor early learning could lead to an individual lacking the skills necessary (internal conditions) to establish strong interpersonal relationships and result in social isolation and further psychological and social deficits that could lead to sexual offending, such as intimacy problems (Marshall, 1989) or attachment problems (Baker & Beech, 2004; Ward, Hudson, & Marshall, 1996). These deficits in interpersonal functioning are exactly the kinds of problems that Thornton (2002) and Hanson and Harris (2001) regard as a particular type of stable dynamic risk factor for sexual offending, i.e., causal psychological risk factors (Beech & Ward, 2004; Ward & Beech, 2004). Our point here is that psychological vulnerabilities that have been previously described in the sexual offending literature as a stable dynamic risk domain can be reconceptualized as dynamic disturbances in the motivation/emotional system.

The Action Selection and Control System

The action selection and control system is associated with the frontal cortex, the basal ganglia, and parts of the thalamus. A major function of this system is to help the organism to plan, implement, and evaluate action plans, and to control behavior, thoughts, and emotions in service of higher-level goals. The action selection and control system is concerned with the formation and implementation of action plans designed to achieve the goals of the individual. It draws heavily upon the *motivation/emotional* system for the goals that effectively energize behavior and the *perception and memory* system for procedural and declarative knowledge (i.e., knowledge about how to do certain things, and relevant facts and information pertaining to a given situation). Problems that might arise from malfunctions in the action control and selection system essentially span self-regulation problems such as impulsivity, failure to inhibit negative emotions, inability to adjust plans to changing circumstances, and poor problem solving skills.

Again these deficits in self-management/self-regulation are exactly the kinds of problems that in the sexual offending literature have been described as stable dynamic risk factors (Hanson & Harris, 2000, 2001; Thornton, 2002). As we have argued above, it is possible to view these "vulnerability factors" as essentially disturbances in the action selection and control system—in conjunction with input from the

other two neuropsychological systems comprising the ITSO. In other words, the "self-control" theoretical constructs involved in many theories/descriptions of sexual offending (e.g., Ward & Hudson, 1998) can be reformulated in terms of the interlocking neuropsychological systems. Thus, we are not simply *relabeling* clinical phenomena but rather are showing how these factors can be produced by the casual mechanisms comprising the ITSO.

The Perception and Memory System

This system is associated primarily with the hippocampal formation and the posterior neocortex. A major function of this system is to process incoming sensory information and to construct representations of objects and events and make them available to the other two systems. Problems in the perceptual and memory system can lead to maladaptive beliefs, attitudes, and problematic interpretations of social encounters. The presence of maladaptive beliefs that are frequently available to guide information processing is likely to cause the subsequent activation of problematic goals and emotions, which in relation to sexual offending make it difficult for a person to effectively control his sexual behavior. We hypothesize that these cognitive structures can function as preattentive filters biasing the processing of social information and resulting in a variety of personal and social difficulties.

These problems may underlie the kinds of offense-supportive cognitions that Thornton (2002) and Hanson and Harris (2000, 2001) regard as another type of stable dynamic risk factor for sexual offending. The ITSO proposes that what have been termed cognitive distortions (Abel et al., 1989) are arguably caused by entrenched beliefs and subsequent biased information-processing originating in the perception and memory system. An intriguing aspect of the ITSO is that different types of cognitive distortions are predicted to have their origins in different neuropsychological systems.

Clinical Phenomena

Problems in any of the neurological systems outlined above will comprise a person's adaptive functioning in any number of ways, depending on the specific dysfunction in question, e.g., if there are problems in the *action selection and control* system it will make it more difficult for an individual to adequately regulate his mood. Exposure to antisocial models is also likely to teach individuals maladaptive ways of solving personal and interpersonal problems and result in problematic values and attitudes which will have an impact upon the *perception and memory* system. It is hypothesized by the ITSO that the three functional systems will always interact to cause a sexual offense but that this interaction will be different for each person depending on that individual's specific problems within these systems. In addition, there are numerous types of problems that can occur within the three systems and these can also result in different clinical presentations and treatment needs. The fact that the three functional systems can individually, or collectively, create offense related vulnerabilities, means that different types of deficits in these systems will be associated with different offense variables. That is to say, individuals will commit sexual crimes for quite different reasons and therefore present with varied clinical problems, but these all lead back to problems with the three functional systems. That is, each individual will have their own offense pathway, but this will be influenced by their own interaction of the three functional systems.

According to the ITSO, deficits in neuropsychological functioning interrelate with individuals' current *ecology* or physical environment (proximal dimension) to cause the emergence of four groups of symptoms or clinical phenomena that are directly associated with sexual offending. These clinical phenomena can be usefully viewed as acute risk factors (Hanson & Harris, 2000, 2001) or the *acute state* of Thornton's (2002) dynamic risk domains, which are self-management problems, socio-affective functioning problems, distorted attitudes, and deviant sexual interests. These clinical phenomena are then expressed in a state form, such as: powerful emotional/behavioral expression, need for intimacy/control, offense-supportive cognitions (deviant thoughts and fantasies), and deviant sexual arousal, and it is from this expression that they are likely to lead the individual concerned to commit a sexual offense, depending of course on the availability and accessibility of a potential victim (an ecological variable). We will now examine each of these clinical phenomena in more detail.

Emotional/Behavioral Regulation Problems

The first set of clinical symptoms/problems include the commission of impulsive acts, poor emotional control (tendency to explosive outbursts), and other behavioral expressions of emotional impulses. These phenomena may arise from problems in two different neuropsychological systems. For example, problems in an individual's *motivation/emotional* system may manifest at a psychological functioning level as mood problems, while a problem in the *action selection and control* system will present as impulsive behavior. Therefore, the causes of what Thornton describes as problems in self management (Domain 4 problems), have their roots in more than one neuropsychological system.

We would suggest that these problems occur due to exposure to sexual activities such as compulsive masturbation during early adolescence, and the absence of alternative means of increasing self-esteem or mood, which can create a profound link between sex and emotional well-being (Cortoni & Marshall, 2001). Emotional competency deficits are likely to produce powerful negative emotional states, say for example, an individual may have an argument with a partner or may experience a stressful life event, such as

losing a job, and if they have emotional competency deficits then they will experience a powerful negative emotional state as a result. This is particularly the case if the individual lacks the ability to dampen down, or communicate, their emotions in a "healthy" way. Such an inability to efficiently manage mood states may result in a loss of control, which, in conjunction with sexual desire, can lead an individual to either become disinhibited or else opportunistically use sex as a soothing strategy to meet his or her emotional and sexual needs. This may be especially likely when confronted with triggering risk factors (Beech & Ward, 2004; Ward & Beech, 2004) such as substance abuse, anger, hostility, and emotional collapse.

Need for Intimacy and Control

The second set of clinical symptoms revolves around social difficulties and includes: emotional loneliness, inadequacy, low self-esteem, passive victim stance, and suspiciousness. Problems in this area are arguably a reflection of dysfunction in the *motivation and emotional* system and can be viewed in terms of attachment insecurity leading to problems establishing appropriate adult intimate relationships (Ward et al., 1996). Attachment style is a relatively enduring set of characteristics for making sense of one's life experiences (Young, Klosko, & Weishaar, 2003), where either one has a positive or negative view of self and others. Beech and Mitchell (2005) have outlined how distal ecological factors such as adverse childhood experiences are highly significant for neurological systems (especially events such as abuse, stress, and rejection), which can produce biochemical changes in the neuropsychological systems that underlie and modulate attachment behaviors (Kraemer, 1992).

There are a number of different kinds of attachment style that have been identified in sexual offenders, each reflecting different types of motivation/emotional system dysfunction. Ward et al. (1996) have argued that there are three insecure attachment styles in the four-category model that would be related to different types of sexual offending given the particular environmental triggers. The three insecure attachment styles are proposed as follows: *Dismissive* individuals would be more likely to demonstrate hostility to others, making them likely to offend violently against adult women; *preoccupied* individuals would tend to seek approval from others and sexualize attachment relationships, leading them to engage in sexual contact with children; Further to these ideas, Burk and Burkhart (2003) note that individuals with a *Disorganized* style of attachment are likely to use sexual offending as one of several possible strategies of externally based control in response to the intense negative emotional states which are the consequence of such a attachment style. Further to this idea, Smallbone and Dadds (1998, 2000) suggest that for intra-familial abusers—if an individual has some level of disorganized attachment, then in reaction to distress they may activate their sexual systems rather than their attachment system and so in response to a nonsexual need they may employ sexual tactics. This individual may use sex to achieve nonsexual needs because their attachment style has their sexual needs tied in with attachment. Taken together these ideas would suggest that the relative levels of need for intimacy and control would vary depending upon the type of attachment style an individual has.

Offense-Supportive Cognitions

The third set of clinical symptoms associated with committing sexual offenses in child molesters and rapists are offense-supportive cognitions, i.e., cognitive distortions. The type of cognitive distortions that child abusers typically report reflect the views that children are sexual beings and that sex does not cause harm to children (Ward & Keenan, 1999). The kinds of offense-supportive cognitions evident in rapists include the beliefs that heterosexual encounters are inherently conflict ridden, that women seek to deceive men about what they really want, and that women are constantly sexually receptive to men's needs (Polaschek & Ward, 2002). Ward and Keenan proposed that underlying these surface level cognitions are a set of schemas which are utilized by individuals to explain, predict, and interpret interpersonal phenomena. These schemas can be regarded as "implicit theories" in that they are part of the process by which offenders explain and interpret the actions of others. Implicit theories are likely to have been formed during an offender's early life and therefore exert their effects through the filtering of perceptual information. In other words, implicit theories are located in the *perception and memory system*.

Sexual Interests

It is commonly thought that child molesters sexually abuse children because they have a deviant sexual interest in children, and that rapists prefer forced sexual contact with women to consensual sex. In other words, the expression of deviant, sexual behavior is thought to be the direct product of a deviant sexual preference. These deviant sexual preferences (or paraphilias) are thought by many to have become entrenched prior to the initial deviant act (Abel et al., 1987; Marshall, Barbaree, & Eccles, 1991). Paraphilias have been defined as, "recurrent intense sexually arousing fantasies, sexual urges or behaviors generally around children or non-consenting persons, the suffering or humiliation of oneself or others, or nonhuman objects" (DSM-IV-TR, APA 2000, p. 522). More recently, those who have described the acquisition of deviant sexual preference have suggested a more sophisticated description of how such paraphilias are acquired. Here, fantasy is seen as being important in the maintenance of deviant interests. Leitenberg and Henning (1995) define sexual fantasy as almost any mental imagery that is sexually arousing or erotic to the individual. Sexual fantasies do not have to

be accompanied by masturbation, although they often are. The role of sexual fantasy in the etiology of sexual offending is described by Abel et al. (1987), who report that in a sample of 400 outpatient sexual offenders, 58 % stated that they had experienced, prior to the age of 18, sexual arousal to deviant ideas that were later translated into deviant acts. Additionally, Marshall and Eccles (1991) report that 41 % of men who had molested extra-familial male children had experienced deviant fantasy prior to the age of 20. Hence, it is hypothesized that deviant fantasies precede deviant arousal, which, in turn, leads to sexual offending.

We would suggest these problems arise through an interaction between the three areas of dysfunctional psychological functioning discussed above. That is, the inability to effectively manage attachment issues and mood problems (problems in the *motivation/emotional system*) system, in the presence of dysfunctional schemas/implicit theories (problems in the *perception and memory* system) may lead to the occurrence of deviant sexual fantasies and sexual preoccupation. These problems coupled with a failure to regulate sexual desire (a basic physiological drive—*motivation/emotional* system) might lead an individual to use sex to meet their emotional and sexual needs. Specifically, if an individual has problems with sexual control (problems in the *action selection and control* systems), in conjunction with high levels of sexual arousal, driven by deviant interests, this would mean that deviant sexual arousal could easily occur in particular situations, given certain triggering factors, such as anger, hostility, or the presence of a potential victim. That is, situations where due to personal circumstances and/or the nature of the physical environment, an individual would become deviantly aroused to children or to the thought of coercive sex with a woman. We will now describe how such "deviant" arousal and the other three types of clinical problems are maintained and can escalate.

Maintenance and Escalation of Clinical Factors

The ITSO accounts for the maintenance and escalation of sexual offending by virtue of its impact on the ecology of the offender and on his psychological functioning. The sexual abuse of a child might result in a person becoming further socially isolated from his normal social supports and lessen his chances of forming appropriate intimate relationships. If an individual in this situation also has problems with his mood, then sex with a child may become increasingly a powerful way of regulating problematic emotional states. In other words, the consequences of sexually abusive actions can modify, entrench, or worsen the personal circumstances of an offender and in this way, increase or maintain the offending behavior.

From the perspective of the ITSO, cultural factors interact with biological and individual learning to create situations that support or discourage sexual offending. An example of a relevant cultural process might be the portrayal of females as essentially sexual objects and males as sexually entitled to have sex with whom they want and when they want (Polaschek & Ward, 2002). For some males, a weak genetic predisposition toward sexual promiscuity may interact with a learning environment where females are routinely ridiculed and presented as inferior and a culture where females are not valued and are underrepresented in positions of power and influence. In this situation, it is probable that males will grow up with pro-rape attitudes and beliefs. Furthermore, continued exposure to a social environment characterized by sexist and hostile attitudes to women, and dysfunctional sexual norms, can help to maintain and even escalate sexual offending.

Relationship to Other Theories of Sexual Offending

We propose that the ITSO has the theoretical resources to unify other prominent theories of sexual offending. We do not have the space in this chapter to demonstrate this for every theory, so we have chosen what we see as two of the most promising etiological theories in order to illustrate how this can be done. The theories we have selected are Finkelhor's (1984) precondition theory and Marshall and Barbaree's (1990) Integrated Theory. We will limit ourselves to a brief description of each theory and a few comments about how it could be incorporated within the ITSO.

Finkelhor's Precondition Theory

Finkelhor (1984) suggests that four underlying factors have typically been used to explain the occurrence of child sexual abuse, usually in the form of single factor theories. These theories are based on the following claims: sex with children is emotionally satisfying to the offender (emotional congruence); men who offend are sexually aroused by a child (sexual arousal); men have sex with children because they are unable to meet their sexual needs in socially appropriate ways (blockage); and finally, these men become disinhibited and behave in ways contrary to their normal behavior (disinhibition). He argues that the first three factors explain why some individuals develop sexual interest in children and the fourth why this interest manifests as sexual deviance.

In Finkelhor's theory, these four factors are grouped into four preconditions that must be satisfied before the sexual abuse of a child occurs. The first precondition implies that the offender must be motivated to sexually abuse a child, and encompasses three of the four factors (i.e., emotional congruence, sexual arousal, and blockage). The second precondition involves overcoming internal inhibitions (e.g., which can be achieved through alcohol, impulse disorder, senility,

psychosis, severe stress, socially entrenched patriarchal attitudes, or social tolerance of sexual interest in children), and is related to the disinhibition factor. The third precondition involves overcoming external inhibitions or conditions that increase the possibility of offending (e.g., maternal absence or illness, lack of maternal closeness, social isolation of family, lack of parental supervision, unusual sleeping conditions, or paternal domination or abuse towards mother). The final precondition states that the offender must overcome a child's resistance to the abuse (e.g., giving gifts, desensitizing a child to sex, establishing emotional dependence, using threats or violence). The two remaining preconditions are associated with the how of the offense process and do not relate to the four causal factors. Finkelhor hypothesizes that the preconditions occur in a temporal sequence with each being necessary for the next to occur.

The four factors or motives in Finkelhor's theory can be subsumed within the three psychological systems outlined earlier: the motivation/emotional, perception and memory, and action selection and control systems. Emotional congruence and sexual arousal are motivational constructs and have affective aspects to them. In the ITSO, they would both be incorporated within the motivation/emotional system. The constructs of blockage and disinhibition can be seen as reflecting faulty planning or self-regulation and can be viewed as parts of the action and control system. The preconditions of overcoming both external and a child's resistance can also be viewed as reflecting control strategies and would also involve the retrieval of information from strategies from the perception and memory systems.

Marshall and Barbaree's Integrated Theory

Marshall and Barbaree's Integrated Theory (1990) proposes that the sexual abuse of children occurs as a consequence of a number of interacting distal and proximal factors. Specifically, this theory states that individuals experiencing developmentally adverse events (e.g., poor parenting, inconsistent and harsh discipline, physical and sexual abuse) are likely to exhibit distorted internal working models of relationships, particularly, with respect to sex and aggression, resulting in poor social and self-regulation skills from an early age.

For these individuals, the transition into adolescence is a particularly critical period. It is at this stage that individuals are most receptive to acquiring enduring sexual scripts, preferences, interests, and attitudes. Furthermore, the massive increase of sex hormones during this period increases the salience and potency of these sexual cues. According to Marshall and Barbaree, sex and aggression originate from the same neural substrates (e.g., hypothalamus, amygdala, septum, etc.) and are thought to cause qualitatively similar experiences. If an individual comes from an adverse background and, therefore, is already predisposed to behaving in an antisocial manner, the pubertal release of hormones may serve to fuse sex and aggression and to consolidate or enhance already acquired sexually abusive tendencies.

As a young adult, the lack of effective social and self-regulation skills makes it more probable that relationships, or attempted relationships, with women will be met by rejection and result in lowered self-esteem, anger, and negative attitudes toward females. These powerful negative emotions may fuel the intensity of sexual desires and the development of deviant sexual fantasies. Masturbation to these fantasies will increase their strength and also function as mental rehearsals in which future sexual offenses are planned. Young children may be viewed as more inherently trustworthy and to constitute a "safe haven" for the individual. The individual may therefore see deviant sex or fantasies as meeting a multitude of needs, including releasing sexual tension, and increasing personal effectiveness and control, interpersonal closeness, self-esteem, and masculinity.

According to the integrated theory, the above vulnerability factors interact with more transient situational elements such as stress, intoxication, strong negative affect, sexual stimuli, and the presence of a potential victim to impair an individual's ability to control their behaviors, resulting in a sexual offense. The reinforcing effects of deviant sexual activity and the development of cognitive distortions maintain offending. This reinforcement may be positive (e.g., sexual arousal, sense of power) or negative (e.g., reduction of low mood) in nature.

Marshall and Barbaree's Integrated Theory is a very sophisticated and powerful theory and its accommodation within the ITSO requires considerable thought. In order to ease, the task we will simply take each of the three systems comprising the trait factors of the ITSO and consider its relationship to key ideas in the Integrated Theory. With respect to the trait or vulnerability factors, the following analysis is feasible: (a) The motivation/emotional system can incorporate the sexual attachment, intimacy, emotional, and needs constructs of the Marshall and Barbaree theory. (b) The action selection and control aspect of our theory can absorb the impulsivity, social skills, and self-regulation components of the Integrated Theory. (c) The perception and memory system is able to integrate the entrenched beliefs, strategies, identity, and values referred to in the Integrated Theory. Concerning the other variables comprising this elegant theory, the emphasis on ecological, social learning, circumstantial, and biological factors are all easily dealt with. For example, early learning events are viewed as part of the developing offender's social ecology. One of the virtues of the Integrated Theory is that it explicitly addresses the role of biological and hormonal variables in the genesis of sexual abuse. With its strong neurobiological orientation, the ITSO is also able to take these factors in account without neglecting the important role of psychological agency and identity.

Future Directions and Conclusions

In this chapter, we have sketched out a possible framework for integrating many of the factors identified in research and theory determinants of sexual offending. In our view, the ITSO shows considerable potential for bringing together theories from different levels of theory, including the major multifactorial theories of sexual abuse (strong unifying power). It incorporates the insight from the comprehensive etiological theories that there are multiple trajectories to sexual offending. It also provides a useful way of incorporating single factor theories in terms of the three psychological systems outlined earlier. Individually and collectively, the three systems can be utilized to explain specific problems evident in sexual offenders such as emotional loneliness or deviant sexual arousal. It is also possible to create a unified or integrated account such as the one sketched out in this chapter. Finally, theories of the offense and relapse process are easily accommodated by virtue of the ITSO's stress on self-regulatory capacities and the role of ecological factors in facilitating sexual crime. Cultural factors are considered to be both a developmental resource and also part of the offender's current ecology.

Furthermore, the ITSO provides a clinically useful framework for the assessment and treatment of sexual offenders. Its ability to account for multiple offense trajectories and varying clinical presentations means it will help clinicians to focus on offenders' unique problems. The multisystemic nature of the ITSO prompts therapist to take into account a range of causal variables when formulating a case, to think dynamically with respect to their interaction, and to appreciate the role of ecological (i.e., social, cultural, circumstantial) variables in both creating the conditions for abuse and in shaping offender vulnerabilities. In our view, the use of the ITSO by clinicians will facilitate the construction of tailored treatment programs and avoid the mistakes inherent in a-one-size-fits-all perspective.

Finally, the ITSO is really an abstract framework for thinking systematically about sexual offending and its constituent causal variables. It is necessary for researchers to unpack its assumptions in greater detail and apply it to different types of sexual crimes, for example, rape, exhibitionism, or child molestation (i.e., to achieve greater explanatory depth and to improve upon its existing heuristic value). The abstract nature of the ITSO allows for variety in the types of goals, strategies, contexts, beliefs, emotions, and biological mechanisms involved in different sexual crimes. In other words, the ITSO possesses both horizontal and vertical depth. The former by virtue of its strong ecological orientation and the latter because it assumes human beings are embodied beings whose actions are conjointly influenced by a network of causal influences. Like all of us, sexual offenders are psychological agents who seek to realize their personal goals and animals whose evolved capacities allow them the possibility of changing their lives.

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Part I

Disorders and Types of Sexual Offending

Pedophilic Disorder

Jill D. Stinson and Judith V. Becker

Pedophilia, or a sexual interest in young children, has long been recognized as unusual and deviant, often linked with sexual behaviors involving youth and prepubescent children. Even early cultures which condoned the marriage of older men to adolescent females, or sexual relationships between older males and adolescent males (i.e., pederasty), largely condemned and questioned individuals who engaged in preferential sexual practices with very young children who had not yet reached the age of puberty (e.g., Suetonius, 121/1989; see also Quinsey, 1986; Seto, 2008a). Early works dedicated to the discussion of aberrant sexual behaviors as a form of mental illness (e.g., Krafft-Ebing, 1886/1997) also noted the peculiarity of individuals who chose to engage in sexual behavior with infants and young children. It seems that despite cultural variations in marriageable age and perceptions of sexual development, sexual interest, and arousal associated with infants and very young children are almost universally perceived as unconventional and at the same time, inappropriate.

Diagnosis and Diagnostic Considerations

Pedophilia first appeared in the context of mental disorder in the late nineteenth century, when it was labeled *paedophilia erotica* by Krafft-Ebing (1886/1997). It was later included in the diagnostic nomenclature for mental health professionals with the publication of the *Diagnostic and Statistical Manual for Mental Disorders, 2nd edition* (American Psychiatric Association, 1968) and has continued to be defined as a mental illness in subsequent revisions of diagnostic criteria related to problematic sexual interest and behavior.

Our most current diagnostic definition of pedophilia comes from the Diagnostic and Statistical Manual of Mental Disorders, 5th edition (DSM 5, American Psychiatric Association, 2013). Termed pedophilic disorder, this diagnosis connotes not simply sexual interest in prepubescent children but also the presence of significant distress, interpersonal impairment, or other difficulty as a result of these sexual interests. The DSM 5 contains a number of key diagnostic elements that were similarly present in the previous 4th edition and text revision of the Diagnostic and Statistical Manual (DSM-IV-TR, American Psychiatric Association, 2000). Within this definition are several crucial features: (1) recurrent and intense sexually arousing fantasies, urges, or behaviors involving prepubescent children, (2) acting on the urges or experiencing clinically significant distress or interpersonal impairment, and (3) time-related criteria, including a duration of at least 6 months for fantasies, urges, or behaviors and an age of 16 for the individual in question, with at least 5 years' difference in age between the individual and the children of interest. Additional specifiers include child gender preference, incestuous sexual interest, and whether or not the individual is also attracted to adults as well as children. While it is noted that the sexual interest involves a prepubescent child, this is merely defined as "generally 13 or younger," given that signs of pubescence are fluid throughout early pubertal development and vary from child to child. Diagnostic criteria for pedophilia described in the *International Statistical Classification of Diseases and Related Health Problems, 10th Revision, 2007 Version* (ICD-10; World Health Organization, 2007) are relatively brief, stating only that it reflects a sexual preference for children of prepubertal or early pubertal age. This remains the key feature with regard to most definitions of pedophilia—that it connotes a sexual interest in young children.

Oftentimes, the term "pedophile" is used rather loosely within a general context, referring broadly to individuals

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who have committed sexual crimes against children and used interchangeably with "child molester." However, it is important to note that given current diagnostic labels, not everyone who has engaged in sexual acts involving children would meet criteria for pedophilia, nor have all individuals diagnosed with pedophilia necessarily engaged in acts of child molestation or child sexual abuse. This is an important distinction, as much of the literature on pedophilia may be clouded by the inclusion of individuals who have not met specific criteria categorizing their sexual interest and behavior as a mental illness (Seto, 2008a). It is noted that individuals may engage in sexual behavior involving children without clear pedophilic interests, for reasons such as impulse control problems, dysfunctional relationship models stemming from histories of sexual abuse and trauma, intimacy deficits with adults (e.g., Beech & Fisher, 2002; Bumby & Hansen, 1997; Marshall, 1989, 1993), or self-regulatory deficits (e.g., Stinson, Sales, & Becker, 2008).

Victim research indicates that as many as 20 % of females and 10 % of males have been sexually victimized as children (Finkelhor, 1994), and that approximately 90,000 cases of child sexual abuse were reported to the authorities in the USA in 2000, though there appears to have been a decrease in actual offending, reporting, or both in recent decades (Finkelhor & Jones, 2004). From this, however, it is difficult to determine the exact number of pedophilic offenders, given that many sexual offenders against children may not demonstrate these characteristics or that some of the children represented in these numbers may have been victimized by the same perpetrator.

With regard to the prevalence of pedophilia, we do not currently know how many individuals are afflicted with this disorder. We do know that it is infrequent and that on surveys eliciting responses regarding sexual fantasies involving young children, approximately 3–5 % of individuals surveyed report some sexual interest and arousal associated with prepubescent children [as reported in Seto (2008a, 2008b)]. Even fewer individuals have reported acting on their sexual interest or fantasies in these same surveys. However, it becomes clear that despite the relative rarity of cases of pedophilia, it is more common among some groups than others. Not surprisingly, cases of pedophilia are most often identified among groups of known sexual offenders against children. Research regarding sexual interest and arousal patterns among adult men who have committed known acts of child sexual abuse reveals that between 40 and 50 % of these men would meet DSM-IV-TR (American Psychiatric Association, 2000) criteria for pedophilia (Blanchard, Klassen, Dickey, Kuban, & Blak, 2001; Maletzky & Steinhauser, 2002; Seto, 2008a; Seto & Lalumiere, 2001).

Recent attention to the use of child pornography, particularly given its availability on the internet, highlights the reality that not all individuals with sexual interests in young children are known offenders, and that little is in fact known about pedophilic individuals who have not acted on their sexual interests. In a study by Wolak, Finkelhor, and Mitchell (2005) describing the content of pornographic materials associated with a sample of child pornography offenders, 85 % possessed pornography involving children under the age of 12, in addition to pornography depicting post-pubertal adolescents. In this same sample, 17 % possessed depictions of prepubertal children exclusively. Thus, while approximately half of child sexual abusers may meet criteria for pedophilia, perhaps more than half of individuals who collect images of underage youth may demonstrate significant sexual interest in prepubertal children.

Sexual development and age of onset of pedophilic sexual interests do not appear to be substantially different from the sexual development or age of first sexual interests and experiences in non-pedophilic males (Seto, 2008a), though these individuals do differ in terms of the nature of their sexual interests. It is therefore likely that pedophilic sexual interests first manifested themselves in adolescence, along with the advent of puberty, for these individuals. Additional research does suggest higher rates of sexual abuse or trauma in the histories of adolescent and adult sexual offenders against children than those against adults, perhaps implying some early disturbances in normative sexual experiences and development (see Seto, 2008a).

With regard to comorbidity with other sexual disorders, pedophilia is often associated with comorbid diagnoses of exhibitionism, voyeurism, and frottage, as well as acts of rape (Abel, Becker, Cunningham-Rathner, Mittelman, & Rouleau, 1988; Raymond, Coleman, Ohlerking, Christenson, & Miner, 1999). Although criteria used to define pedophilia were predominantly behavior-based, findings from Abel et al. (1988) additionally reveal that 80–95 % of individuals with pedophilic interest in male children met criteria for one or more additional paraphilias, with the same being true for 60–85 % of individuals with pedophilic interest in female children. Similar results were obtained by Raymond et al. (1999), in that 53 % of the individuals in a sample of pedophiles met diagnostic criteria for at least one other paraphilia.

In terms of comorbidity with other psychiatric symptoms and diagnoses, individuals with pedophilia are often diagnosed with other Axis I and II conditions at a significant rate. In one study of individuals diagnosed with pedophilia (Raymond et al., 1999), current and lifetime rates of other Axis I disorders were 75 % and 93 %, respectively. The most common of these were mood disorder (31 % current; 67 % lifetime), anxiety disorder (53 % current; 64 % lifetime), and substance use disorder (4 % current; 60 % lifetime). Rates of Axis II personality pathology were reported at 60 % in this same sample. Few other studies have examined rates of psychopathology specifically among pedophiles, but other

empirical research denoting comorbid psychiatric disorder among individuals who meet criteria for one or more paraphilias reveal similar levels of psychopathology (e.g., Kafka & Hennen, 2003), particularly with regard to mood-disordered and personality-disordered symptoms.

Etiology of Sexual Interest in Children

Initial efforts to describe the causal mechanisms of pedophilia categorized pedophiles into two typologies—fixated and regressed (e.g., Groth & Birnbaum, 1978). These terms originate from a psychodynamic conceptualization of pedophilia and refer to an assumption that individuals who show some sexual interest in or behavior related to children are relying on sexual impulses from an earlier developmental stage. The fixated pedophile is an individual who is "fixated" in an earlier developmental stage and who identifies him- or herself with children. The fixated pedophile demonstrates poor or limited social interactions with adults and a lack of intimate relationships with adult partners. He or she will presumably engage in immature behaviors and associate more frequently with children. It is also hypothesized that the primary targets of a fixated pedophile are male children, and that this represents intrapsychic resolution of difficulties with achieving later stages of adult maturity. The regressed pedophile, on the other hand, is primarily sexually interested in same-aged adult partners and has likely engaged in such relationships during adulthood. However, under conditions of extreme stress, or when adult sexual partners are unavailable, the regressed pedophile may "regress" to an earlier developmental stage and select a child sexual partner to fulfill intimacy needs. This substitution of sexual partners may be situational or dependent on the moment and often does not reflect the degree of planning which is assumed in the sexual offenses characteristic of the fixated pedophile. Further, the regressed pedophile is presumably more likely to select female child victims, as this does not reflect conflicts in prior developmental stages of the offender himself. These views of pedophilia eventually fell out of favor as many researchers and clinicians moved away from psychodynamic personality explanations of sexual deviance and other maladaptive behaviors and adopted theoretical perspectives incorporating cognitive-behavioral, learning, and biological approaches.

A later conceptualization of pedophilia focused on the role of childhood experience, proposing that many sexual abusers of children are themselves former victims of childhood sexual abuse. This idea, labeled the abused–abuser hypothesis (Burgess, Hartman, & McCormack, 1987; Burton, Miller, & Shill, 2002; Freeman-Longo, 1986; Freund & Kuban, 1994; Garland & Dougher, 1990), adopts a social learning theory framework and assumes that modeling and internalization of sexual roles for adult and child following experiences of sexual abuse may lead to subsequent sexual interests in children or in adult–child sexual relationships. Three key components to this process are the child victim's initial interpretation of the abuse (e.g., beliefs in the normality of the behavior, belief that it is not harmful) which may serve to normalize the experience, factors specific to the relationship between victim and perpetrator, such as the age of the victim, the identity of or relationship with the perpetrator, or the frequency, severity, and type of abuse, and the initial response of the victim or the reactions of others who may become aware of the abuse. It was believed that through a specific confluence of these factors, some individuals who were victims of childhood sexual abuse would develop sexual preferences of their own which reflected sexual interest in adult–child sexual relationships, thus leading to more lasting pedophilic interest and arousal. Several problems with this hypothesis have limited its usefulness in describing the process through which pedophilic interests form, however. This includes discrepancies between the number of individuals who are victims of child sexual abuse and those who develop pedophilic interests, the rate of pedophiles with no known instances of sexual abuse during childhood, and the lack of empirical research to support many of the hypothesized factors which are believed critical to this process (e.g., Benoit & Kennedy, 1992; Haapasalo & Kankkonen, 1997; Jonson-Reid & Way, 2001).

Some research has considered the role of biological processes in the development of pedophilic sexual interests. Early efforts explored intellectual differences between pedophiles and other sexual offender groups, suggesting that perhaps intellectual or cognitive impairments might characterize the majority of adult individuals who manifest sexual interests in children. Studies comparing intellectual assessment results of sexual offenders with child victims and other offenders have noted some important differences (e.g., Hucker et al., 1986; Langevin, Wortzman, Wright, & Handy, 1989), while others have noted low rates of intellectual impairments among pedophilic or general sex offender samples (e.g., Lambrick & Glaser, 2004; Lindsay, 2002). Other neurological research has considered the possibility of structural brain impairments among pedophilic sexual offenders. Initial research utilizing brain scanning techniques identified abnormalities in the left temporal lobe differentiating pedophilic sexual offenders from other sex offender groups (Galski, Thornton, & Shumsky, 1990; Lang, 1993; Langevin et al., 1988; Langevin, Wortzman, Dickey, Wright, & Handy, 1988; Wright, Nobrega, Langevin, & Wortzman, 1990). Similar research has also identified significantly lower levels of cerebral blood flow, particularly within the frontal and left temporal lobes, of individuals with sexual interest in children as opposed to other sexual offenders or non-offenders (Hendricks et al., 1988; Raine & Buchsbaum, 1996).

Unfortunately, these biologically based theories have failed to provide a specific causal mechanism through which these neurological impairments or differences lead to pedophilic sexual interests, and still only a portion of individuals with sexual interests in children demonstrate these differences. Further, the biological explanations of pedophilia fail to account for important social, cognitive, and behavioral factors which can influence the development of sexual behaviors involving children.

Other etiological conceptualizations have relied on a cognitive-behavioral framework, emphasizing the role of offense-supportive beliefs, cognitive schemas and information processing, behavioral reinforcement contingencies which may strengthen pedophilic arousal, and patterns of sexually deviant interest and arousal. These principles have been utilized to shape a variety of integrated cognitive-behavioral theories, including Finkelhor's Precondition Model (Finkelhor, 1984), Marshall and Barbaree's integrated theory of sexual offending (Marshall & Barbaree, 1990), and other models which use cognitive-behavioral theory to not only explain pedophilic offenses but other sexual offenses as well [e.g., Hall and Hirschman's Quadripartite Model, Hall and Hirschman (1991); the Pathways Model, Ward and Siegert (2002)]. Important components of these theories include sexual beliefs about children (e.g., "Sexual activity between adults and children isn't harmful" or "Children know about sex and benefit from sexual experiences") which may facilitate sexual offending against them, ways of processing interpersonal information which overemphasize sexual interaction or sexual interest (e.g., perceiving that a child asking for a hug from an adult is in fact sexually interested in that adult, interpreting questions about sex or sexual activity as sexual interest or a desire for sexual activity), or beliefs about the world which may suggest sexual entitlement or sexual expectations of others. Other factors which are relevant from a cognitive-behavioral perspective include intimacy deficits, limited social skills or social competence, loneliness, empathy deficits, or antisociality. Theories emphasizing these principles suggest that sexual interests in children thus develop through a combination of experience, cognitive beliefs about sexuality and children, and the gradual reinforcement of sexual arousal in response to children over time. These theories inform perhaps the majority of current treatment approaches, though few of them have been rigorously empirically tested from a causal perspective (Seto, 2008a; Stinson, Sales & Becker, 2008).

More recent etiological considerations have examined the role of self-regulatory processes in the development of pedophilia and other sexual pathology and problematic sexual behaviors [Multi-Modal Self-Regulation Theory, Stinson, Sales, and Becker (2008); Self-Regulation Model, Ward and Hudson (2000)]. While these do not specifically focus on only the development of pedophilia or sexual interest in children, they do propose relationships between deficits in self-regulatory functioning and the use of sexual goals as a regulatory strategy. Important components of these conceptualizations as related to pedophilic interests include difficulties with regulating mood or thoughts, deficits in adaptive functioning with regard to relationships, reinforcement of specific sexual behaviors or interests, and goals consistent with sexual offending. As noted, these ideas are relatively recent and have thus been subjected to only limited empirical evaluation (e.g., Stinson, Becker, & Sales, 2008; Stinson, Robbins, & Crow, unpublished manuscript).

Assessment Strategies

Mental health professionals are often called upon to do various forms of assessment with individuals who have committed sexual offenses, many of whom have engaged in sexual activity with children and who might meet criteria for pedophilia. Some of these evaluations are for legal purposes. Some are for treatment. Others involve mitigation of legal culpability or even determinations of treatment progress. This section of the chapter will focus on those assessments which occur prior to beginning treatment. These assessments focus on a variety of issues, including diagnosis and history, description of the offense process, and identification of treatment needs.

Pretreatment assessments for individuals who have engaged in sexual offenses against children or who have demonstrated pedophilic interests should be comprehensive and include many of the following elements. A first step includes review of collateral materials, including victim statements, criminal and/or juvenile justice records, and any other legal documents related to prior offenses that the individual might have committed. A thorough clinical assessment also involves describing developmental and family history, education, medical history, school history, substance abuse history, any history of abuse, or neglect. One should also obtain information regarding the individual's living situation, hobbies or interests, and available supports. It is critical to ascertain whether or not the individual has ever received prior psychological or psychiatric counseling and if that was helpful. It might also be beneficial to obtain prior therapy records, if potentially related to the assessment question at hand.

Personality characteristics or traits may additionally be useful in determining important factors related to the client's offending, responses to treatment, and possible risks for future sexual offenses. There are numerous personality inventories which could be used as part of a comprehensive assessment. Such measures might include the Personality Assessment Inventory (PAI; Morey, 1991), the Minnesota

Multiphasic Personality Inventory, 2nd Edition (MMPI-2; Butcher, Dahlstrom, Graham, Tellegen, & Kaemmer, 1989), or the Millon Clinical Multiaxial Inventory, 3rd Edition (MCMI-III; Millon, Davis, & Millon, 1997). Since psychopathy has been found to be predictive of recidivism (e.g., Hanson & Harris, 1998; Hanson & Morton-Bourgon, 2005; Hemphill, Hare, & Wong, 1998) as well as success in treatment (Seto & Barbaree, 1999), it is recommended that adults also be assessed using the Psychopathy Checklist, Revised (PCL-R; Hare, 1991).

Regarding sexual interests, a comprehensive and thorough sexual history is essential. This includes a history of "normative" (age appropriate consensual sexual behaviors) as well as paraphilic fantasies and behaviors. A number of specialized instruments are available to assist the clinician in assessing the nature of the individual's sexual interests. Physiological assessments of sexual arousal, particularly related to children, include penile plethysmography and the Abel Assessment of Sexual Interest (AASI; Abel, Huffman, Warberg, & Holland, 1998), which assesses sexual interest via viewing time technology. Research has indicated that viewing time measures are able to distinguish pedophiles from non-pedophiles (Abel et al., 1998, 2004; Abel, Jordan, Hand, Holland, & Phipps, 2001), who have targeted male child victims from those who have targeted female child victims (Abel et al., 2004; Worling, 2006), and different types of paraphilic sexual interests (e.g., Gray & Plaud, 2005; Stinson & Becker, 2008). However, despite these successes, others have questioned the use of these instruments, as they are often expensive, invasive, and do not always lead to definitive findings of sexual interest (e.g., Freund, Watson, & Rienzo, 1988; Gray & Plaud, 2005; Howes, 1995, 2003; Looman, Abracen, Maillet, & DiFazio, 1998; Stinson & Becker, 2008).

Some have also used the polygraph as a physiological measure of sexual activity involving children. While this cannot be used to diagnose pedophilia or corroborate sexual fantasies involving children, it may be used to validate historical instances of sexual behavior involving children (e.g., Abrams, 1991; Ahlmeyer, Heil, McKee, & English, 2000). However, there are few articles in the literature attesting to the validity of polygraphy with a pedophilic population or other sex offender populations.

Other measures of sexual interest and related cognitions and behaviors may include combination of self-report and historical variables, such as the Multiphasic Sex Inventory, 2nd edition (MSI-II; Nichols & Molinder, 2000), Clarke Sexual History Questionnaire (Langevin & Paitich, 2002; Paitich, Langevin, Freeman, Mann, & Handy, 1977), the Abel and Becker Cognition Scale (Abel et al., 1989), and the Abel and Becker Sexual Interest Cardsort (Abel & Becker, 1985). Interestingly, recent research has indicated that some self-report instruments, such as the MSI-II (Nichols & Molinder, 2000) or self-report sexual fantasy content, may be more accurate predictors of sexual interests in children or other targets than the traditional physiological measures in some populations of sexual offenders (Stinson & Becker, 2008). Thus, these instruments, which are perhaps more cost-effective, easy to administer, and less invasive, might provide much valuable information for those interested in examining sexual interest in children [For a more detailed list of assessment inventories that have been used in assessing sexual offenders, readers are referred to Prentky and Edmunds (1997)].

Treatment Models

Historically, a variety of treatment theories have governed the development of treatment models or treatment strategies for working with pedophiles. Individuals have used psychodynamic therapy, eclectic approaches, and generic group therapy. More recently, cognitive-behavioral interventions, the relapse prevention model, and in some cases, psychopharmacologic interventions have been the predominant methods of providing sex offender treatment. Cognitive behavior therapy utilizes a multicomponent approach and targets both cognitive treatment needs, such as deviant sexual arousal, distorted cognitions, pro-offending attitudes, impulse control deficits, social skills deficits, poor emotional regulation, environmental triggers, and behavioral components like masturbatory reconditioning, covert sensitization, or olfactory aversion therapy (e.g., Marshall & Eccles, 1996; Marshall & Fernandez, 1998; McGrath, Hoke, & Vojtisek, 1998). An important part of these therapies also involve assisting the client in overcoming the denial and minimization and developing empathy. With regard to pedophilia and offenders with sexual interest in children, the goal of cognitive-behavioral sex offender treatment would be to reduce offense-supportive beliefs (e.g., "Ancient societies encouraged sex between adults and children," or "Children need to have sex to learn about it."), develop empathy for children, improve relationships with adult consenting sexual partners, and reduce deviant arousal to child stimuli. Although the majority of treatment programs in North America utilize cognitive-behavioral techniques, the effectiveness of such programs has been questioned (e.g., Kirsch & Becker, 2006; McGrath, Cumming, Burchard, Zeoli, & Ellerby, 2010; Rice & Harris, 2003). Empirical research evaluating the effectiveness of cognitive-behavioral treatment in reducing violent sexual recidivism among general sexual offenders has produced minimal, mixed, or even negative effects (Hanson, Steffy, & Gauthier, 1993; Marshall, Jones, Ward, Johnston, & Barbaree, 1991; McGrath et al., 1998; Quinsey, Harris, Rice, & Lalumiere, 1993; Quinsey, Khanna, & Malcolm, 1998; Rice, Quinsey, & Harris, 1991).

Relapse prevention is a type of cognitive-behavioral intervention which has been continually dominant in North American sex offender treatment programs (McGrath et al., 2010). Relapse prevention relies on the identification of high-risk situations, triggers which may initiate the sex offense process, and the development of a relapse prevention plan. These high-risk situations or triggers may include environmental factors, "seemingly unimportant decisions" which can lead to offending or beliefs or thoughts which are supportive of the offense process. The ultimate goal of relapse prevention is to develop a comprehensive plan to assist the client with accurately identifying these precursors and minimizing risk. Though many programs have used a relapse prevention approach, recent research regarding its outcome has been less than encouraging and suggests that there are few differences between treated and untreated offenders (Marques, Wiederanders, Day, Nelson, & van Ommeren, 2005).

Psychopharmacologic interventions are frequently used in some treatment programs as an adjunct to treatment. Hormonal treatments such as medroxyprogesterone acetate, cyproterone acetate, and leuprolide acetate have been used in the treatment of individuals with pedophilia. These medications are used to lower the individual's testosterone levels and consequently reduce sexual drive, though they do not redirect the individual's patterns of sexual interest (i.e., sexual interest in children or minimal erectile capacity may remain despite treatment). However, these forms of medication can cause unwanted side effects, including weight gain, increased blood pressure, impaired glucose tolerance, and gallbladder disease (Meyer, Walker, Emory, & Smith, 1985) and may be subject to continuing compliance problems, as is the case with other pharmacological interventions. Others have questioned the use of these medications on ethical grounds (e.g., Meyer & Cole, 1997; Stinneford, 2006), while others have noted their failure to reduce sexual recidivism (Rice & Harris, 2003). Other pharmacological treatments have involved the use of Selective Serotonin Reuptake Inhibitors (SSRIs) for the treatment of paraphilic and non-paraphilic sexual disorders (e.g., Greenberg & Bradford, 1997; Greenberg, Bradford, Curry, & O'Rourke, 1996). As noted by Becker and Johnson (2008), it is possible that these medications may decrease sexual obsessions, improve disordered mood symptoms, and perhaps decrease impulsivity.

While it does not endorse a specific treatment approach, the risk-needs-responsivity model (Andrews, Bonta, & Hoge, 1990; Bonta & Andrews, 2007) has been applied to the treatment of pedophilic sex offenders as well as other offender groups. This model emphasizes discriminating high from low risk offenders and offering treatment to those most at risk, targeting criminogenic needs related to the individual's sex offending behavior, and considering responsivity factors such as motivation, special needs, or barriers to treatment [see further Hanson, Bourgon, Helmus, and Hodgson (2009a, 2009b), Becker and Stinson (2011)]. This approach calls for continued research in identifying those at highest risk and thus in most need of treatment, targeting treatment needs which may be most relevant for reducing risk and producing a better outcome for offenders, and tailoring treatments so as to have the greatest preventative impact on future sexual offending.

As can be seen from the previous discussion, many problems remain with current approaches to sex offender treatment. This may be due to a number of factors, including a rather atheoretical approach to sex offender treatment (i.e., that our theories of what causes sex offending behaviors and pedophilic interests do not match our strategies for treating these behaviors and interests; Kirsch & Becker, 2006), problems with treatment duration or delivery, a lack of comprehensive and integrative treatment targets, or poor aftercare and follow-up once treatment has been completed. With regard to pedophilic sexual offenders, given the high rates of comorbidity with other paraphilias and other psychiatric disorders, it is possible that traditional treatments are less successful for this population given the psychiatric complexity of individuals with this disorder, and the corresponding adaptive and functional deficits which may be seen accompanying this diagnosis.

Recidivism and Risk Assessment

With regard to known recidivism among pedophilic sexual offenders, research indicates that anywhere from 5 to 42 % of individuals studied have engaged in further acts of sexual violence after release (Hanson et al., 1993; Hanson & Bussiere, 1998; Langan, Schmitt, & Durose, 2003; Moulden, Firestone, Kingston, & Bradford, 2009; Prentky, Knight, & Lee, 1997). Interestingly, one recent study of recidivism among offenders against children under the age of 16 utilized phallometric testing and the Screening Scale for Pedophilic Interest (Seto & Lalumiere, 2001) to differentiate pedophilic from non-pedophilic offenders and found no significant differences between the recidivism rates of these two groups (Moulden et al., 2009). This suggests that much about the nature of sexual recidivism among pedophiles, and whether or not it differs from other sex offender groups, remains unknown. There is also some research to indicate that a small subgroup of sexual offenders against children continue offending until later in life (e.g., Hanson et al., 1993), though this may not be the case with the larger population of pedophiles and sexual offenders against children (Barbaree, Blanchard, & Langton, 2003).

The assessment of risk for individuals who have committed sexual offenses focuses primarily on determining the risk of future sexually violent recidivism upon release into the community. This may include determining risk in order to

assign an offender to treatment and emphasize treatment needs in accordance with the risk-needs-responsivity model (Andrews et al., 1990; Bonta & Andrews, 2007), to assess dangerousness according to specific legal standards or criteria, or to make placement or risk management decisions. Few studies of risk have differentially focused on individuals who are at greater risk of sexually offending against children as opposed to other victim groups, though some risk factors specific to pedophilic sexual interests have been implicated as crucial determinants of risk. For example, general risk factors for the detection of known sexual recidivism include offender age, history of arrest for sexual and nonsexual offenses, patterns of violence associated with sex offending behavior, antisocial lifestyle characteristics, poor mood or affect regulation, anger control, and cooperation with supervision requirements (Hanson & Bussiere, 1996; Hanson & Harris, 1998, 2000; Hanson, Harris, Scott, & Helmus, 2007; Hanson & Morton-Bourgon, 2005). Risk factors more specific perhaps to individuals with pedophilia or sexual offenses against children may include certain victim characteristics (e.g., age), deviant sexual interests, problems with sexual self-regulation, and attitudes or beliefs which are supportive of sexual offending (Hanson et al., 2007; Hanson & Harris, 1998, 2000; Hanson & Morton-Bourgon, 2005). Individuals with pedophilic sexual interests may thus be at greater levels or risk with regard to these factors due to the age of their victims, sexual interests in children, and attitudes or beliefs which are related to their sexual behaviors involving children.

The way in which this risk is determined typically involves the use of actuarial instruments designed to predict risk among a diverse population of sexual offenders. These instruments, developed by determining the known recidivism rates of large groups of sexual offenders post-release and statistically calculating characteristics of these individuals most predictive of their recidivism, have demonstrated predictive superiority over clinical judgment alone (e.g., Meehl, 1954). Because these measures rely on statistical relationships, they do not inform us as to causal mechanisms behind an individual's risk; in other words, they do not tell us why a certain factor is predictive of risk nor will they give us a true estimate of risk on an individual basis. Instead, they predict risk based on a set of characteristics which were significant for a group of individuals who had engaged in additional acts of sexual violence. A combination of static and dynamic risk variables have been incorporated into these instruments, including the Static-99 and Static-99R (Hanson & Thornton, 2000; Helmus, 2009), the Static-2002 (Hanson & Thornton, 2003), the Rapid Risk Assessment for Sex Offense Recidivism (RRASOR; Hanson, 1997), the MnSOST-R (Epperson, Kaul, & Hesselton, 2005), the Sex Offender Risk Appraisal Guide (SORAG; Quinsey, Harris, Rice, & Cormier, 1998), the Sexual Violence Risk-20 (SVR-20; Boer, Hart, Kropp, & Webster, 1997), and the Stable-2000/Acute-2000 and Stable 2007/Acute 2007 (Hanson et al., 2007). As noted above, many of these instruments contain items which may rely on a history of pedophilic sexual behaviors and interests, including sexually deviant interests, youthful victim age, and offense-supportive beliefs.

Though actuarial instruments are typically considered the most precise and objective means of measuring risk of future sexual offending, some research has evaluated the utility of using clinical adjustments to static actuarial measures. Unfortunately, some research suggests that the addition of clinical or discretionary material makes no impact on actuarial prediction (e.g., Krauss, 2004) or may actually worsen it [Barbaree, Seto, Langton, and Peacock (2001), for further discussion, please see Seto (2008a)]. Other recent work regarding the use of clinical data to supplement actuarial decision making involves the development of structured clinical and actuarial assessment tools, including the Historical Clinical Risk—20 (HCR-20; Webster, Douglas, Eaves, & Hart, 1997) and the Structured Anchored Clinical Judgment—Minnesota (SACJ-Min; Grubin, 1998). Again, though these instruments do not exclusively address risk concerns related to pedophilia, a number of the risk items do relate to specific sexual interests or behaviors which may be relevant for individuals with pedophilia.

With regard to individuals who have demonstrated pedophilic sexual interests but who have not yet been known to act on them (e.g., individuals who utilize child pornography but who have not been arrested for sexual acts involving children), few available resources exist to describe their future risk of engaging in sexual behaviors with child victims. Many of the above-described risk assessment actuarial instruments rely heavily on history of arrest or known offense behaviors in order to make determinations of an individual's potential risk. Seto (2008a) and Seto and Eke (2005) have noted that men who utilize child pornography but who have not committed contact sexual offenses against children are perhaps less likely to commit future sexual offenses involving children than men who utilize child pornography but who have already engaged in child sexual offenses, again suggesting that history of behavior is a highly predictive factor. Whether or not the presence of pedophilia alone may be predictive of future offending when compared with non-pedophilic individuals who have been found with child pornography has yet to be determined.

Policy Issues

In an effort to make for safer communities, legislators have enacted numerous laws that impact or regulate the behavior of sexual offenders, particularly offenders who have targeted child victims. Such laws have included longer sentences, sex offender registration, community notification and residency restrictions, and long-term post-incarceration civil commitment.

These laws apply to both juvenile as well as adult sexual offenders. In many cases, the impetus for the development of these laws was a particularly heinous and public case where a child was sexually assaulted and/or murdered by an individual with a history of sex offending behavior. In fact, many of these laws have been named after the very victims in these cases (e.g., Megan's Law, the Jacob Wetterling Act). While some policies have been criticized as being unconstitutional (e.g., Sexually Violent Predator civil commitment), the U.S. Supreme Court and other courts have often upheld them (e.g., *Kansas v. Hendricks*, 1997). However, several states' efforts to enact the death penalty for cases of child molestation did result in a reversal by U.S. Supreme Court decision (*Kennedy v. Louisiana*, 2008).

Many of these policies, particularly those involving community registration and notification, are predicated on the assumption that knowing who the offenders are will prevent future sexual violence. This also presumes that these individuals are unknown to the victims and their families, whereas much of the research has indicated that perpetrators of sexual violence against children are often known or even related to the victims (e.g., Snyder, 2000), thus perhaps negating the effectiveness of prior registration and notification. Policies instead should perhaps focus on education regarding child sexual abuse or decreasing stigma for victims of child sexual abuse which may in turn increase willingness to report such offenses.

Though few research efforts have been conducted to evaluate the efficacy of many legislative policies directed toward sexual offenders against children, some recent data have examined recidivism rates of both adults and juveniles who are impacted by registration and notification policies. Evaluation of several states' registration and notification policies as well as related residency restrictions reveal somewhat mixed results, in that there were no significant effects on juvenile sexual recidivism (Letourneau & Armstrong, 2008; Letourneau, Bandyopadhyay, Armstrong, & Sinha, 2010), but some initial deterrent impact on adult sexual offending (Letourneau, Levenson, Bandyopadhyay, Armstrong, & Sinha, 2010). However, examination of a change in trajectory of adult offending (i.e., differentiating different offender risk groups) following the implementation of registration and notification laws (Tewksbury & Jennings, 2010) and of recidivism and child offenders' proximity to schools and daycare centers (Zandbergen, Levenson, & Hart, 2010) failed to find significant effects.

Other research has assessed the impact of sex offender registration and notification policies on offenders, their families, and the reduction of recidivism. Levenson, D'Amora, and Hern (2007) examined the impact of community notification on 239 registered sex offenders from one state and 148 from another state. The offenders were surveyed as to outcomes including job loss, housing disruption, assault victimization, property damage, harassment, and suffering on the part of their family members. They were also queried as to psychosocial effects such as stress, isolation, fear for their safety, shame, and embarrassment and as to whether or not having community notification helped them manage risk and prevented reoffense. The majority of the sex offenders reported negative consequences; for example, 21 % reported they lost a job because their boss or coworker discovered their registration status. Ten percent were forced to move from their homes, and 21 % had been threatened or harassed by neighbors. Eighteen percent experienced property damage. The majority of offenders experienced psychosocial distress in relation to the public disclosure, and nearly half were afraid for their safety because their sex offender status was known. Specifically, 62 % reported that the community notification made recovery more difficult by causing stress, 58 % reported shame and embarrassment, 54 % reported feeling alone and isolated, and 55 % reported less hope for the future now that they would be a registered sex offender. Given the role of negative affect and lifestyle instability in the determination of an offender's risk to reoffend, these effects are concerning.

Levenson and Tewksbury (2009) examined the stress experienced by family members of adults who were registered sex offenders. Sixty-eight percent of survey respondents reported frequent stress due to their family member's registration as a sex offender. Almost half of the respondents reported fearing for their safety due to their loved ones being registered as a sex offender, and 31 % of the respondents reported they were forced to move due to residential restriction laws or community pressure. Stress levels were high among the family members of registered sex offenders, as were isolation, loss of friends, and relationships and fear for their safety.

Thus, it would appear that there are a number of unintended consequences either to sex offenders who are made to register or to their family members. Since family members are a potential source of support for individuals who have committed sexual offenses, it is important to identify strategies which might be helpful in aiding relatives who are in relationships with individuals who must register or who are involved in community notification. Finally, though some initial research has demonstrated perhaps small, though inconsistent, effects of registration and community notification on recidivism, more research is clearly needed to determine if other policies are achieving their goals relative to reducing recidivism and enhancing community safety.

Future Directions

As has been highlighted throughout this chapter, a number of areas still remain relatively unexplored with regard to understanding individuals with pedophilic sexual interests. In order

to provide the most effective assessment, treatment, risk management, and prevention, we should continue to focus on these unknowns in our research and clinical practice with pedophilic sexual offenders.

First, we must gain a more complete understanding of the causal mechanisms underlying etiology and risk. For example, recent theoretical and empirical findings have implicated self-regulation and self-regulatory deficits as not only important etiological considerations (Stinson, Becker & Sales, 2008; Stinson, Sales & Becker, 2008; Ward, Polaschek, & Beech, 2006) but also as significant predictors of risk (Hanson et al., 2007; Hanson & Harris, 1998). However, this work is still relatively new and lacks comprehensive empirical study. And while research has determined many significant factors which may precede sexual offending or predict risk, the causal mechanisms explaining these statistically significant relationships remain elusive. In other words, in order for us to truly understand not only how pedophilic sexual interests develop but also how they impact continued sexual behavior, we must know more about why certain constructs or factors are significant and how they impact and interact with one another.

A related concern involves the need for more effective integration between theory and practice. Many current treatment interventions for pedophilia, including those which involve chemical or biological solutions, are predicated on the belief that treating outward symptoms of the disorder (e.g., sexual arousal, sexual beliefs about children) will ultimately reduce sexual interest in children and related behaviors. However, the etiological link between these concepts and offending behavior remains unclear (e.g., Stinson, Sales & Becker, 2008). In order to remain effective, our practices of assessing and treating pedophilia must match what is known from empirical evaluation of causal theory. In this way, we can ensure that we are truly addressing those causal or maintenance factors most related to risk and prevention of sexual violence.

Similarly, we must focus efforts on developing and researching the most effective treatment interventions for individuals with pedophilia and pedophilic sexual interests. Emerging criminal justice trends in the detection of users of child pornography suggest that a number of individuals with pedophilia who were previously unidentified will now be in need of treatment intervention. Most treatments for sexual offending thus far, including those aimed at reducing sexual interests and behaviors involving children, have focused primarily on contact pedophilic offenders. And while much remains to be improved with regard to these treatments [e.g., limited treatment effectiveness noted by Marques et al. (2005)], even greater need lies in the treatment of these increasingly salient pornography offenders with clear sexual interests in children, but whose behaviors and clinical presentation may be different from that of the traditional contact child sexual offender seen in correctional samples.

With regard to improvements in our understanding of risk, we should perhaps place greater emphasis on the changing or dynamic nature of risk, particularly within the community following treatment. While several risk assessment instruments have incorporated dynamic factors, such as treatment progress, understanding of risk, or compliance with supervision requirements, the ability to capture the rapid and situational factors impacting risk on a daily basis in other settings is still largely absent from our risk prediction tools. Some in this area have made distinctions between risk status and risk state, noting that while status may remain relatively constant, the state of risk is constantly changing and building over time (Douglas & Skeem, 2005). Others have likened risk prediction to weather prediction (Monahan & Steadman, 1996), comparing the prediction of dangerousness to the prediction of the weather, where conditions are variable and can only be known for short periods of time. Future research with regard to pedophilia and risk of sexual offending should incorporate many of these principles.

Finally, we have voiced concerns that many legislative efforts in the area of prevention and treatment for sexual offenders against children have resulted from reactive public outcry rather than sound empirical research. Thus, an obvious area for future research includes education and empirically informed legislative policies. This may involve a change in emphasis from reactive deterrence measures to those aimed at prevention, treatment, and reintegration into the community. It also may include more rigorous evaluation of the effectiveness of current legislative practices, including community registration and notification, civil commitment for dangerous sexual offenders, and sentencing practices for sexual crimes, as well as identifying proactive research contributions to proposed legislation.

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Hebephilic Sexual Offending

Skye Stephens and Michael C. Seto

Introduction

This chapter focuses on sexual offenses committed by hebephilic individuals (see also Stephens & Seto, 2015). The literature on sexual offenses committed by pedophilic individuals is reviewed in depth in Seto (2008). *Hebephilia* refers to a sexual preference in pubescent children (Tanner stages 2 or 3 in terms of physical maturation; see Table 1), typically ages 11–14. In hebephilia, the focus of the sexual interest is on girls or boys who are just beginning to show secondary sex characteristics (Blanchard, 2010; Blanchard et al., 2009). Hebephilia is differentiated from *teleiophilia*, a sexual preference for physically mature persons (Tanner stage 5), and *pedophilia*, a sexual preference for prepubescent children (Tanner stage 1, generally younger than 11) who show no signs of sexual development (Blanchard et al., 2009). The term hebephilia was first introduced by Glueck (1955) and in the early writings of Freund (1965), who discussed hebephilia in the context of phallometric assessment of sexual arousal.

Although approximate age ranges are specified, it is the physical stage of sexual development as opposed to chronological age that truly matters in this distinction. For example, it is not the case that an individual is attracted to a girl because she is 13 years old; it is that the person is attracted to girls who are beginning to show signs of sexual development—breast budding, growth spurt, emergence of pubic and axillary hair—rather than prepubescent girls, who do not show any such signs, or older adolescent girls, who are postpubescent or appear sexually mature.

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The typical age ranges associated with pedophilia and hebephilia are approximate, because people vary in the age of onset of puberty and their maturation rates. Pediatric research has shown, for example, that the average age of onset of puberty has decreased steadily over the past century for both boys and girls, possibly as a result of better nutrition and physical health (Herman-Giddens et al., 1997, 2011). Pubescence typically occurs between the ages of 11 and 14 (e.g., Herman-Giddens et al., 2011). For girls, pubic hair and breast budding appear at an average age of 11 years; for boys, pubic hair appears and physical changes in the penis and scrotum begin at an average age of 11 (Roche, Wellens, Attie, & Siervogel, 1995). The pubertal growth spurt begins at an average age of 10 for girls and 12 for boys (Grumbach & Styne, 1998) and the mean age for first menses is 12.88 (SD = 1.20) for Caucasian girls and 12.16 (SD = 1.21) for African American girls (Herman-Giddens et al., 1997). Herman-Giddens and colleagues (2011) found that boys typically begin stage 2 genital development between the ages of 9 and 10 and stage 3 development between 11 and 13. For boys, stage 2 pubic hair development starts between 10 and 12, and for stage 3 it occurs between 11 and 13. For testicular volume increases to 3 ml or higher start on average between 9 and 10 and this starts to increase to 4 ml between 11 and 12. In both males and females, adult-typical pubic hair patterns are established between the ages of 13 and 16, female breast development is mostly complete between the ages of 14 and 16, and the genitals approach their adult size and shape between the ages of 14 and 16 (Grumbach & Styne, 1998; Herman-Giddens et al., 2011). Hebephilic sexual offenders would be most interested in pubescent children, based on their physical appearance, rather than a particular age range.

In the clinical literature, hebephilia has often been (imprecisely and thus confusingly) equated to a sexual preference in adolescents, which is typically defined as the developmental period between the ages of 12 and 18. This wide age range is problematic as it would include pubescent children

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Table 1 Tanner stages

Tanner stage	Brief description	Typical age range	Preference
1	No secondary sex characteristics have developed	Under 11 (prepubescent)	Pedophilia
2	Breast buds develop and areola begins to widen. Male genitalia change. Small amount of pubic hair growth	11 (pubescent)	Hebephilia
3	Male genitalia continue to change and the penis begins to lengthen. Breasts start to develop and extend past the areola. Pubic hair becomes coarser	12–14 (pubescent)	Hebephilia
4	In females, the breasts continue to develop and the areola and nipple becomes an additional mound. Testicular volume continues to change and the penis continues to lengthen in males. Pubic hair extends across the pubis bone	15–16 (adolescent)	Ephebophilia
5	Secondary sex characteristics reach full maturity	17 and older (sexually mature)	Teleiophilia

Note: The changes regarding secondary sex characteristics are briefly described, and interested readers should consult Tanner (1978) to receive a full description of each stage

along with sexually mature teenagers who could be easily confused with young adults. A sexual preference in those in late adolescence who show many signs of sexual maturity (Tanner stage 4) or who are sexually mature (Tanner stage 5) is not representative of hebephilia; instead, it can be described as *ephebophilia* or *teleiophilia* (Hames & Blanchard, 2012). The distinction is important in both conceptual and practical ways. Conceptually, hebephilia is a paraphilia, reflecting an atypical (statistically rare) sexual age interest in pubescent children (see Seto, 2010). In contrast, a sexual preference in older adolescents (ephebophilia) would probably not meet Wakefield's (1992) definition, given older adolescents are reproductively viable and the fact that typically men are sexually attracted to older adolescents, as reflected in self-report, psychophysiological, and pornography use studies (Freund, Seeley, Marshall, & Glinfort, 1972; Symons, 1979).[1] Practically, acting on hebephilic sexual interests by viewing child pornography or engaging in sexual acts with pubescent children would violate laws in most jurisdictions regarding age of sexual consent, whereas the same is not necessarily true of ephebophilia.

The present chapter will briefly review the research literature on pedophilia, because hebephilia and pedophilia have a number of similarities. Additionally, there is an established literature on the etiology, assessment, and treatment of pedophilia among sexual offenders that may serve as a useful framework for thinking about hebephilic sexual offending. We will discuss ways in which hebephilia may be a distinct sexual age preference while reviewing the debate about the inclusion of hebephilia in *DSM-5*. We then discuss the etiology, assessment, and treatment of hebephilia.

Pedophilia and Hebephilia

Unlike hebephilia, pedophilia is an accepted clinical diagnosis and is currently part of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM: American Psychiatric Association, 2000) and *International Classification of Diseases* (ICD: World Health Organization, 1997) diagnostic nosologies. In the most recent version of the *DSM* (*DSM-5*), a person can be diagnosed with pedophilia if they have intense and recurrent sexual interests in prepubescent children—as reflected in their thoughts, urges, fantasies, sexual arousal, or behavior—and they are clinically distressed or impaired as a result of this sexual interest. The definition remained unchanged between the DSM-IV-TR and the DSM-5, though the diagnosis will be relabeled "pedophilic disorder" to distinguish the disorder from paraphilic sexual interest in the absence of distress or impairment (American Psychiatric Association, 2013). In the *ICD-10*, the latest version of the international diagnostic system, pedophilia represents a sex-

[1]The sexual interests of women in adolescents has been much less studied, and the sexual interests of women in prepubescent or pubescent children even less so.

ual preference for boy and/or girls usually of "prepubertal *or early pubertal age*" (emphasis added). As such the international classification system includes both pedophilic and hebephilic sexual interests under the category of pedophilia, and the description in the ICD-10 is similar to how we have defined it in this chapter.

Pedophilia is generally accepted as a paraphilia and mental disorder [though see the December 2002 special issue of the *Archives of Sexual Behavior* for a series of articles and commentaries arguing this point, e.g., Seto (2002)]. Hebephilia, on the other hand, has not been widely accepted, for several possible reasons: (1) it cannot be reliably distinguished from pedophilia, given the liminal nature of puberty and problems with the reliability of age estimation; (2) hebephilia may not meet Wakefield's (1992) definition of a harmful dysfunction; and (3) because of political and social concerns about how a diagnosis of hebephilia might be used (or misused) in legal and clinical decision-making. We discuss these arguments in the next section.

The Debate About Hebephilia

Writers have been deeply divided on whether hebephilia should be included in *DSM-5* (e.g., Green, 2010; Plaud, 2009; Rind & Yuill, 2012; Tromovitch, 2009; Wakefield, 2012). In some cases, authors have evoked the culturally relative criteria used in determining dysfunction, which is similar to arguments that have been made about pedophilia as a mental disorder. Franklin (2010) suggested hebephilia is a novel concept, advanced by small group of researchers driven by personal interests. These criticisms were devastatingly refuted by Cantor (2012), who points out the many errors made by Franklin in her critique.[2]

Others have argued that a sexual interest in pubescent girls[3] is normal; in its most extreme form, the argument has been made that hebephilia has been evolutionarily "hardwired," at least for heterosexual men with regard to pubescent girls (Franklin, 2009; Rind & Yuill, 2012). The common thread in these arguments is that men without psychopathology would show some sexual interest in pubescent children. Franklin (2009) also argued that sexual activity between men and pubescent girls has occurred in other time periods and in other cultures, signifying that it is not always socially proscribed. Green (2010) noted that the age of consent in some European countries falls within the age range originally proposed in the *DSM-5* revisions for pedohebephilic disorder, which suggested the typical pubescent age range was 11–14 (e.g., Spain's age of consent is 13). Others have suggested that a sexual interest in pubescent girls was historically accepted; Rind and Yuill (2012) reported that girls between the ages of 12 and 14 were married to older men in Ancient Egypt. Janssen (2009) went further and argued that the entire concept of paraphilias, not just hebephilia, is flawed because these labels are social constructions that reflect societal norms as opposed to actual psychopathology.

Rejoinders

It is readily apparent when reading arguments against hebephilia that many authors have focused on a critique of the idea that a sexual interest or behavior involving adolescents in the age range mentioned in early DSM-5 documents (ages 11–14 and sometimes expanded to include adolescents as a whole) is maladaptive or abnormal. This occurs even though hebephilia refers specifically to pubescent children as defined by maturation status. Blanchard and colleagues as well as other researchers have responded in depth to these critiques of hebephilia [see Blanchard (2010) for a response to arguments against the diagnosis of hebephilia and Cantor (2012) for a detailed response to Franklin's (2010) critique]. In considering these responses and the legitimacy of hebephilia, it is important to first consider the definition of what would constitute a mental disorder as reflected in *DSM-IV-TR*.

Harmful Dysfunction Wakefield (1992) definition of a mental disorder as harmful dysfunction is widely cited and serves as the basis for their definition of a mental disorder in *DSM-IV-TR* (American Psychiatric Association, 2000, 2013). According to Wakefield, a harmful dysfunction involves (1) evidence of a malfunctioning biological mechanism that (2) results in significant distress or impairment. In terms of the first criterion, one perspective would suggest that hebephilia (and pedophilia) represent exaggerations or other dysfunction in the male-typical interest in cues of youthfulness, including neotenous facial features, smooth skin, and lustrous hair (Seto, 2008). Though typical men are sexually interested in youthfulness, they are also sexually interested in cues of sexual maturity, including adult size, full breasts, and waist-to-hip ratio approaching 0.70 (Buss, 1994). As a result, men are most sexually attracted to older adolescent and young adult women (Kenrick & Keefe, 1992), not pubescent or prepubescent children. The combination of youthfulness and sexual maturity indicates a high likelihood that the female is healthy and fertile. Pedophiles and hebephiles respond strongly and positively to cues of youthfulness, but negatively to cues of sexual maturity (e.g., Blanchard et al., 2009; Seto & Lalumière, 2001). As further evidence that a sexual interest in pubescent (i.e., sexually

[2]This includes evidence that hebephilia has been discussed for decades, is mentioned in at least 100 texts (http://individual.utoronto.ca/james_cantor/page21.html), and has been examined by multiple research groups (http://individual.utoronto.ca/james_cantor/page19.html).

[3]Of note, these critics have focused on adult male interest or behavior involving pubescent girls and have not discussed sexual interest in or behavior involving pubescent boys in any sustained way.

immature) children is maladaptive, Ryniker (2012) argued that in cultures where marriage between adult men and pubescent girls occurs, it is usually as a result of economic and social considerations rather than the adult's sexual interest in the girl. In other words, the marriages served nonsexual purposes, and sexual activity might or might not have occurred in these contexts. Hames and Blanchard (2012) reviewed the anthropological literature and argued that sexual activity did not begin until the girl had completed, or almost completed, the pubertal process.

Additionally, Blanchard (2010) found that heterosexual pedophiles and hebephiles currently have fewer children than teleiophiles, which is not consistent with the argument that hebephilia is evolutionarily adaptive or neutral in its effect on fitness (though that contention is an inference from current environments to the much different environments found in the ancestral past, where humans lived in small hunter-gatherer clans with fewer mate options). Taken together, these arguments would suggest that a sexual preference for pubescent children is maladaptive, similar to a sexual preference for prepubescent children (see Seto, 2002, 2010).

Regarding the second criterion in Wakefield's (1992) definition, a sexual preference in pubescent children could result in significant distress or impairment. In many jurisdictions contact between adults and pubescent children is illegal and would result in criminal charges. Legal problems stemming from a mental disorder would constitute a form of impairment, even if the individual was not concerned with the symptoms, as it has broad implications for the individual's quality of life (e.g., job loss, relationship difficulties). Even in the absence of a criminal charge or conviction, there could still be other impairment in an individual's life (e.g., disrupted adult relationships) or a clinically significant amount of distress because sexual behavior involving pubescent children violates social norms in most if not all contemporary cultures. For example, Beier et al. (2009) recruited pedophilic and hebephilic men from the community who were not required to participate in treatment but were motivated to seek treatment due to the impact their sexual interests were having on their lives. This demonstrates that some pedophilic or hebephilic men are sufficiently distressed as to seek treatment. In the absence of large-scale epidemiological research, it is not known how many non-distressed pedophiles or hebephiles there might be. Seto (2008, in press) has suggested that the prevalence of pedophilia may be 1–3 % based on nonrepresentative surveys and studies of clinical or criminal justice samples. In clinical samples, hebephilia may be more prevalent than pedophilia (Blanchard et al., 2009), though this has not been a consistent finding (e.g., Beier et al., 2009).

Responding to one of Franklin's (2009, 2010) criticisms, showing some sexual response to pubescent or prepubescent children is less important than the *relative* response to pubescent children. Most heterosexual men are most interested in adult women, followed by adolescent girls and then

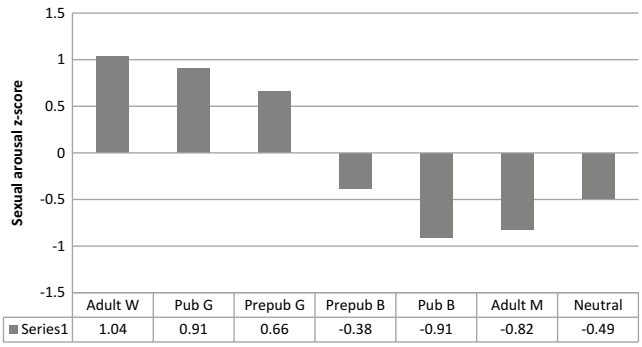

Fig. 1 Sexual Response Gradient. The figure represents the level of sexual arousal to each of the stimulus categories during phallometric assessment. Labels are as follows: Adult W = adult women stimuli; Pub G = pubescent girl stimuli; Prepub G = prepubescent girl stimuli; Prepub B = prepubescent boy stimuli; Pub B = pubescent boy stimuli; and Adult M = adult men stimuli. The figure represents the classic sexual response gradient for those interest in adult women. These indivudal show their greatest response to adult females, followed by pubescent and prepubescent females. The scores for male stimuli are negative, which means that the level of sexual arousal is below their mean level of sexual arousal. The neutral category is comprised of scenery and is used as a control condition

pubescent and prepubescent children followed by males [referred to by Seto, Lalumière, and Kuban (1999), as the sexual response gradient; see Fig. 1]. Given that teleiophilic men still show sexual response to non-preferred age categories, showing some response to pubescent children is normative. Showing more arousal to pubescent children than to adults, or not discriminating between these two categories, is *not* normative. Different clinics would use different cutoffs in order to determine how much of a greater response would be needed towards prepubescent or pubescent children relative to adults (Lalumière & Harris, 1998).

Assessment of Hebephilia

Self-Report

The simplest way to assess hebephilic sexual interests is to ask an individual directly, either in interviews or using questionnaires. However, as with pedophilia there are obvious reasons for any individual to deny sexual interest in pubescent children, given the intense stigma associated with being sexually interested in children in contemporary societies. Though some hebephiles may admit their sexual interest in pubescent children, many others might not, especially if they face more punitive legal consequences (e.g., more severe sentencing if they have committed a sexual offense). Due to the likely stigma and possible negative consequences such as ostracism, prejudice, and even violence, an admission of sexual interest in pubescent children is likely to be true, whereas denial of any such sexual interest might well be false in order to avoid legal consequences or other social

sanctions. It is important to consider that there may be rare occasions when someone might have good reasons to lie about having hebephilic sexual interests; one possibility is when someone would rather claim hebephilia than pedophilia, given some listeners may confuse hebephilia with a sexual interest in older adolescents.

Hebephilic sexual interests might also be inferred from information about someone's sexual history, preferably with multiple, independent sources. For pedophilia, Seto and Lalumière (2001) developed a screening scale comprised of four simple items related to one's sexual offence history: multiple child victims, any boy victim, any victim under age 12, and any unrelated child victims. Sex offenders with any history of sexual offending involving children could obtain a score from 0 to 5 on this scale (having a boy victim had twice the weight of the other items). This screening scale score was positively correlated with phallometrically assessed sexual arousal to prepubescent children in multiple samples (Seto, Harris, Rice, & Barbaree, 2004; Seto, Murphy, Page, & Ennis, 2003). As such, in the absence of a reliable and honest client, information from their sexual offence history can be used to confirm the diagnosis. Although the measure is specifically designed to detect pedophilia, a similar scale could be developed to screen for hebephilia, with items defined in terms of pubescent children.

Phallometry

Phallometry is used to assess penile responses (in terms of circumference or volume change) in response to sexual stimuli, such as descriptions of sex with different aged persons (see Laws, 2009). In the original phallometric test designed by Freund (1965) to assess erotic age-gender preferences, pubescent stimuli were included alongside prepubescent stimuli and adult stimuli. In subsequent research, Freund clearly distinguished pedophilic and hebephilic arousal patterns (e.g., Freund, Chan, & Coulthard, 1979). As previously discussed, this literature uses the term hebephilia if someone shows his greatest responses to pubescent children over the other age categories. Based on phallometric assessment, if an individual's greatest response is to pubescent children relative to their sexual response to adults, hebephilia could be present. Relative responding means that the examiner would take into account whether the response to pubescent aged stimuli was significantly greater [the significant threshold is set by individual clinics resulting in variability across phallometric labs; e.g., Howes (1995)] than the response to adult stimuli. Relative response is important as it leads to greater diagnostic accuracy than absolute response (Lykins et al., 2010b).

Classification Accuracy Like other diagnostic methods, phallometry produces both false negatives (e.g., not detecting the presence of pedophilia or hebephilia when the condition is in fact present) and false positives (e.g., incorrectly indicating pedophilia or hebephilia is present when the condition is not in fact there). Due to the negative consequences of being identified as pedophilic or hebephilic, assessors might conservatively set their clinical cutoffs for interpreting results such that specificity (minimizing false positives) is high, even though that necessarily comes at the expense of the sensitivity (minimizing false negatives) of their test. For pedophilia, Blanchard, Klassen, Dickey, Kuban, and Blak (2001) have shown that their phallometric testing procedure has high specificity (greater than 90 %) with good sensitivity (61 %). As such, the test is better equipped to identify men without pedophilia or hebephilia, than those who have it, which means that a negative test result does not necessarily mean that the individual does not have pedophilia or hebephilia. That is, a lack of response to pedophilic or hebephilic stimuli during phallometric testing does not rule out the possibility of pedophilia or hebephilia. This highlights the important role of collateral information (e.g., criminal records, previous assessment results, reports by others, child welfare reports, interview data) in these types of assessments. Research specifically focused on the sensitivity and specificity of tests focused on detected hebephilic sexual interests is needed.

Standardization One difficulty with phallometry is that there is no standardization across laboratories. This results in variability in both its administration and the interpretation of results (Howes, 1995); this has led to criticisms (e.g., Fedoroff, Kuban, & Bradford, 2009; O'Donohue & Letourneau, 1992). These concerns are particularly salient in the assessment of hebephilia, as labs have more experience with assessing pedophilia. For example, some laboratories may not include stimuli depicting pubescent children. This is an important consideration as it means that these labs would be unable to detect the presence of hebephilia, as hebephiles can appear nondeviant (respond greatest to adults) if pubescent stimuli are not included (Harris, Rice, Quinsey, Chaplin, & Earls, 1992). Additionally, some labs may use stimuli that include adolescents in Tanner stage 4, which means that they would only be able to detect the presence of ephebophilia, which is not a paraphilia (Hames & Blanchard, 2012). This highlights the important role of considering the stimuli used in phallometric assessment when interpreting the results. Another issue is that phallometric testing is expensive, requiring specialized equipment and trained assessors, and is perceived as intrusive, such that some individuals will refuse to participate. Also, phallometric assessment is not permitted in some European countries (e.g., Germany), leaving clinicians to rely on other types of assessments. Regardless of whether a professional has access to a phallometric lab, as with other types of diagnoses, multiple assessment methods are required in order to increase diagnostic accuracy.

Other Methods of Assessment

Cognitive measures (e.g., viewing time) have been used in the detection of sexual deviancy. One example of a cognitive measure that has been used to detect sexual interest in children among sexual offenders is the Implicit Association Tasks [IAT; see Gray, Brown, MacCulloch, Smith, and Snowden (2005)]. The IAT is a computerized task involving five trials, whereby offenders are presented with 32 words across four different categories: sexual (e.g., breasts), nonsexual (e.g., elbow), adult (e.g., grown-up), and child (e.g., infant). During initial trials, offenders are asked to classify words as sexual or nonsexual and adult or child. On subsequent trials they are to separate words in to child/nonsexual and adult/sexual (congruent condition) categories. Offenders would complete an incongruent trial where they are instructed to categorize words as child/sexual and adult/nonsexual. Results are interpreted as indicative of a sexual interest in children if offenders have a faster reaction time during the incongruent condition.

Brown, Gray, and Snowden (2009) used the IAT task to assess whether potentially pedophilic offenders (having victims younger than 11), potentially hebephilic offenders (having victims ages 12–15), and a control group of nonsexual offenders would perform differently on the IAT. There were significant group differences on IAT performance, with potentially pedophilic offenders more likely than potentially hebephilic offenders or the control group to show evidence of an association between children and sex in the task. They found no difference between the control group and potentially hebephilic offenders. Although a promising application of the IAT, there were two limitations of this research. First, the offenders were distinguished by victim age rather than maturation status of victims, which would likely increase misclassification. For example, some 14 year olds and more 15 year olds would be expected to be postpubescent, and thus offenders who had an ephebophilic or teleiophilic sexual preference could be misclassified as potentially hebephilic. Second, offenders were classified according to their youngest victim, which meant offenders could have had victims from other age groups. Based on these limitations, more research is needed on whether the IAT can be specifically used to distinguish among offender types and whether IAT performance corresponds with phallometric responses.

Diagnostic Considerations

Based on self-reported sexual interests, Blanchard et al. (2009) categorized offenders as follows: two pedophilic groups (interested in children ages 0–5 or 6–10), two hebephilic groups (interested in children aged 11 or 12–14), an ephebophilic group (interested in adolescents 15–16), and a teleiophile group (interested in adults). They used these groupings to examine how self-reported interests corresponded to phallometrically assessed sexual arousal to prepubescent, pubescent, and adult stimuli. Focusing on their results pertaining to hebephilia, they found a high correspondence between a self-reported sexual interest in pubescent girls and sexual arousal to pubescent children, as heterosexual hebephiles responded more to the pubescent category than to prepubescent or adult categories. Unexpectedly, the self-reported heterosexual pedophile group (who reported interest in 6–10-year-old girls) responded most to pubescent rather than prepubescent girls, whereas the self-reported heterosexual pedophile group who reported attraction to children from infancy to age five responded most to prepubescent child stimuli.

For those attracted to males, both self-reported pedophile groups (i.e., to younger or older prepubertal children) responded most to prepubescent stimuli as hypothesized. However, the self-reported hebephiles did not show a significant difference in their sexual response to pubescent and prepubescent males. The male-attracted ephebophile group had the greatest response to pubescent children, which could be due to the absence of older adolescents in Tanner stage 4 in the stimulus set. These results suggest that self-reported hebephilic sexual interest corresponds to phallometric assessment results, at least in the case of heterosexual men. Blanchard and colleagues reported that their results for hebephiles attracted to men could have resulted from a number of factors: (1) small sample size of this subgroup which could have resulted in a decreased ability to detect statistical differences, (2) prepubescent female models ranged from 3 to 11, whereas the prepubescent male models were slightly older, ranging from ages 5 to 11, and (3) the pubescent male models were slightly more physically developed than the female pubescent models. Blanchard et al. also suggested that their results could signify there is a characteristic difference between same-sex and opposite-sex-attracted hebephiles. Another possibility is that there are fewer physical differences between pictures of prepubescent and pubescent boys than between prepubescent and pubescent girls; breast budding is a relatively obvious cue to pubescent status, unlike changes in genital appearance or the onset of the pubertal growth spurt.

After initially indicating that hebephilia would be added to the DSM-5, the APA Task Force in charge of the *DSM-5* revision process decided not to include hebephilia as a diagnosis in the DSM-5. Clinicians could still consider hebephilia as a paraphilia, however, using the diagnosis of Other Specified Paraphilic Disorder. To make this diagnosis, a comprehensive assessment is required. This can include in-depth clinical interviews regarding sexual and relationship histories, review of collateral information such as police or court accounts of any sexual offenses, phallometric assessment of sexual age interests, and the use of alternative objective measures such as viewing time. An important issue

is the limits of self-report, because there are obvious reasons to lie about being sexually interested in pubescent children; collateral and ideally objective assessment data are crucial. A second issue to keep in mind is the distinction between interest and behavior: some hebephiles may never have acted upon their interest by accessing pornography depicting pubescent children or by having sexual contact with pubescent children. Additionally, some proportion of offenders with pubescent victims will not be hebephiles, motivated instead by other factors such as antisociality (see below discussion on victim age polymorphism in offenders against adolescent victims). Freund et al. (1972) suggested hebephilia was likely to be present if there is evidence of repeated sexual contacts with pubescent children, especially as the age difference between adult and minor increased.

A third issue to keep in mind regarding assessment is that pedophilia and hebephilia may be difficult to distinguish. This may partially account for the results of Blanchard and colleagues (2009), who found that men who self-reported pedophilic or hebephilic interest responded to categories that were unexpected (e.g., self-reported pedophiles interested in girls appearing to be between the ages of 6 and 10 had their greatest response to pubescent children). A challenge is that the Tanner stage of any known sexual offense victims is unlikely to be known; instead, clinicians will generally have information about the age of past victims and must use this to infer victim maturation status. For example, a 12-year-old girl might be showing signs of puberty onset, but might also be part of the population that does not begin puberty until the age of 13 or 14; it is not clear if offending against this girl might be evidence of pedophilia (prepubescence), hebephilia (pubescence), or neither. Another possibility that needs to be explored in further research is the comorbidity of pedophilia and hebephilia, where someone is sexually interested in both prepubescent and pubescent children (just as nonexclusive pedophiles can be sexually attracted to both children and adults; American Psychiatric Association, 2000; Freund et al., 1972) and whether they represent distinct psychological constructs.

Etiology

Etiological research on pedophilia and hebephilia has relied on retrospective research, looking for historical correlates of pedophilic or hebephilic sexual interests that might have etiological significance. This includes group comparisons of pedophilic or hebephilic individuals with others who do not have these interests and by correlating indices of sexual interest (e.g., self-reported interest, phallometrically assessed sexual arousal to children, number of child victims) with historical factors. Limitations of this research include the typical limits of self-report, the preponderance of studies of individuals who have been seen in clinical or criminal justice settings (as opposed to community settings), and incomplete historical information. Prospective research studies—following very large samples using repeated assessments with multiple measures over time to see who develops sexual interests in prepubescent or pubescent children—have not been done, though there have been some smaller studies of potentially at-risk individuals (e.g., children who have been sexually abused and who might be at risk of acting out sexually towards children; Salter et al., 2003). Etiological candidates that have been examined in research include nonspecific prenatal factors (as indicated by markers such as left-handedness, which appears during the first trimester), neurocognitive functioning, and sexual abuse history. Each of these candidates is reviewed in the following sections.

Prenatal Factors Pedophiles and hebephiles are more likely to be non-right-handed than those with teleiophilia, at a rate much higher than what is observed in the general population (Cantor et al., 2004, 2005). Cantor et al. (2005) found that the rate of non-right handedness in their group of pedophiles was tripled in comparison to teleiophilic men, even after accounting for potential confounds such as IQ and age (see also Blanchard et al., 2007). They argued that this is a crucial finding given that handedness develops in the very early stages of gestation. This could provide support to the argument that precursors to the development of atypical age sexual interests may be present before birth. Further indirect evidence is reported by Cantor et al. (2007), who found that both pedophilic and hebephilic offenders were shorter, on average, than teleiophilic offenders. Both of these findings imply that early developmental factors were sufficiently potent as to affect physical development.

Neurocognitive Functioning Recent sexological research has suggested that pedophiles and hebephiles show distinct differences when compared to teleiophiles in a number of neurocognitive domains. Regarding overall cognitive abilities, Cantor et al. (2006) investigated the educational histories of a sample of pedophilic, hebephilic, and teleiophilic men. They found that in comparison to teleiophiles, pedophiles and hebephiles were twice as likely to have failed a grade or to have required special education (encompassed under the term educational difficulties), even when controlling for other variables such as intelligence and parental education. Cantor et al. (2004) found that both pedophiles and hebephiles had lower IQs when compared to teleiophiles, with hebephiles' scores as intermediate between the groups. They also found that both pedophiles and hebephiles exhibited memory deficits in comparison to teleiophiles in the area of memory recall, though this effect disappeared when IQ was controlled for. Additionally, both pedophiles and hebephiles were more likely to suffer a head injury before the age of 13

when compared to teleiophiles (Blanchard et al., 2003). Interestingly, the difference was not found for head injury after the age of 13, suggesting it is head injury during a particular critical developmental period (before puberty) that might be important.

The empirical evidence on the neurocognitive and physical anomalies to date has been used to assert that both pedophilia and hebephilia result from an underlying neurodevelopmental perturbation (Blanchard et al., 2002; Cantor et al., 2006). According to this hypothesis, the fetus is exposed to something teratogenic in the gestation period that would cause the cognitive, physical, and behavioral deficits alongside the atypical sexual age interest. However, without longitudinal research the nature of this link is not clear nor is whether a third variable causes both the atypical sexual interests and the markers that have been found in the research (Blanchard et al., 2002). Regardless, the hypothesis has continued to gain traction in the field, largely based on recent studies that have examined the biological underpinnings of atypical age interests.

In further support of the neurodevelopmental hypothesis, Cantor and colleagues (2008) utilized magnetic resonance imaging (MRI) and found white matter differences between pedophilic and hebephilic men compared to teleiophilic men. These white matter deficiencies were localized to both the temporal and parietal lobes of the brain in both pedophilic and hebephilic men (Cantor et al., 2008; Cantor & Blanchard, 2012). Cantor et al. (2008) argued that their findings suggest a disconnection in the brain network that recognizes and responds to sexual cues, which may occur in a period of neurodevelopment leading to deviant sexual preferences such as pedophilia and hebephilia.

Sexual Abuse History There is a long-standing belief that experiencing sexual abuse as a child or young adolescent increases the likelihood that someone will sexually offend against minors in the future (the so-called *abused–abuser* hypothesis). Indeed, meta-analytic reviews show that both adolescent and adult sex offenders are substantially more likely to have experienced sexual abuse than their nonsexually offending counterparts (Jespersen, Lalumière, & Seto, 2009; Seto & Lalumière, 2010). The group differences were much smaller for physical abuse history, suggesting a specific sexual abuse to sexual offending link. This result is bolstered by longitudinal data showing that sexually abused children are more likely than other children to get into trouble for sexual offending (Salter et al., 2003; Widom & Ames, 1994) and cross-sectional data from the community showing an association between experiencing sexual coercion and engaging in sexual coercion (Seto et al., 2010). Moreover, both Jespersen et al. (2009) and Seto and Lalumière (2010) found that sex offenders with child victims were more likely to have sexual abuse histories than sex offenders with adult victims, suggesting a potential link with sexual interest in children. Consistent with this idea, Becker, Kaplan, and Tenke (1992) found that sexually abused adolescent sex offenders showed greater sexual arousal to children when assessed phallometrically. Greenberg, Bradford, and Curry (1993) found that men with sexual abuse histories who victimized children and adolescents chose victims of similar age to the age of their own sexual victimization.

Summary The research conducted to date on hebephilia is important as it has established a small body of literature on the cognitive, physical, and behavioral deficits seen in hebephilic offenders. Further, it has advanced our understanding of a possible etiological pathway in the development of both pedophilia and hebephilia. Although hebephilic offenders have been found to be distinct in their arousal patterns (e.g., Blanchard et al., 2009), the research literature to date has often found that hebephilic men are intermediate between pedophilic and teleiophilic men in a number of regards. Unfortunately, in many of the above cited studies, pedophiles and hebephiles were not directly compared. It is possible that hebephiles would be similar to pedophiles in some regards, but they may differ in regard to other correlates. One area where hebephilia is especially relevant would be in sexual offending.

Hebephilia and Sexual Offending Against Children and Adolescents

Contrary to public perception, sexual offending victim choice does not always equate to sexual interests or preferences. For example, Seto (2008) concluded that 50–60 % of men with child victims were not pedophilic, which suggests that sexual offenders can victimize children for reasons other than a sexual preference (e.g., antisociality). As such, sexual offending against pubescent children may not necessarily correspond to hebephilia.

Many researchers have found that, as a group, sexual offenders against adolescents are often intermediate on the variable of interest when compared to offenders against children and offenders against adults (e.g., Kalichman, 1991). Cohen, Frenda, Mojatabai, Katsavdakis, and Galynker (2007) found that when compared to child molesters and rapists, sexual offenders with adolescent victims were intermediate in the likelihood of having a male victim and in their use of violence during the commission of the offence. One study found that offenders with adolescent victims were twice as likely to have been diagnosed with a mood disorder as offenders with child or adult victims (Carlstedt et al., 2009). Firestone, Dixon, Nunes, and Bradford (2005) compared incest offenders with victims younger than six and incest offenders with victims who were 12–16. They found

significant differences in that those with younger victims were more likely to abuse drugs and alcohol, come from a family with a history of criminal behavior, exhibit poor sexual functioning, and suffer from greater levels of psychopathology. In regards to their offending, those with adolescent victims were less likely to have two or more victims, to have abused a male, to have abused a relative, or to have used violence during the commission of their offence. In a study of victims of extrafamilial sexual assaults, adolescents (13–18 years old) were compared to adult (25–44 year old) victims. Adolescent victims were less likely to be victimized by a stranger, less likely to sustain physical injuries, and more likely to be drinking or using drugs at the time the offence occurred (Muram, Hosteler, Jones, & Speck, 1995).

It is not clear whether sexual offenders with adolescent victims differ in their sexual response to prepubescent or pubescent children. Firestone et al. (2005) found no difference in phallometric response to prepubescent children between those who victimized adolescents and children. A possible reason for the absence of meaningful differences may be attributable to the composition of their sample, as incest offenders are less likely to be pedophilic (e.g., Seto et al., 1999). In other studies that have examined more heterogeneous groups of sexual offenders, sexual offenders with adolescent victims do not differ from offenders with adult victims in their sexual response to prepubescent children, whereas both of these groups differ from offenders with child victims (Baxter, Marshall, Barbaree, Davidson, & Malcom, 1984; Malcolm, Andrews, & Quinsey, 1993). These findings could be due to the absence of pubescent and adolescent stimuli, which would be what hebephiles would show the greatest response to.

Another potential reason for these findings is that offenders with adolescent victims show the highest levels of victim age polymorphism among offenders who have multiple sexual victims (Guay, Proulx, Cusson, & Ouimet, 2001). Victim age polymorphism is a term used to denote inconsistency across offenses in the ages of victims, for example, if an offender has both child and adult victims. Adolescent victims may serve as viable option for an opportunistic offender when the offender's preferred victim type is not accessible (Guay et al., 2001; Lussier, Leclerc, Healey, & Proulx, 2007). This can be viewed as a behavioral example of the sexual response gradient, wherein teleiophilic offenders might still offend against adolescent or pubescent victims, and pedophilic offenders might offend against pubescent or early adolescent victims (Seto et al., 1999) as they most closely resemble their ideal victim type (Heil, Ahlmeyer, & Simons, 2003).

Lykins and colleagues (2010a) explored the sexual response gradient idea in a study of sexual arousal in nonoffending heterosexual teleiophilic men. During phallometric testing, these men had the greatest response to women, followed by pubescent girls and prepubescent girls. They showed the lowest levels of sexual arousal to males of any age group. Similar results have been found in studies of sexual offenders (e.g., Blanchard et al., 2009; Seto & Lalumière, 2001). It is possible that hebephilic offenders are less likely to have exclusive sexual age interests. Beier et al. (2009) found that in their sample of self-identified hebephiles, 41 % were exclusively interested in a specific group, in comparison to 61 % of pedophiles and 100 % of teleiophiles. Thus, distinguishing hebephilia from other types of arousal patterns would be a more challenging task, given that they may be less likely to exhibit an exclusive pattern of sexual responding. Though they might show strong responses to stimuli depicting pubescent children, they could also exhibit substantial responses to depictions of pubescent children or of postpubescent adolescents and young adults.

In one of the few studies to directly examine the relationship between hebephilia and sexual offending, Studer, Aylwin, Clelland, Reddon, and Frenzel (2002) examined the phallometric responses among child molesters with intrafamilial and extrafamilial child victims. Among hebephilic (based on phallometric assessment) sexual offenders with child victims, there was no difference in whether they selected related or unrelated victims. Further, no differences emerged in the hebephilic intrafamilial group on their selection of biological or nonbiological family members as victims. This pattern differed from what was found in teleiophiles, who tended to have intrafamilial child victims, and pedophiles, who were more likely to have extrafamilial child victims. This suggests that hebephiles may be equally likely to be intrafamilial or extrafamilial offenders, which is in contrast to pedophiles or teleiophiles who victimize children.

Clinical Applications

Risk Assessment

Atypical sexual interests are a psychologically meaningful risk factor, meaning sexual interest in prepubescent or pubescent children ~~are~~ is a robust predictor of sexual recidivism and play a prominent role in theoretical models of sexual offending (Hanson & Morton-Bourgon, 2005; Mann, Hanson, & Thornton, 2010; Seto, 2008). Atypical sexual interests are indicated by phallometrically assessed sexual arousal to children, having multiple child victims, and other sexual offending characteristics (e.g., having unrelated child victims or having boy victims). Studies have typically not distinguished between pedophilia and hebephilia, however, and an important theoretical and clinical question is whether these two age interests differ in their associations with sexual recidivism. Eke and Seto (2011) conducted a study of child pornography offenders in order to examine the factors that

influenced child pornography offenders to recidivate. Included in their examination of different risk factors was admitted pedophilic and hebephilic sexual interest. Admitted hebephilic interest was an important factor in predicting future contact sexual recidivism, but not admitted pedophilic interest. Based on their findings, it may be that hebephilia may be more important than pedophilia in sexual recidivism, at least among child pornography offenders. It is not known whether hebephilia plays less of a role among men who have primarily committed contact sexual offenses.

Although pedophilic and hebephilic interests have usually not been distinguished in risk appraisal research, hebephilia is already represented in many established risk measures because maturation status is not specified. For example, the *Sex Offender Risk Appraisal Guide* has 14 items, one referring to *any* deviant phallometric results and the second asking whether the offender has only offended against girls under the age of 14 (Quinsey, Harris, Rice, & Cormier, 2006). Deviant phallometric results would include showing relatively greater sexual response to stimuli depicting prepubescent or pubescent children while victimizing girls under 14 could include both prepubescent and pubescent victims. To take a second example, the Screening Scale for Pedophilic Interests is significantly and positively correlated with sexual arousal to prepubescent children in the phallometric laboratory and is also a significant predictor of serious recidivism among sex offenders with child victims (Seto et al., 2004; Seto & Lalumière, 2001). This measure is comprised of only four items referring to sexual child victim history: any boy victims, multiple child victims, any victim under the age of 12, and any unrelated child victims. Someone who has offended against pubescent children only would score points on this measure, which was originally developed to assess pedophilic interests among any individuals with victims under the age of 14.

Treatment and Prevention

Treatment

Psychosocial Treatment Pedophilia can be viewed as akin to a sexual orientation that emerges early in life and is stable over time (see Seto, 2012). Hebephilia could be viewed this way as well, because of its conceptual and clinical similarities with pedophilia, though its evidence base is much less developed. There is no strong evidence to support the idea that any sexual gender or age preferences can be changed using existing treatment technologies (see Barbaree, Bogaert, & Seto, 1995; Seto, 2008). Thus, the focus of treatment for pedophilia (and, by extension, hebephilia) is on increasing self-management of pedophilic thoughts, fantasies, urges, sexual arousal, and sexual behavior. Sexual self-regulation deficits have been identified as an important psychologically meaningful risk factor for sexual reoffending (Mann et al., 2010). These skills can be taught using cognitive-behavioral techniques and form a core aspect of the most common sex offender treatment programs in operation (McGrath, Cumming, Burchard, Zeoli, & Ellerby, 2009). Voluntary control over sexual arousal can be addressed using behavioral conditioning techniques that teach offenders how to suppress their sexual arousal to undesirable stimuli (children); behavioral techniques have been less successful at increasing sexual arousal to normative stimuli (Lalumière & Quinsey, 1998). An unanswered question is to what extent behavioral conditioning of sexual arousal can be robustly demonstrated, because the evidence has mostly been limited to small sample studies and/or uncontrolled evaluation designs. If there is a robust effect, it is likely that the effects fade over time and thus sex offenders will need "booster" sessions to maintain potential gains achieved.

More broadly, treatment of paraphilic offenders appears likely to be the most effective when it adheres to the Risk Need Responsivity (RNR) model of correctional rehabilitation (Hanson, Bourgon, Helmus, & Hodgson, 2009). The RNR model posits that correctional interventions are more likely to be effective when they are true to a core set of principles (Andrews & Bonta, 2010). The risk principle states that interventions are most effective when they are titrated to the risk posed by offenders, with the most intense interventions for high risk offenders and low intensity or even no intervention for low risk offenders. The needs principle states that interventions are more effective in reducing recidivism when they focus on so-called criminogenic needs, that is, dynamic risk factors that are associated with recidivism. Research with sexual offenders suggests dynamic risk factors include general and specifically sexual self-regulation deficits, noncompliance with rules, antisocial attitudes and beliefs, and association with delinquent peers. Finally, the responsivity principle states that interventions are more likely to be effective when they are tailored to individual learning styles. For offenders, this typically means programs that are cognitive-behavioral in their approach emphasize concrete skills training over insight or learning abstract principles, and use classic teaching techniques such as modeling, role play, and rehearsal. Hanson et al. (2009) examined data from 23 sex offender treatment outcome studies. Treated offenders had lower recidivism rates overall than offenders in the comparison groups. Programs that adhered to the risk, need, and responsivity principles to a greater degree produced larger differences than programs that addressed them to a lesser degree.

Medication For those with intense sexual urges, who have a history of self-regulation problems and who are therefore at higher risk of sexually reoffending, anti-androgen medications

have been used in treatment (Thibaut et al., 2010). These medications reduce circulating androgen levels, and several smaller-scale clinical trials have demonstrated substantial reductions in sex drive and behavior as a result. There is no evidence that anti-androgens can change the direction of sexual interests; instead, they can be viewed as turning down the intensity of existing interests. A significant problem for anti-androgen medications is the risk of serious side effects, including osteoporosis and liver damage. Perhaps as a result of these undesired effects, compliance with anti-androgen medication can be a problem (Hucker, Langevin, & Bain, 1988). For individuals who will not accept or cannot tolerate anti-androgen medications, there may be a role for selective serotonin reuptake inhibitors (SSRIs), which are commonly used in the psychiatric treatment of depression and other mental conditions. SSRIs can also reduce sex drive and may also benefit clients by improving mood. Randomized clinical trials are needed to test medication effects, because most of the evidence base consists of open trials or other less rigorous designs.

Circles of Support and Accountability (COSA) The COSA model was developed to support offenders who had served their prison sentence and were being released to the community despite continuing to be at high risk of reoffending (Wilson, Picheca, & Prinzo, 2007; Wilson & Prinzo, 2001). Given the higher recidivism risk associated with men with a sexual interest in children, especially when combined with antisocial tendencies, those with either pedophilia or hebephilia could benefit from such a program. In the model, four to six members of a volunteer support group visit the offender daily, assist him with fundamental living tasks such as obtaining and keeping housing and employment, and mediate if necessary with police, media, and concerned members of the public. These volunteers are given training regarding the patterns of sexual offending and warning signs and are able to consult with professionals such as police officers or mental health clinicians as needed. Preliminary evaluation results are encouraging: Wilson et al. (2007) followed 60 sex offenders involved with COSA in Canada and compared them to 60 sex offenders who were released at the end of their prison sentence without a circle; the two groups were matched on risk to reoffend, length of time in the community, and prior involvement in sex offender treatment. After an average follow-up time of 4.5 years, 5 % of the offenders involved in COSA had sexually reoffended compared to 17 % of the comparison offenders. A similar result was obtained in a replication study conducted by Wilson, Cortoni, and McWhinnie (2009). Duwe (2012) recently published the results of a small randomized clinical trial to evaluate a Circles of Support and Accountability model in Minnesota and found positive effects on recidivism for those who went through the program.

Randomized Clinical Trials Systematic or meta-analytic reviews of sex offender treatment have concluded that it can be effective in reducing sexual recidivism (Hanson et al., 2002; Lösel & Schmucker, 2005). However, there is an ongoing and vociferous debate about the efficacy of sex offender treatment given the paucity of randomized clinical trials and the discouraging results of the best clinical trial, the Sex Offender Treatment Evaluation Project or SOTEP (Marques, Wiederanders, Day, Nelson, & van Ommeren, 2005; Marshall & Marshall, 2007; Seto et al., 2008). Randomized clinical trials are important because of obvious and subtle biases inherent in less rigorous designs. For example, many of the studies we reviewed in the Hanson et al. (2002) meta-analysis compared treated offenders with offenders who had dropped out of treatment or refused treatment. Given that dropout is associated with greater risk of recidivism, this means treated offenders are being compared to a higher-risk group, on average, even if the two groups are matched on risk using an established risk measure (because some of the variance in risk associated with risk might not be captured). Studies are considered to be incidental assignment designs, where treated offenders were compared to offenders who did not receive treatment [e.g., because the clinic was too far away: Marshall and Barbaree (1988)]. The problem, again, is that offenders who were not able to attend treatment might differ in risk-related ways (e.g., the offenders could have made arrangements to participate in treatment if they were more motivated).

For these kinds of reasons, randomized clinical trials are considered the gold standard of treatment evaluation by organizations such as the United States Food and Drug Administration, the Cochrane Collaboration for systematic reviews in health care (cochrane.org), and the Campbell Collaboration for systematic reviews in education, social welfare, and criminal justice (campbellcollaboration.org). Other study designs have methodological or analytic issues that limit the inferences that can be drawn about treatment efficacy. In the most recent Cochrane review of trials involving adults who have sexually offended or are at risk to do so, Dennis and her colleagues stated matters clearly and succinctly: "The inescapable conclusion of this review is the need for further randomized controlled trials" (Dennis et al., 2012, p. 1). The current state of adult sex offender treatment evaluation can be contrasted to the encouraging results of small randomized clinical trials that support cognitive-behavioral, ecologically sensitive treatment for adolescents who sexually offend, and for children with sexual behavior problems (Borduin, Schaeffer, & Heiblum, 2009; Carpentier, Silovsky, & Chaffin, 2005; Letourneau et al., 2009). More methodologically sound research relying on randomized clinical trials is needed regarding both psychosocial (including social interventions such as Circles of Support and Accountability) and medical treatments for adults who sexually offend against youth.

Prevention

A disadvantage of offender treatment is that it is provided after victimization has already been taken place. In the following section, we discuss some of the innovative prevention efforts that have been implemented in an effort to prevent sexual offenses from occurring in the first place. The first effort is a clinical outreach program in Germany that used mass media campaigns to recruit self-identified pedophiles and hebephiles living in the community [Dunkelfeld Prevention Project: Beier et al. (2009)]. The second effort is an information clearinghouse and hotline available to individuals who are concerned about their sexual interest or behavior involving children (Stop It Now!).

Project Dunkelfeld Beier et al. (2009) developed a secondary prevention program in Germany to address men in the "Dunkelfeld" (translation: dark field), that is, individuals who are sexually interested in children but are unknown to authorities because they are not seen in clinical settings and are not involved with the criminal justice system. Interested persons contacted a sexology clinic offered at the Charité hospital in Berlin, Germany, and underwent a comprehensive assessment. This Berlin clinic offers treatment free of charge to individuals who use child pornography or are attracted to children. Treatment is aimed at teaching individuals skills to prevent child sexual abuse. Individuals who were diagnosed with pedophilia or hebephilia were offered treatment, as long as they were not currently involved in a criminal proceeding for sexual offending. Clients learned to increase victim empathy, to employ cognitive strategies aimed at problematic attitudes and beliefs about sex with children, and learned self-regulation strategies that they could use to prevent the occurrence of child sexual abuse. In many cases, medication was also available and used to help clients better control their sexual impulses (Amelung, Kuhle, Konrad, Paulsa, & Beier, 2012; see also, dont-offend.org).

Unlike Canada or the United States, Germany does not have a mandatory child sexual abuse reporting law, except where homicide is considered to be a risk, which was likely an advantage in recruiting community clients who were not already known to the authorities. The original Berlin clinic has now expanded to include other clinics in Germany, with government funding. Beier et al. (2009) provided further details about the sample of men they recruited to the program. They found that of the 358 men who were assessed, approximately 75 % of them had committed a prior sexual offence (many of which were undetected). Of those assessed, 12 % were not diagnosed, 60 % were diagnosed with pedophilia, and 28 % were diagnosed with hebephilia. Based on descriptive information about their sample of hebephiles, 58 % were primarily interested in females, 38 % in males, and 5 % in both males and females. Approximately, 15 % of them met criteria for another mental disorder, and 14 % had another paraphilia. Approximately, 80 % had committed a prior contact sex offence or child pornography offence.

Stop It Now! Stop It Now! is a nonprofit organization that began in the United States but now has sister organizations in other countries, including the United Kingdom (stopitnow.org). Stop It Now! provides online resources, links, a clinical directory service, and a confidential, toll-free number for individuals who are concerned about their sexual interests or behavior involving children. The goals of Stop It Now! are prevention, education, and outreach. Both Stop It Now! and the Association for the Treatment of Sexual Abusers maintain directories of clinicians who can provide assessment and treatment of individuals for their sexual interests or behavior, even if they are not currently involved in the criminal justice system (or have not committed any sexual offenses). Ideally, efforts such as Stop It Now! and the Dunkelfeld Project would reach individuals before they had committed any sexual offenses.

Conclusion

Research suggests that hebephilia is a valid psychological construct, representing a distinct sexual interest in pubescent children (e.g., Blanchard et al., 2009). Though the debate continues as to whether it should be formally recognized as a mental disorder, we agree with the logic of Blanchard (2010): If pedophilia is accepted as a mental disorder in standard nosologies such as the *DSM-IV-TR* and *ICD-10*, then hebephilia should be included as well because they are similar conceptually and clinically in terms of the relationship between sexual interests and behavior, evidence of links between phallometrically assessed sexual arousal and victim selection, and group differences from offenders with prepubescent child victims and offenders with adult victims.

There are many questions that need to be addressed in further research. A fundamental question is how common hebephilia is in the general population and how many hebephilic individuals act on their sexual interest either by accessing illegal pornography depicting pubescent children or by initiating sexual contacts with pubescent children. Epidemiological surveys are needed to address this question, which also applies to pedophilia. The sexual response gradient hypothesis would lead us to predict that there are more hebephilic men than pedophilic men.

Other research goals should include how to best distinguish hebephilic from pedophilic and other sexual offenders, further group comparisons and follow-up studies using a more precise definition and assessment of hebephilia (pubescent children, not adolescents more broadly), and research to determine if hebephilia shares etiological factors with

pedophilia. Focusing on clinical applications, it is important to know if hebephilic offenders differ in risk from other sex offenders and if they respond differently to interventions. To illustrate the importance of these questions, it may be the case that hebephilic sex offenders pose a greater risk to sexually offend because they are less likely to be exclusive than pedophilic or teleiophilic offenders and thus may have a larger potential victim pool. At the same time, this lower non-exclusivity of sexual age interests may provide opportunities for clinicians to support a shift towards legal and more socially appropriate aged partners through behavioral conditioning and self-management techniques.

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Rape and Paraphilic Coercive Disorder

Gary Zinik and Jesus Padilla

History and Controversy of a Rape Paraphilia

There has never been a diagnostic category in any edition of the *Diagnostic and statistical manual of mental disorders* (APA, 1952, 1968, 1980, 1987, 1994, 2000, 2013) that describes an individual who is persistently aroused by coercive sex and repeatedly commits acts of rape. Despite this, clinicians generally hold that such individuals do suffer from a sexual disorder or paraphilia, and that the paraphilia has specific dimensions. Most often characterized as paraphilic coercive disorder (PCD), this paraphilia has long been the subject of clinical treatment and sexuality research.

Paraphilic coercive disorder has a long and controversial history. It was considered and ultimately rejected for inclusion into the Paraphilias section of the revised third edition of the Diagnostic and Statistical Manual of Mental Disorders (*DSM-III-R*, APA, 1987) but is now being reconsidered for inclusion in the next edition of the diagnostic manual (*DSM-5*), which is scheduled for publication in 2013. With the passage of sex offender civil commitment laws in 20 states since 1990, along with recent research findings, paraphilic coercive disorder has generated new interest—and new controversy.

Paraphilias Defined

It has generally been proposed that paraphilias (e.g., pedophilia) are psychologically characterized by an internalized set of deviant sexual urges and/or fantasies that lead to the expression of overt paraphilic behavior. Paraphilic behavior is assumed to reflect underlying deviant arousal patterns that have become deeply imprinted into an individual's sexual arousal system. These fixed mental and emotional patterns have been described as *love maps*, *sex prints*, *erotic signatures*, and *sexual scripts*. The origin of the word *paraphilia* is constructed from two Greek roots: *para* means beyond and *philia* means love, reflecting that paraphilias are construed not only as sexual disorders but *as disorders of loving*.

In this sense, paraphilias have been characterized as disorders of courtship (Freund, 1988; Freund, Scher, & Hucker, 1983) because they can interfere with normal pair bonding, mating, and biological reproduction. In *Lovemaps*, John Money (1986) famously catalogues over 60 different paraphilias which result from the "vandalism of sexuoerotic development of the vulnerable male" (p. 1). Paraphilias are not exclusive to males, but males with paraphilias are thought to vastly outnumber females. Thus, as with the current work on PCD, research has primarily been limited to males. Statistically, paraphilias occur at low levels of frequency in the population and are abnormal—a deviation from the norm—and are thus considered forms of sexual deviancy. In its extreme or exclusive form, the paraphilic stimulation is required for sexual arousal and inhibits the ability to form suitable and sustainable sexually intimate relationships.

A Suggested Definition of Paraphilic Coercive Disorder

Paraphilic coercive disorder is defined as a mental disorder characterized by persistent urges, fantasies, or behavior involving coercive sexual acts toward nonconsenting persons. It reflects an underlying deviant sexual arousal to forced sex and is conceived as the sexualizing of power, control, and dominance over nonconsenting persons. The eroticizing of coercive sex is thought to develop psychologically such that physical force and/or the nonconsent of the sexual situation become established "turn ons" that are pursued in either fantasy or reality for repeated sexual gratification. Money and Lamacz (1989) used the terms *raptophilia* (Latin

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derivative) or *biastophilia* (Greek derivative) to describe what we believe is comparable to PCD: "Genitoerotic arousal and, eventually the orgasm, that are contingent on having a partner who, as a captive, is forced to yield sexually under condition of threat, assault, and injury" (p. 48).

The essential elements of Paraphilic Coercive Disorder could then be described as follows:

(A) Over a period of at least 6 months, recurrent sexually arousing fantasies, urges, or behaviors involving coercive sexual acts with nonconsenting persons, typically including genital contact.
(B) The experience of power, dominance, and control are sexually arousing because the sexual behavior is forced upon a person who is deprived the liberty of consent and would otherwise refuse the sex if given a free choice.
(C) The individual has acted on these sexual urges (committed sexual assault), or the sexual urges or fantasies cause marked distress or interpersonal difficulty.
(D) The disorder is distinguished from sexual sadism in which the physical suffering and/or psychological humiliation of the nonconsenting person is the source of sexual arousal.

To summarize, PCD as a diagnosis applies to serial rapists who demonstrate *persistent*, *repetitive* acts of coercive sex over time with multiple victims. At the core of PCD is the deviant arousal to the abusive power of sex with a nonconsenting person. Note that the nonconsenting person need not be actively physically resisting the sexual assault (fighting, struggling, etc.). In some rape situations a fearful victim may "surrender" and never physically resist, accepting that she or he would lose the struggle, and passively submit to the rape. This is particularly true of vulnerable victims who are small in stature, elderly, physically disabled, or when the perpetrator uses weapons. In addition, PCD cam be present in serial rapists who target unconscious or mentally incompetent victims who are incapable of consent due to their lack of awareness that a sexual assault is being committed upon them. Whereas sexual sadists are erotically aroused by the use of force greater than necessary to subdue the victim, the need for excessive force or the infliction of pain are not necessarily characteristic of PCD.

Sexual Deviance, Paraphilias, PCD, and the *DSM*

The original edition of the *Diagnostic and statistical manual of mental disorders* (*DSM*, APA, 1952) was designed to develop a uniform nomenclature of mental diseases and a method for coding and statistically tracking their prevalence. The *DSM* was also based on the premise that all disease—including mental disease—had a biological basis, and advancing science would ultimately shed light on both the origins and treatments for disease. However, the *DSM* catalogue of disorders was also influenced by psychodynamic and Freudian notions that were popular at the time, particularly the concept of *neurosis*. The only sexual disorders listed in the *DSM* were termed *sexual deviations* and appeared as a subcategory under *sociopathic personality disturbance*. Sexual deviations included cases formerly classified as "psychopathic personality with pathologic sexuality," but offered little guidance as to signs, symptoms, or criteria for diagnosis. Rape and sexual assault are mentioned but appear to be features of sexual sadism as a type of sexual deviation (which also included mutilation).

The second edition of the diagnostic manual (*DSM-II*, APA, 1968) was designed to more closely follow the World Health Organization's eighth edition of the *International classification of diseases* (ICD-8, 1996; WHO, 1966). The numerical classification scheme was revised, and eight specific sexual deviations were listed as personality disorders that included homosexuality, fetishism, pedophilia, transvestitism, exhibitionism, voyeurism, sadism, and masochism. The list also included "Other Sexual Deviation" and "Unspecified Sexual Deviation." Sexual deviations as a diagnostic class were "for individuals whose sexual interests are directed primarily toward objects other than people of the opposite sex, toward sexual acts not usually associated with coitus, or toward coitus performed under bizarre circumstances … This diagnosis is not appropriate for individuals who perform deviant sexual acts because normal sexual objects are not available to them" (APA, 1968, p. 44).

The third edition of the manual, *DSM-III* (APA, 1980), produced a major shift in which the psychodynamic and biological views were abandoned in favor of a descriptive model that characterized each mental disorder as a clinically significant behavioral or psychological syndrome or collection of symptoms. Rather than focusing on etiology, mental disorders were defined as those disorders associated with distress, disability, or impairment in functioning. A multiaxial system was created to rank the degree of impairment, and diagnostic criteria were offered for each disorder based on specific behavioral signs and subjective symptoms.

The term *paraphilia* first appeared in *DSM-III*, and it is here that we first see the more familiar definition as recurrent, intense sexual urges, fantasies, or behaviors lasting at least 6 months—a time frame that was arbitrarily selected by the authors (Frances, 2007). The paraphilias included the sexual deviations listed in the *DSM-II* with the addition of zoophilia and a residual atypical class called paraphilia, not otherwise specified (NOS). Ego dystonic homosexuality—though not a paraphilia—replaced sexual orientation disturbance, which was introduced in 1973 as a replacement for the prior listing of homosexuality as a personality disorder and sexual deviation in the *DSM-II*.

A paraphilia diagnosis for non-sadistic rape, called sexual assault disorder, was first introduced for consideration in the *DSM-III*. However, sexual assault disorder was withdrawn

after the American Academy of Psychiatry and the Law and other groups voiced opposition that it could be used to promote an insanity defense by defendants facing prosecution for rape (Kutchins & Kirk, 1989). Nevertheless, advocates continued to maintain the need for a separate diagnostic category for paraphilic rape.

Work on the revised edition of *DSM-III* began in 1983 and eventually produced the *DSM-III-R* (APA, 1987). One significant change between the revised edition and its predecessor was that a paraphilia diagnosis no longer required the deviant acts or sexual object to be the preferred or exclusive means of achieving sexual pleasure. In the *DSM-III-R*, paraphilias could be either the *Exclusive* or *Nonexclusive* type, provided they had a duration of at least 6 months. In this way, a nonexclusive paraphilic diagnosis did not necessarily eliminate normative sexual interests (Person, 2005), suggesting that pathological and non-pathological sexual preferences could coexist side by side within the same individual—though not necessarily of equal strength and potency.

It was also during the formulation of the *DSM-III-R* that the term "paraphilic coercive disorder" was officially introduced by the Paraphilias Work Group. The proposed diagnostic criteria were as follows:

(A) Over a period of at least 6 months, preoccupation with recurrent and intense sexual urges and sexually arousing fantasies involving the act of forcing sexual contact (e.g., oral, vaginal, or anal penetration; grabbing a woman's breast) on a nonconsenting person.
(B) It is the coercive nature of the sexual act that is sexually exciting and not signs of psychological or physical suffering of the victim (as in sexual sadism).
(C) The individual repeatedly acts on these urges or is markedly distressed by them.

The diagnosis of PCD was proposed for inclusion in the *DSM-III-R* along with two other controversial diagnoses: masochistic personality disorder and premenstrual dysphoric disorder. As news spread of these proposed changes in the diagnostic manual, strong opposition was heard from both the popular press and various professional organizations (The American Psychological Association, the American Orthopsychiatric Association, the National Association of Social Workers, and the National Organization for Women). Objections were voiced for a number of reasons, not the least of which was how the three diagnoses were perceived to unfairly affect women. Premenstrual dysphoric disorder could apply only to women, masochistic personality disorder was perceived as disproportionally applying to (and thus discriminating against) women, and it was believed that PCD would help rapists to avoid prosecution (at the expense of their female victims) because they allegedly suffered from a psychiatric disorder.

The newly proposed diagnoses provoked a firestorm of debate in the mental health community, and the response from feminist psychologists was particularly passionate (Capalan, 1995; Kutchins & Kirk, 1989, 1997). For example, in a meeting with one of the *DSM-III-R* committees, psychologist Lynne Rosewater from the Feminist Therapy Institute (Georgetown, Maine) threatened to sue the American Psychiatric Association if they included the three controversial diagnoses in the *DSM* (Capalan, 1995). But the proposed paraphilic coercive disorder diagnosis by far generated the most debate. Indeed, Zander (2008) contends that PCD was one of the most hotly debated and widely publicized issues ever considered by the drafters of the *DSM*, second only to the internationally publicized debate about the inclusion of homosexuality in the early 1970s. (For a discussion of the debate over homosexuality in the *DSM*, see Bayer (1981).)

Broad cultural and political trends in the mid-1980s clearly influenced the debate over PCD as a legitimate diagnosis. To begin with, feminist literature promoted the perspective that rape was a violent assault motivated by the rapist's desire for power and dominance rather than by sexual arousal. The motto that "rape is a violent crime, not a sexual crime" was popularized by leaders of the feminist movement (Brownmiller, 1975; Dworkin, 1981; Wells & Motley, 2001). This new thinking influenced the reform of rape laws and the rules of evidence for prosecuting rapists. Prior to this time, rape victims were discouraged from prosecuting because their sexual histories were allowed as evidence, and this information, along with their identities, was typically published by the media. By the early 1980s, most jurisdictions in the United States had adopted rape shield statues to protect the victim's identity and personal history.

During this same period of rape law reform, a separate but overlapping judicial concern was developing about the effects of pornography. In 1969, the United States Supreme Court ruled that all forms of adult pornography were legal and could be viewed by people in the privacy of their own homes. This prompted President Lyndon Johnson to organize the first government inquiry into the effects of pornography in 1970. The 1970 President's Commission on Obscenity and Pornography concluded that there were no antisocial or adverse effects from exposure to sexually explicit material.

By the mid-1980s, the production and distribution of pornography was proliferating at an unprecedented rate. This was in part due to the affordability and widespread use of videotape technology that allowed for home viewing of sex movies. In addition, an underground market developed for porn videos with extremely violent content ("snuff films" and "slasher flicks"). This prompted President Ronald Regan to commission the second government inquiry into the effects of pornography, headed by then Attorney General Edwin Meese. Some felt the Meese Commission, as it was called, was padded with antipornography crusaders, which prompted considerable controversy before its results were even released (Hertzberg, 1986). Predictably, the Meese

Commission produced very different results from the first President's Commission on Pornography in 1970. The Meese Commission concluded that there was a causal link between viewing pornography and sexual violence toward women (Attorney General's Commission on Pornography, 1986). According to the report, viewing pornography changes perceptions of typical sexual behavior, trivializes rape, promotes rape myths, and directly leads to male aggression toward women. (Subsequent research on the effects of pornography has challenged the Meese Commission findings; see Ferguson and Hartley (2009) for a comprehensive review.)

It was within this political climate in the mid-1980s that a groundswell of opposition against the proposed diagnosis of PCD was heard, both inside and outside the American Psychiatric Association. The controversy was covered by news media internationally, and the American Psychiatric Association received hundreds of letters and petitions containing thousands of signatures from mental health professionals and others who objected to the validity of PCD as well as the other two proposed diagnoses (premenstrual dysphoric disorder and masochistic personality disorder). Even the U.S. Department of Justice (USDOJ), which rarely takes a public position on mental health issues, argued that the proposed diagnosis of PCD would be used by criminal defendants to avoid legal responsibility in criminal prosecutions for rape (Kutchins & Kirk, 1997). Although controversial, the position taken by USDOJ was less surprising considering that Attorney General Edwin Meese was heading the Department of Justice at the time, and the *Meese commission report on pornography* was published in July 1986, only a few weeks after the American Psychiatric Association Board of Trustees, by a vote of ten against and four in favor, rejected PCD for inclusion in the *DSM* on June 28, 1986.

Nevertheless, there was a growing consensus among clinicians who treated sex offenders that Paraphilic rapism did exist in a subsample of serial rapists (Fuller, Fuller, & Blashfield, 1990). At the same time, there were good reasons why a diagnosis of PCD was not ready for inclusion in the *DSM*. There was little evidence-based research on its reliability and validity, raising problems with differential diagnosis and distinguishing paraphilic rapists from the vast majority of rapists who commit sexual assault for non-paraphilic reasons. But the clamor to exclude PCD from the *DSM* went beyond these scientific concerns, and the decision to reject it was not without its critics. Psychiatrist Fred Berlin, one of the original proponents of PCD, supported the position that some serial rapists were turned on by the coercive rather than the sadistic elements of rape (Berlin et al., 1997). Psychologist Judith Becker (who also was a dissenting member of the Meese Commission on Pornography) estimated that the proposed PCD diagnosis would apply to approximately 20 % of rapists (Holden, 1986).

After the *DSM-III-R* was published in 1987, the controversy over PCD remained quiet for a time. No proposal to insert a rape-related paraphilia was raised during the drafting of the *DSM-IV* (APA, 1994) or *DSM-IV-TR* (APA, 2000). It wasn't until the mid-1990s, after several states passed sex offender civil commit laws and the subsequent surge in sex offender research, that the controversy over rape paraphilia resurfaced.

Paraphilia NOS and Civil Commitment of Sex Offenders

A new generation of civil commitment laws emerged in the 1990s designed to protect society from a small number of high-risk sex offenders, called sexually violent predators (SVP) or sexually dangerous persons (SDP), who were likely to reoffend after release from prison.

In 1997, the U.S. Supreme Court upheld the constitutionality of the civil commitment of sex offenders who were deemed to be dangerous by virtue of a mental disorder (Kansas v. Hendricks, 1997). To date, 20 states and the federal government have passed SVP laws in which dangerous sex offenders can be detained by civil commitment after their prison sentence has expired. Despite some state-to-state variations, all SVP laws share four basic elements (Prentky, Janus, Barbaree, Swartz, & Kafka, 2006). To be committed the offender must (a) have some mental disorder or abnormality that (b) causes or is related to (c) an elevated risk of future sexual violence and (d) treatment rather than punishment must be the purpose of commitment, though amenability to treatment or participation in treatment are not required.

States that allow for civil commitment of dangerous sex offenders require that individuals have a mental disorder that predisposes them to commit sexually violent crimes. One of the more common types of sex offenders within the SVP population is the repeat rapist who targets adolescent and adult victims (Abracen & Looman, 2006; Becker, Stinson, Tromp, & Messer, 2003; Jackson & Richards, 2007; Levenson, 2004). In the absence of a specific rape paraphilia diagnosis, the default diagnosis currently used to identify non-sadistic serial rapists is paraphilia not otherwise specified (NOS). The NOS diagnosis is usually followed with qualifiers such as paraphilia NOS *rape*, paraphilia NOS *nonconsent*, paraphilia NOS *sexual aggression toward nonconsenting females*, and paraphilia NOS *forced sex with adult victims*.

Jackson and Richards (2007) provide a breakdown of the diagnoses of 190 sex offenders civilly committed in Washington State, which includes 56.3 % pedophilia, 42.6 % paraphilic NOS nonconsent, 23.7 % other paraphilia NOS, and 16.8 % sexual sadism. Becker et al. (2003) reported that over half of their Arizona sample of 120 SVPs (56 %) were diagnosed with paraphilia NOS. Yet broad consensus about how best to define or standardize diagnostic criteria did not exist for repeat rapists, and use of paraphilia NOS for this purpose has been criticized as overbroad and lacking reliability and valid-

ity (First & Halon, 2008; Frances, Sreenivasan, & Weinberger, 2008; Miller, Amenta, & Conroy, 2005; Polaschek, 2003; Prentky et al., 2006; Zander, 2005, 2008). In contrast, however, other experts contend that the paraphilic rapists can be reliably diagnosed under the NOS category with the absence of a specific listing in the *DSM* (DeClue, 2006; Doren, 2002; Packard & Levenson, 2008; Sachsenmaier, 2009). Indeed, the current debate over use of Paraphilia NOS as a qualifying mental disorder in civil commitment trials echoes the controversy concerning the inclusion of paraphilic coercive disorder in the *DSM* in the mid-1980s. Susan Sachsenmaier (2009) notes the historical irony: PCD was criticized in the 1980s when it was believed the diagnosis would be used by rapists to *avoid* prosecution for their crimes, whereas, under current civil commitment laws, the rape paraphilia NOS diagnosis is criticized for *promoting* the prosecution of rapists.

Much of the disagreement concerns whether the wording of proposed diagnostic criteria allows for the diagnosis of a paraphilia in the absence of direct evidence for deviant urges or fantasies, which was apparently not the intent of its authors (First & Francis, 2008). Like biblical scholars deciphering Holy Scripture, two camps emerged in this debate. One camp (e.g., First & Francis, 2008; Zander, 2005, 2008) holds a literalist view of *DSM* criteria as final and authoritative and cautions that "tinkering with criteria wording should be done only with care … because of the potential unforeseen consequences … and because of the disruptive nature of all things" (First & Francis, 2008, p. 1241). The other camp holds the more liberal view that *DSM* criteria represent "guidelines," which allow room for interpretation (Doren, 2002; Elwood, 2009; Sachsenmaier, 2009). This hair-splitting distinction becomes critical in SVP civil commitment cases because many rapists deny rape urges and fantasies, and the diagnosis must therefore be based on rape behavior alone.

Paraphilic Coercive Disorder and the *DSM-5*

At the time of this writing, efforts are under way to compile the next edition of the *Diagnostic manual* (the *DSM-5*, which is scheduled for publication in May 2013), and paraphilic coercive disorder has been reintroduced for consideration. The official website of the *DSM-5* (APA, 2010, at www.dsm5.org) lists the following diagnostic criteria for PCD:

(A) Over a period of at least 6 months, recurrent, intense sexually arousing fantasies or sexual urges focused on sexual coercion.
(B) The person is distressed or impaired by these attractions or has sought sexual stimulation from forcing sex on three or more nonconsenting persons on separate occasions.
(C) The diagnosis of Paraphilic Coercive disorder is not made if the patient meets criteria for a diagnosis for Sexual Sadism Disorder.

The *DSM-5* website adds the following statement:

> In clinical practice, especially under the adversarial conditions that commonly apply during forensic evaluations, convicted sexual offenders will commonly do their best to conceal coercive sexual interests. Consequently positive evidence from any source (self-report, laboratory tests, or patterns of behavior) may be taken as indicative … The reliance on "forcing sex on three or more nonconsenting persons on separate occasions" in indicating that the paraphilia rises to the level of a disorder will also likely have the effect of increasing the accuracy of the ascertainment of this paraphilic interest. It is probable that this degree of repetition is in itself partially indicative of a specific interest in coercive sexual behavior (as opposed, for example, to those rapes where situational or opportunistic factors play a larger role) (APA, 2010, at www.dsm5.org).

The *DSM-5* proposed criteria for PCD based on behavior alone is not without its critics, however. Warnings have been issued concerning unreliability, misuse, and risk of misdiagnosis similar to those raised over PCD in the mid-1980s and more recently, by the use of Paraphilia NOS in civil commitment cases (Frances, 2010). Indeed, First and Halon (2008) state, "Concluding that an individual's behavior is driven by paraphilic rapism based entirely on a history of committing repeated rapes within a circumscribed period of time is never justified" (p. 446). At a recent presentation to the California Department of Mental Health (2009), when asked by an evaluator whether he would diagnose a rapist who had 100 victims with a coercive paraphilia, Dr. First answered that he would not do so without evidence ruling out alternative explanations for the rape behavior. First (2007) also stated he would not conclude a serial rapist was aroused by forced sex even if the offender had ten cycles of sexual offending in which he was incarcerated for rape, released, then raped again, repeating this cycle ten times. Yet when considering rape behavior of this magnitude, what possible alternative explanations could there be?

Certainly, the need for caution and supportive research is appropriate, but so is common sense. Establishing behavioral criteria for distinguishing paraphilic from non-paraphilic rapists may be difficult, but that does not mean the effort should be abandoned. It seems reasonable, both clinically and empirically, that at some point, increasing numbers (victims, arrests, and convictions) begin to matter and become a diagnostic indicator. Persistence of offending in sexual criminals is also a well-established risk factor for recidivism identified in sex offender literature (Hanson & Bussiere, 1998; Hanson & Morton-Bourgon, 2004; Harris, Phenix, Hanson, & Thornton, 2003; Phenix, Doren, Helmus, Hanson, & Thornton, 2008). Nevertheless, the *DSM-5* website offers the following caveat: "The reason for diagnosing specific paraphilic disorders from multiple, similar offenses in uncooperative patients is to achieve a level of diagnostic certitude closer to the certitude in diagnosing these disorders from self-reports in cooperative patients. It is not derived from legal theory or practice" (APA, 2010, at www.dsm5.org).

Epidemiology and Prevalence of Rape

Rape appears to be a universal phenomenon across societies that has existed throughout human history and appears to exist in some animal species (Lalumiere, Harris, Quinsey, & Rice, 2005). In modern industrialized societies, rape is an abhorrent crime that devastates victims, violates the values and legal norms of those societies, and inevitably results in severe social sanctions (e.g., incarceration).

Studies on the demographics of crime have clearly established that rape is underreported in the United States and abroad, and that reliance on recorded crime statistics greatly underestimates the actual occurrence of this and other sex crimes (Abel, Becker, Mittelman, Cunningham-Rathner, & Rouleau, 1987; Ahlmeyer, Heil, McKee, & English, 2000; Doren, 1998; Freeman-Longo & Knopp, 1992; Groth, Longo, & McFadin, 1982; Marshall & Barbaree, 1988; Prentky, Lee, Knight, & Cerce, 1997; Romero & Williams, 1985). For example, a 1992 study sponsored by the National Victims' Center indicated that only 16 % of all rapes are reported to police. A 2007 English government report notes similar findings: between 5 % and 25 % of rapes are reported to police. According to a 2000 Bureau of Justice Statistics study (Tjaden & Thoennes, 2000—described below), about 40 % of actual rapes or sexual assaults were reported to police. It is estimated that only about half of those individuals who are reported are arrested, about 80 % of those arrested are prosecuted, and about 58 % of those prosecuted are convicted (Rape, Abuse, and Incest National Network: www.RAINN.org, 2010). This suggests that only a very small proportion (less than 10 %) of rapists are incarcerated and that the vast majority go undetected.

Because of underreporting, the actual occurrence of rape in the United States is typically estimated from victim and perpetrator surveys and the estimates of the *incidence* (the number of rapes occurring during a given period of time) and *prevalence* (the percentage of persons who have been raped) vary depending on the definition used, the population studied, and the methods used to gather the data (Muehlenhard, Sympson, Phelps, & Highby, 1994). In 2000, the National Institute of Justice and the Centers for Disease Control and Prevention sponsored the National Violence Against Women (NVAW) Survey (Tjaden & Thoennes, 2000). This highly cited survey included a demographic cross section of 8,000 men and 8,000 women who were interviewed by telephone about their experiences with violence, including rape. In the study, completed rape was defined as an event that occurs without the victim's consent and involves the use of threat or force to penetrate the victim's vagina or anus by penis, tongue, fingers, or object or the victim's mouth by penis. Included in the survey was a measure of attempted rape that included force and threat without the actual completion of the act. The study found that 14.8 % of women reported having been raped or had been the victims of attempted rape (2.8 %) in their lifetime. About half (54 %) of these victims reported the rape occurred when they were under 18 years of age. The study also found that about 3 % of men reported attempted or completed rape (see also Baumer, 2004).

The reasons given by victims for not reporting a rape vary but typically involve victims' stating that the rape was a personal matter (23.3 %), fear of reprisal (16.3 %), police bias (5.8 %), and, in the case of attempted rape, to protect the offender (9.9 %) (Tjaden & Thoennes, 2000). This study further found that only about a fourth of rapes or sexual assaults were reported if the victim was the current or ex-wife or girlfriend of the perpetrator. In contrast, when the offender was a stranger, about half of the rapes (46 %) and two-thirds of the sexual assaults (66 %) were reported. It has been found that physical injuries and the use of a weapon were primary factors associated with increases in reporting (Bacheman, 1998).

Studies of perpetrators have found self-reported rates of rape, attempted rape, or sexual assault range from 9.0 % (Koss, Gidycz, & Wisniewski, 1987) to 14.9 % (Lisak & Roth, 1988). Findings from studies that have only assessed rape and attempted rape ranged from 6.5 % (Lisak & Miller, 2002) to 14.8 % (Merrill et al., 1998). Studies restricted to perpetrator's admissions of rape alone have ranged from 4.8 % (Weiss & Zverina, 1999) to 6.1 % (Kosson, Kelly, & White, 1997). In the United States, most rapists are male, below the age of 30, slightly older than their victims, tend to be more accepting of violence in general, have a more authoritarian approach to relationships, and display more hostility toward women (Drieschner & Lange, 1999).

The finding that most rapists go undetected is not unimportant because the most often studied samples of rapists are those that are or have been incarcerated and those in civil commitment custody. As such, research findings on detected rapists may not generalize to the population of all rapists. Lisak and Miller (2002), for example, argue that the majority of undetected rapists are serial rapists. In a community sample of 1,882 non-offending males, Lisak and Miller (2002) identified 120 undetected rapists. Seventy-six (63 %) were found to be serial rapists who reported an average of 14 victims and were responsible for 439 rapes and attempted rapes, 49 sexual assaults, 277 acts of sexual abuse against children, 66 acts of physical abuse against children, and 214 acts of battery against intimate partners. Lisak notes that undetected rapists he studied premeditate the sexual assaults and are extremely adept at identifying "likely" victims and testing their boundaries; typically they groom victims using sophisticated strategies such as physical isolation, use only enough psychological and physical violence (threats, assaults) sufficient to coerce the victim (i.e., do not exhibit the gratuitous violence one might expect from a sadistically

oriented perpetrator), and use drugs or alcohol to render the victim vulnerable or unconscious.

In summary, rape is a greatly underreported crime and the rapists that are detected may not be representative of the general rapist population.

Rapist Typologies

When clinicians began studying the psychology of rape, it immediately became clear that perpetrators of sexual aggression were a heterogeneous group and that rape was committed for a variety of reasons. Clinicians and the courts understood that identifying the motivation for sexual coercion was significant for legal dispositions of rape crimes and, when appropriate, clinical interventions. Early descriptive models represented the clinicians' best guess about what were the most discriminating characteristics among these offenders.

The first typology of rapists was proposed by Nicholas Groth in the late 1970s. Groth, Burgess, and Holmstrom (1977) ranked accounts from 133 rape offenders and 92 victims on the dimensions of power, anger, and sexuality. All three dimensions operated in every rape, but the proportions varied and power and anger always predominated. In their seminal book *Men Who Rape*, Groth and Birnbaum (1979) summarize their findings:

> Rape, then, is a pseudosexual act, a pattern of sexual behavior that is concerned much more with status, hostility, control, and dominance than with sensual pleasure or sexual satisfaction. It is sexual behavior in the primary service of nonsexual needs. (p. 13)

However, Groth's rape typology was heavily influenced by both psychoanalytic concepts (Stoller, 1975) and the politically correct view of rape promoted by feminist literature at the time (Brownmiller, 1975). It also had significant problems with reliability and validity assessment (Hazelwood, 1987; Hazelwood & Burgess, 1989; Knight, 2010b), and no estimates of inter-rater reliability have been provided.

A particularly influential topology for rapists has been produced by Raymond Knight and colleagues based on four decades of research at the Massachusetts Treatment Center at Bridgewater (Knight, 1999, 2010a; Knight & Guay, 2006; Knight & Prentky, 1987, 1990; Knight, Rosenberg, & Schneider, 1985). One of the critical questions guiding Knight's work was whether rapist types were dimensional or operated as discrete naturally occurring taxons that "carved nature at its joints" (Knight, 1999). The core sample on which the original rapist typology was based included all sexually dangerous offenders civilly committed to the Massachusetts Treatment Center (MTC) between 1959 and 1991. A rapist was defined as an adult male whose sexual offenses were committed against victims 16 years of age or older. Data for the MTC rapist typology program was gathered from several sources including archival records, criminal histories, and the *Multidimensional assessment of sex and aggression* (MASA). The MASA is a self-report inventory designed to assess the domains for classifying rapists (Knight, 1999; Knight, Prentky, & Cerce, 1994). The original impetus for creating the MASA was because of the paucity of information related to offenders' sexual behavior, cognitions, and fantasies in the archival records. Like all self-report inventories, the MASA has the same inherent problems with under and overreporting, which may be even more pronounced when surveying individuals about potentially embarrassing or illegal sexual behavior. The MASA began as a paper-and-pencil inventory and has undergone several revisions to improve reliability, one of which was computerized administration. Participants were guaranteed confidentiality, but even with guarantees of confidentiality and immunity from prosecution, questions remain as to whether sex offenders are the most accurate historians of their own sexual behaviors and fantasies. Nevertheless, after conducting reliability and validity studies on a wide variety of samples (including college students, community noncriminals, and non-sex offending criminals), the authors conclude that "the inventory shows promise as a useful assessment instrument for sex offenders" (Knight & Cerce, 2001, p. 2).

The original MTC rapist typology (MTC:R1) has gone through two major revisions and Knight claims the third version, the MTC:R3, "is the best available published typological model for discriminating among rapists" (Knight, 2010b, p. 3). The latest version of the MTC:R3 (Knight, 2010b) includes five major types of rapists that range along dimensions of violence, sexualization, and impulsivity. Sexualization was defined as high rates of sexual preoccupation, compulsivity, sexual drive, sexual fantasy, and paraphilic fantasy and behavior.

The MTC:R3 rapist types are: (1) sadistic, (2) pervasively angry type, (3) vindictive types, (4) opportunistic type, and (5) sexual non-sadistic type. Knight reports that discriminating between types is problematic and incorrect classifications are sometimes made (Knight, 2010b; Knight & Guay, 2006). For example, "contrary to expectations, both the Vindictive and the Pervasively Angry types achieved more extreme scores than the Sadists on the Sadistic Fantasies factor [on the MASA]" (Knight, 2010b, p. 7), and these three types were statistically similar on the bondage and "Synergism of Sex and Aggression" factors. In addition, non-sadistic rapists were easily discriminated from sadistic rapists, but non-sadistic rapists were sometimes confused with opportunistic rapists during the classification process.

Originally, the MTC:R3 was a linear model, and the sexualization dimension was believed to operate independently from the violence domain. However, this proved not to be the case. In order to assess the relationship between sexualization and sexual aggression, rapists were compared to

community and criminal controls. This included community sample of men who denied ever committing acts of sexual coercion, men who admitted committing undetected acts of sexual aggression, and criminal offenders with no history of sex offending. Compared to noncoercive males, the composite group of sexually aggressive males (convicted rapists and self-admitted community and criminal sexual aggressors) reported significantly higher frequencies of sexual preoccupation, compulsivity, sexual drive, and paraphilic fantasies and behaviors. These findings suggest the important role for sexualization or "hypersexuality" in sexual coercion against women in both criminal and undetected rapists (Knight, 2010b; Knight & Guay, 2006). In other words, as sexualization increased across groups, so did sexual aggression. Likewise, as impulsivity and antisocial behavior increased, so did sexual aggression in both criminal and noncriminal samples.

In an effort to correct conceptual problems and misclassification of rapist types, Knight reorganized the MTC:R3 typology into a "circumplex dimensional model" (Knight, 2010b, p. 23) with sexualization, impulsivity, and violence dimensions superimposed over the circumplex of rapist types. We would argue that PCD rapists are most similar to the pervasively angry, vindictive, and sadistic types, all of which are high on the impulsivity, violence, and sexualization dimensions.

Knight (2010a) argues against the existence of PCD rapists—at least as a "preferential taxon" and a diagnostic entity distinguishable from sexual sadism. Knight bases his conclusions on several lines of evidence, including the creation of a PCD scale from items on the MASA. Knight examined the responses of 186 adult male sex offenders. The PCD scale was composed of the following four items: masturbating to thoughts of forcing someone to have sex, being sexually aroused by making a woman do what the respondent wants sexually, by having a woman struggle, and by thoughts of overpowering someone. Knight's PCD scale does not include items that reflect a serial rape strategy, for example, data on number of victims, relationship to victims (stranger versus acquaintance), rape when consenting partners are available, or persistence of offending over time (e.g., number of rape arrests)—all factors relevant to PCD as motivating rape behavior. Knight's PCD scale was then correlated to the item "having thoughts of forcing someone to have sex." While the correlation reached significance ($r = .75$, $p < .001$), Knight also found that the PCD scale's correlation with the "sadism fantasy scale" on the MASA was slightly higher ($r = .76$, $p < .001$), and he concluded that the majority of the PCD scale variance is associated with sadism. However, as noted above, Knight has reported that the vindictive and pervasively angry rapists types also scored higher than the sadists on the sadistic fantasy scale, so these findings are not surprising given our view that PCD is related to these three rapist types as defined by Knight.

Persistence of Sex Offending and Paraphilic Coercive Disorder

There is some evidence of relationship between arousal to sexual coercion and serial rape. Hazelwood, Reboussin, and Warren (1989) studied 41 incarcerated serial rapists who had each raped a minimum of ten victims. Collectively, the sample was found to be responsible for 837 rapes, more than 400 attempted rapes, and over 5,000 "nuisance" sexual offenses. Data was collected concerning the subjects' first, middle, and last rapes. Results showed that while the amount of force used by the rapist did not change from first to last rape overall, there were ten individuals for whom the amount of force did increase from first to last rape. Four correlates were identified that distinguished these "increasers" from the "nonincreasers." The data also indicated that when the victim resisted, the amount of self-reported arousal experienced by the rapist was greater, and the duration of the rape was longer.

Mieth, Olson, and Mitchell (2006) examined *specialization* and *persistence* in the criminal careers of sex offenders. The data for their study was originally supplied by the U.S. Department of Justice and the Bureau of Justice Statistics (Langan & Levin, 2002; Langan, Schmitt, & Durose, 2003). The sample included more than 38,000 inmates released from prison in 15 states in 1994 representing about two-thirds of prisoners released across the entire country in that year. From that group, a sample of about 10,000 male sex offenders was collected based on arrest histories for a sexual offense, and a subsample of 2,291 offenders arrested for rape was further identified. Criminal specialization was then examined. It was defined as three or more arrests for the same sex offense during the offender's criminal career. Of the 2,291 rapists in the sample, only 7 % were *serial specialists* with three or more rape arrests demonstrating this pattern of sex offense specialization. Of those serial rapists, approximately one quarter (27 %) were found to be *persistent specialists*, meaning that they had at least one arrest for rape during the beginning (first third), middle (second third), and last (third third) stages of their criminal careers. Sachsenmaier (2009) suggests (and we agree) that the method developed by Mieth et al. (2006) to identify *persistent specialist offenders* can be useful to identify rapists who would meet the criteria for paraphilic coercive disorder.

Several individual case studies exist giving detailed descriptions of PCD (Berlin et al., 1997; Kafka, 1991; Spitzer, Gibbon, Skodol, Williams, & First, 2002). Kafka (1991) offers an interesting case report of a 30-year-old male who was referred for treatment after an aborted attempt to rape his mother. The man began having rape fantasies at age 18, and that became his primary means of achieving orgasm with masturbation. In his fantasies, a woman was physically restrained, perhaps bound by the extremities, and forced to

be orally, anally, or vaginally penetrated. The fantasies did not include unnecessary pain, suffering, or humiliation of the victim. The fantasy victims were always women that he knew. According to the case report, the man had been rejected by a female peer he wanted to date, and he got intoxicated. The urge to rape his mother had been on his mind for several days, and he finally decided to attack her, and they struggled for several minutes. Approximately 2 days after assaulting his mother, he went alone to the younger woman's apartment while intoxicated with a clear intent to rape her. He backed down from his plan while waiting in hiding, and soon afterwards admitted himself to the hospital for treatment of substance abuse. Kafka reports this individual suffered from multiple impulse control disorders including alcohol and marijuana abuse, compulsive gambling, kleptomania, voyeurism, and PCD.

Rape and Antisocial Behavior, Including Psychopathy

The core features of psychopathy include a deceptive and manipulative interpersonal style, lack of guilt and remorse for misdeeds, and an impulsive, irresponsible, and antisocial lifestyle (Cleckley, 1941; Hare, 1991, 2003). The relationship between psychopathy, deviant sexual behavior, and sex offending has been well established in both criminal and non-offender samples (Knight, 2010b; Knight & Guay, 2006; Lalumiere et al., 2005; Rice & Harris, 1997). Psychopathy was positively related to admissions of unreported sexual aggression by men in noncriminal community samples (Knight & Guay, 2006; Williams, Cooper, Howell, Yuille, & Paulhus, 2009). In a study of non-offender college males, Williams et al. (2009) found that deviant sexual fantasies translated into sexually deviant behavior only for individuals scoring high in psychopathy, and this interaction was most pronounced for sexual assault. These researchers also found that the link between pornography consumption and deviant sexual behavior held only for individuals high in psychopathy, and they conclude that "rather than serving a cathartic function, pornography may activate or escalate the deviant sexual behavior of psychopaths" (Williams et al., 2009, p. 215).

Clinical observation and literature reviews show that serial rapists tend to be antisocial individuals, and rapists are likely to be psychopaths more than any other category of sex offenders (Lalumiere et al., 2005; Lalumiere, Fairweather, Harris, Seto, & Suschinsky, 2009; Lalumiere, Harris, & Seto, 2009; Lalumiere, Quinsey, Harris, Rice, & Trautrimas, 2003). Higher PCL-R scores have been found among rapists than among child molesters, and still higher scores have been found among men who offend sexually against both adult and child victims (Porter et al., 2000; Porter, Campbell, Woodworth, & Birt, 2001; Quinsey, Rice, & Harris, 1995; Rice & Harris, 1997; Serin, Malcolm, Dhanna, & Barbaree, 1994; Sreenivasan et al., 2007). Several studies using the psychopathy checklist-revised (PCL-R) have found that between 12 % and 40 % of rapists, depending on the risk level of the sample, meet the criteria for a diagnosis of psychopathy (Brown & Forth, 1997; Prentky & Knight, 1991; Serin, Mailloux, & Malcolm, 2001). Recidivism studies of the relationship between psychopathy and sexual deviance also show that sex offenders who were both psychopathic and paraphilic by phallometric assessment exhibited higher rates of sexual reoffense than other offenders (Harris et al., 2003; Hildebrand, de Ruiter, & de Vogel, 2004; Rice & Harris, 1997).

Harris, Rice, Hilton, Lalumiere, and Quinsey (2007) studied 512 sex offenders and found that psychopathy was associated with early, frequent, and coercive sex. This research group looked at the relationship between psychopathy, sexual recidivism, and the following five juvenile variables: (1) having had sexual contact with an adult before age 15; (2) age at first sexual intercourse (including sex offense perpetration); (3) number of sexual partners before age 15; (4) forcing someone into sexual activity before age 15; and (5) Cormier–Lang score for sex offense criminal charges before age 18. These researchers found that the juvenile variables are a group correlated with psychopathy, particularly with a subset of PCL-R Factor two items (parasitic lifestyle, proneness to boredom, irresponsibility, impulsivity, and lacking realistic goals). Indeed, the cluster of variables describing "precocious coercive sexuality" were more strongly associated with psychopathy than the two items on the PCL-R specifically tapping sexual behavior: promiscuous sexual behavior and many short-term marital relationships. The juvenile variables also improved the prediction of recidivism for sexual offending. The authors theorize that psychopathy is a form of "life course antisociality" selected by evolution that reflects a genetically programmed non-pathological reproductive strategy characterized by "cheating," "high adult mating effort," and "minimal parental investment." They conclude, "Based on the present analysis … we propose that interpersonal sexual and nonsexual aggression are not best conceived of as the consequence of psychopathic personality traits but as fundamental aspects of the condition itself" (Harris et al., 2007, p. 18; See also Knight & Guay, 2006; Lalumiere, Mishra, & Harris, 2008; Mealey, 1995 for discussions of coercive sexuality as an inherent component of psychopathy). The authors also suggest that the coercive and precocious sexuality component of psychopathy is not merely a function of indifference to the suffering of others (the failure-of-inhibition hypothesis) or a variant of sexual sadism. It is, rather, a "sexual preference for coercion that does not result in serious injury" (p. 20), which (like sadism) would interfere with reproductive success.

In the MTC:R3 typology of rapists described above, Knight and Guay (2006) concluded that there was a strong

convergence between sexual aggression and the construct of psychopathy in both criminal and noncriminal populations. This was particularly true of impulsiveness/antisocial deviance assessed by Factor 2 on the PCL-R. Indeed, these converging lines of evidence suggest a "unified theory of sexual coercion" (Knight & Guay, 2006). These researchers found that rapists high in psychopathy generally rated higher in sexualization, and they hypothesize that the proposed underlying evolutionary processes that would select for psychopathy (maximum mating effort with minimal parental investment) are theoretically congruent with the potential for sexually coercive behavior.

Rape and Measured Deviant Sexual Arousal

In addition to clinical and self-report information, important evidence for the presence of PCD comes from phallometric studies using the penile plethysmograph (PPG). The PPG is a device that directly measures sexual response by the use of a mercury strain gauge (a wire loop or flexible band) that is placed around shaft of the penis that provides electrical feedback measuring penile tumescence. The subject's sexual response is recorded while he views images (slides or videos) or listens to auditory recordings of various sexual scenes in which the experimenter controls the type of stimuli (adults, children, male, female, consensual or nonconsensual sex, etc.). PPG data is preferred over self-report because it is less likely to be biased, and the specific nature of sexual deviance can be studied in a systematic fashion.

One of the early attempts to generate empirical evidence of rape as a paraphilia was initiated by forensic sexologist Kurt Freund, who coined the term *courtship disorder*. (Freund was also responsible for the invention of volumetric phallometry.) Freund's use of the term *courtship* has nothing to do with courting or romantic dating; rather, it refers to the ethnological study of animal behavior in the wild. Freund observed that human sexual behavior follows a sequential pattern divided into four primary phases of human courtship labeled as partner location, pretactile interaction, tactile interaction, and genital union (Freund, 1988, 1990). Freund's concept of courtship disorder derived from the notion that a specific set of five paraphilias appeared to reflect an exaggerated or distorted form of normal male response for a particular phase. The specific paraphilias are voyeurism, exhibitionism, frotteurism, telephone scatologia, and paraphilic rape. For example, voyeurism is a disruption of the partner location phase. Based on his phallometric studies of sex offenders, Freund found that many of the courtship paraphilias tended to co-occur (Freund et al., 1983; Freund, Scher, Racansky, Cambell, & Heasman, 1986; Freund, Seto, & Kuban, 1997; Freund & Watson, 1993). Instead of being independent paraphilias, Freund theorized that deviant sexual interests, including *rape proneness*, as he called it, were symptoms of a single underlying courtship disorder. Freund and Seto (1998) found phallometric evidence that "preferential rape" (a paraphilic preference for coercive sex) was associated with other expressions of courtship disorder and suggests that the presence of other paraphilias, particularly exhibitionism, may serve as a behavioral marker for paraphilic rape-proneness. On the other hand, Lalumiere et al. (2005) discuss Freund's findings and point out that the courtship paraphilias, especially rape proneness, also tend to be associated with paraphilias that seem to have nothing to do with phases of normal courtship and reproductive intercourse, including pedophilia (Freund, 1990) and transvestic fetishism (Freund & Watson, 1993).

PPG research is fallible, of course, because men can to some extent manipulate their penile response. Moreover, the findings are limited because assessments are preformed in the laboratory rather than in the real world. However, despite noted limitations, the PPG allows us to explore the conceptual boundaries of PCD and helps to answer the following questions:

(1) Are the sexual arousal patterns of rapists different from normal nonsexual offenders?
(2) Are the sexual arousal patterns of rapists different from violent nonsexual offenders who assault women?
(3) Are the sexual arousal patterns of rapists different from sexual sadists?

In research on PCD, the use of PPG data typically entails the construction of a "rape index," which is defined as the ratio of average sexual responses to stimuli depicting coerced sex divided by the average sexual responses to stimuli depicting consensual sex. In other words, the rape index is a single number index that reflects the strength of arousal to coercive sex compared to consenting sex.

It has been repeatedly shown that rapists as a group score higher on the rape index than non-offender community subjects (Hall, Shondrick, & Hirschman, 1993; Lalumiere & Quinsey, 1993), and the difference between rapists and non-rapists is moderate to large. A more recent and comprehensive meta-analysis (Lalumiere et al., 2003) reported moderate-high effect sizes ($d = 0.82$) and found that the difference between rapists and non-rapists is greater when very violent material is used. PPG studies consistently report that about 60 % of rapists show equal or greater arousal to audio presented rape stories than to consenting sex stories. This pattern is rarely obtained among non-rapists (Lalumiere et al., 2003, 2005; Lalumiere, Harris, 2009; Quinsey, 2009) and is more likely in rapists with more extensive histories of prior rape and violent crime. The meta-analysis by Lalumiere et al. (2003) was especially interesting because it compared PPG data on rapists, nonsexually violent offenders against women, and non-offender community participants. The results from that study found that (1) rapists show stronger

overall responses when listening to rape stories than to the consenting sex stories; (2) men recruited from the community showed a clear preference for consenting sex (especially when told from the female point of view); and (3) the nonsexual assaultive offenders produced response patterns that were virtually indistinguishable from that of the normal community sample.

It has been hypothesized that normal non-offenders might be aroused by the sexual elements of rape stories in phallometric assessment but that such arousal is simultaneously inhibited by the violent elements. Rapists, like non-rapists, are thought to be aroused by the sexual elements of rape but, in contrast to non-rapists, fail to be inhibited by the violent elements (Barbaree & Marshall, 1991). Because paraphilias are defined as sexual disorders, a failure to inhibit a sexual response could be attributed to an antisocial tendency rather than to a paraphilia per se. (For further discussion of this view, see Knight (2010a).) If this hypothesis is true, then it could be correctly concluded that PCD would not exist as a genuine paraphilia (persistent arousal to forced sex) but that all rape behavior results from a failure to inhibit arousal and, thus, PCD operates merely as the sexual expression of a more general proneness to antisociality. Experimental studies have shown that it is possible to *disinhibit* normal men—for example, by intoxicating them, by inducing anger at a woman, or by exposing them to pornography prior to testing so that their relative arousal to rape stimuli is increased (Barbaree, 1990; Lalumiere et al., 2005; Lalumiere, Fairweather, 2009). Similarly, the introduction of coercive elements into a sexual story that began as mutually consenting does not appear to inhibit the arousal of sexually coercive men (Bernat, Calhoun, & Adams, 1999; Lohr, Adams, & Davis, 1997).

This insensitivity hypothesis (Lalumiere et al., 2005) suggests that rapists, as part of a general antisocial lifestyle, lack empathy and are insensitive to the feelings and interests of others, especially in a sexual context. Because of their insensitivity, rapists fail to be inhibited by the violence and lack of consent portrayed in rape scenarios presented during phallometric assessments. If the sexual elements are arousing, and the violence and brutality do not inhibit arousal, this dynamic should be especially true of men who score high on measures of antisociality such as the psychopathy checklist-revised (*PCL-R*, Hare, 1991, 2003). However, the relationship between the rape index and psychopathy as measured by the *PCL-R* tends to be mixed (Firestone, Bradford, Greenberg, & Serran, 2000; Harris, 1998; Rice, Harris, & Quinsey, 1990; Serin et al., 1994; Thornton, 2010).

In another review, Thornton (2010) concludes that available PPG research assessing the relationships between the rape index and antisociality or psychopathy is too small to conclude that rapists are motivated by a general antisocial set. Thornton cites further evidence that violent nonsexual offenders against women do not show a deviant PPG rape index (Lalumiere et al., 2003), even though they show equal levels of general antisociality and psychopathy. Also, there is a small percent of normal men in community samples (approximately 10 %) who have a positive rape index (in which their arousal to coercive sex is stronger than consenting sex), but this subgroup was comprised of community males who self-reported past undetected acts of sexual aggression and who admitted the willingness to commit rape provided they would not get caught (Malamuth, Check, & Briere, 1986).

In addition to the arguments that PCD is simply an expression of general antisocial tendencies, another suggestion is that PCD is merely a variant of sexual sadism, clinically defined as a persistent sexual arousal to the physical suffering or psychological humiliation of another person. Knight (2010a) argues that there is little or no support in the PPG data for a category of PCD independent of sadism. If rapists are prone to sexual assault because physical pain and injury are the focus of their sexual interest, one might expect that phallometric stimuli emphasizing sadistic elements would elicit higher responding even with consenting partners.

Findings concerning the relationship between sexual sadism and the Rape Index have shown inconsistent and sometimes insignificant results but lean toward a lower relationship for sexual sadists than for rapists (Barbaree, Seto, Serin, Amos, & Preston, 1994; Langevin et al., 1985; Seto and Kuban 1995; Marshall, Kennedy, & Yates, 2002; Proulx, 2001). Unfortunately, rape stories used in most PPG research have confounded violence and nonconsent cues by including elements of both. In order to better measure the effects of these variables, researchers (Harris et al., 2009; Seto, Lalumiere, Harris, & Chivers, 2009) recently developed a new set of PPG stimuli to distinguish dimensions of sexual arousal theoretically linked to rape and sexual sadism. These were audio stories describing an interaction between a man and woman whose content varies along three dimensions: (1) violence involving physical injury (present or absent); (2) sexual behavior (present or absent); and (3) consent versus coercion.

The first study (Seto et al., 2009) compared a normal community sample with self-identified sadists; both groups were recruited as community volunteers without criminal histories. The authors found that compared to normal controls, the self-identified sadists had stronger sexual responses to stories containing the injury dimensions, but the two groups showed similarly low responding to the coercion dimensions. Thus, for example, the sadists showed stronger sexual responses than controls to stories depicting consenting sadistic activity (injury and sex), consenting nonsexual violence (injury), nonconsenting nonsexual violence (coercion and injury), and sadistic rape (coercion, injury, and sex). In contrast, sadists actually showed weaker arousal to nonsadistic rape stories (coercion and sex only). In the second study, Harris et al. (2009) compared a sample of 164 rapists to normal controls. The rapists showed markedly stronger arousal than controls to stories depicting non-sadistic rape

and markedly weaker arousal than controls to stories depicting consensual non-sadistic sexual activity. In contrast, rapists showed only small differences from controls on stimuli depicting either consensual sadistic sex or sadistic rape. In a review of these new PPG studies, Thornton (2010) concludes that two distinct paraphilias are supported by the data: (1) a non-sadistic paraphilia in which the salient focus is coercing another into sexual activity; (2) a sadistic paraphilia in which the salient focus is injury (consensual and nonconsensual). The sadistic paraphilia may include some kinds of rape (with injury) but also includes nonsexual sadistic activities. Thornton concludes: "There is significant empirical support for the existence of a distinctive coercive paraphilia among men convicted of rape. This paraphilia involves preferential sexual arousal to forcing sex upon a woman in a way that she obviously experiences as coercive. Development of the paraphilia may depend, in part, on a failure of inhibitory processes but it also involves this erotic focus being a positive excitatory source of sexual arousal" (Thornton, 2010, p. 6).

Clearly, there continues much to be learned about PCD, but the most recent PPG data appears to reflect what clinicians have long reported, that PCD describes a distinct pattern of sexual arousal different from the normal sexual interest of non-offending males and different from both sexual sadists and nonsexual violent (antisocial) offenders.

The Paraphilic Coercive Disorder Checklist

The authors are conducting a study to explore and establish the conceptual boundaries of the construct of paraphilic coercive disorder with the further goal of creating a standardized measure, the Paraphilic Coercive Disorder Checklist (PCDC), for use in applied settings for research, assessment, and treatment of sex offenders. The goal was to create a instrument that could be scored based on behavior documented in an offender's criminal records even when the offender is uncooperative and unwilling to self-disclose sexual information. The procedure for developing the PCDC is a three-step process: (1) item generation; (2) scale development; and (3) scale evaluation. In this chapter, we report on the first step in the process.

Method

Materials

Following an extensive literature review, input from numerous professionals whose work is exclusively or primarily with sex offenders, and author-defined theoretical dimensions of PCD, a set of 83 items reflecting these dimensions was constructed. The set of items included some that were thought to be most reflective of PCD (e.g., "The individual possesses evidence of a *rape kit*"), items that were theoretically negatively related to the concept of PCD (e.g., "The individual has a history of coercive sexual crimes but has lived offense free in the community for 15 or more years"), and items that were felt to be neutral (e.g., "The individual is severely mentally ill"). To further assess the content validity, the 83-item list was given to an impartial judge, highly experienced in the treatment and evaluation of sexually violent predators, who reviewed the list and provided feedback. After deleting redundant or poorly constructed items, the final list of 70 items was produced. The list included items that were designed to establish theoretical cutoff points for determining the presence (or absence) of PCD. For example, the six items reflecting number of victims were constructed in hierarchical fashion, so that we would be able to learn about the number of victims required to increase evaluator certainty of the diagnosis of PCD.

Procedure

A survey containing the list of 70 items and demographic questions, termed the paraphilic coercive disorder rating scale, was constructed and made available to sex offender treatment and evaluation professionals (see Appendix). The survey was disseminated in two ways; the first was to invite, via e-mail, known sex offender professionals who work with high-risk sex offenders from, among others, the states of California, Washington, Iowa, Wisconsin, and Florida, to participate in the survey. Second, invitations to participate in the survey were placed on the Association for the Treatment of Sexual Abusers (ATSA) and California Coalition on Sexual Offending (CCOSO) listserv emailing lists. To insure anonymity and thus promote open and honest participation, the *Survey Monkey* website was used to gather the data (http://www.surveymonkey.com/s/JGTC76K). Participants were asked to rate each item on a 5 point Likert-type scale on the manner in which the item is related to PCD (−2 strongly negates, −1 negates, 0 neutral, +1 supports, and +2 strongly supports). To ensure that as much of the PCD content domain as possible was surveyed, each item also contained a section in which the respondent could comment. In addition, a section for open comments was made available at the end of the survey.

Results

Respondent Characteristics

To the present, 130 professionals have participated in the survey and 126 have fully completed it. Five (4 %) of the 126 surveys were deleted because the respondents indicated

disagreement with the construct of PCD and/or produced response sets (e.g., all zeroes or all ones). The rest of the respondents (121 or 96 % of the original sample) did not voice such opinions nor did they produce response sets. This finding is not unimportant because it suggests that of those surveyed, the vast majority were of the opinion that PCD is a valid construct. In fact, many voiced approval of this work.

The overall response rate is considered to be strong, and the opinions expressed are considered to be representative of the sex offender treatment, evaluation, and research community in the United States. Review of demographic data indicates that the vast majority of respondents were highly trained professionals (107 of the 111 who answered the question were psychologists, psychiatrists, or licensed clinical social workers). The majority of the respondent group was male (66.4 %), over 50 (60.4 %), and worked in public or private settings in which they performed forensic evaluations (80.4 %). Eleven respondents identified themselves as sex offender researchers, six as community supervision professionals, five as criminology researchers, and four as legal counselors.

With an average of 16.6 years experience in evaluating or treating sex offenders (80 of the respondents (62 %) reported 10 or more years' experience), the respondent group was clearly knowledgeable about the topic. The average number of sex offender evaluations performed by individual respondents was 679 with a range between zero and 8,000. With regard to experience with sexually violent predators (SVPs), the average number of years working with SVPs was 9.37, and the average number of SVP evaluations performed by the respondent group was 174 with a range between zero and 1,000.

A few respondents added comments, some of which spoke to the overlap between the constructs of PCD and sexual sadism. This suggests that, as with most mental disorders, when behaviorally measured, the constructs appear to be dimensional in nature.

Findings

The scored items of the PCD checklist were categorized according to mean ratings across respondents, and a hierarchical listing was created (see Appendix). The average scores of items that were greater than positive one (+1 Supports/Rules in PCD) or less than negative one (−1 Negates/Rules out PCD) were pooled into theoretical domains as noted in Table 1. The thresholds of positive and negative one (+1 and −1) were thought to reflect a considerable amount of agreement among the expert respondents. Although important, items that had average scores within the "neutral" range (between negative .99 and positive .99) were not considered in the present analysis.

Table 1 List of items with mean rankings greater than 1.0 grouped by domain

Mean score	Victim domain
1.74	The individual has committed documented acts of coercive sex with 15+ victims
1.70	The individual has committed documented acts of coercive sex with 11–14 victims
1.64	The individual has committed documented acts of coercive sex with 8–10 victims
1.59	The individual has committed documented acts of coercive sex with 5–7 victims
1.24	The individual has committed documented acts of coercive sex with 3–4 victims
1.11	The individual engages in coercive sex with a wide range of victims including two or more of the following: male, female, children, adolescents, adults, elderly, or disabled
Persistence of offending domain	
1.54	The individual has three or more sentencing dates for coercive sexual offenses prior to the index coercive sexual offense
1.27	The individual reoffends quickly and commits a new coercive sex offense within 1 year following sanction/release for a prior coercive sex offense
1.16	The individual has two sentencing dates for coercive sexual offenses prior to the index coercive sexual offense
1.15	The individual committed coercive sexual acts as a minor and as an adult
1.13	The individual displays a pattern of recurrent coercive sexual behavior with persons over a period of at least 6 months
1.06	The individual was arrested/charged for coercive sex as a juvenile and again as an adult
Behavioral correlates domain	
1.41	The individual possesses evidence of a "rape kit": rope, bindings, tape, blindfold, scissors, tools, binoculars, lubricants, etc.
1.39	The individual engages in stereotyped rituals or repetitive patterns of behavior during coercive sex, as if scripts are being enacted, repeated "M.O."
1.30	The individual exhibits advanced planning or premeditation prior to committing coercive sexual acts
1.13	The individual collects and saves victim's memorabilia (photos, jewelry, hair, items of clothing) gathered during coercive sex
1.20	The individual commits acts of coercive sex despite the presence of an available consenting sexual partner
1.16	The individual drives around cruising for victims with whom to engage in coercive sex
1.11	The individual shows physical signs of arousal (erection, ejaculation) during coercive sex
1.09	The individual video or audio records the coercive sex
1.03	The individual reads, watches, or writes pornography with themes of coercive sex
Sexual deviance domain	
1.19	The individual reports having rape impulses or fantasies with masturbation
Items contraindicating PCD	
−1.24	The individual stops the coercive sex when he sees the victim cry or scream
−1.07	The individual loses his erection when the victim complains or otherwise resists

As noted in the "victim domain," the average number of victims of coercive sex required for an average rating supportive of a diagnosis of PCD was 3–4. The mean ratings of the other "number of victims" items were remarkably consistent: The greater the number of victims, the greater the agreement that the individual likely has PCD. Starting with the "three victims" item, the mean rating increased as the number of victims increased across items, reaching +1.74 (the highest ranked item on the entire scale) for the item describing the individual who "commits documented acts of coercive sex with 15+ victims." In addition, having a wide range of victims (including two or more of the following victim types: male, female, children, adolescents, adults, elderly, or disabled) was seen as increasing the likelihood that the assessed individual would be diagnosed with PCD.

In the "persistence domain," the following items were rated as supporting a diagnosis of PCD: A pattern of coercive sex for 6 months (which is the standard durational criteria for a diagnosis of any paraphilia found in the *DSM-IV-TR* (APA, 2000)), coercive sex offenses as a juvenile and as an adult (e.g., early onset of offending), having at least two prior sentencing dates for coercive sex offenses prior to the index sex offense, and quick reoffense (within a year) following sanctions.

Other "behavioral" indicators supportive of a PCD diagnosis include possessing a "rape kit," showing stereotyped rituals or repetitive patterns, advanced planning, collecting and saving victim memorabilia, cruising for victims, committing coercive sexual crimes when a consenting sex partner is available, showing physical signs of arousal during coercive sex, video or audio taping of coercive sexual behavior, and using or creating pornography with themes of coercive sex. In the "sexual deviance domain," having rape impulses or fantasies with masturbation was found to support the diagnosis of PCD.

Discussion

As noted above, the survey items were naturally grouped into the following four descriptive domains: victims, persistence of offending, behavioral correlates, and sexual deviance.

Victim Domain

Six victim items received mean ratings greater than +1.0 (range 1.11–1.74), supporting the finding that PCD involves coercive sexual acts over time with multiple victims. A minimum of three victims (mean = +1.25) was the cut-point, since two victims received a significantly lower ranking (mean = +0.70). Another victim item that experts agreed is supportive of PCD is coercive sex with a wide range of victims. Elsewhere in the literature, mixed victim types (usually defined as child and adult victims) has been identified as both a marker of sexual deviance and associated with increased recidivism among sex offenders (Rice & Harris, 1997; Sreenivasan et al., 2007).

Persistence of Offending Domain

Early onset of sex offending, usually defined as arrest for a juvenile sex offense followed by sexual offending as an adult, is also a well-documented risk factor in recidivism research and a useful predictor of future sex offending (Hanson & Helmus, 2008; Helmus, 2007; Phenix et al., 2008). Most juvenile sex offenders do not reoffend and do not continue a pattern of sexual assault into adulthood; however, for the few who do, repeated sex offenses might reflect an underlying paraphilia for coercive sex. The suggestion here is that early sex offending is the precursor to a life pattern of sexual misconduct that is driven by an underlying arousal to forced sex. Two items describing coercive sexual behavior committed as a minor and an adult were rated as supporting a finding of PCD. This included being arrested/charged for coercive sex as a juvenile and as an adult (mean = +1.06) as well as uncharged coercive sexual conduct as a minor and as an adult (mean = +1.15). These findings are consistent with the literature on the development of paraphilias as well as sexual recidivism research. Many experts believe that paraphilias typically begin in adolescence when deviant sexual interests get reinforced by repeated fantasy and sexual behavior. Early deviant experiences can have an imprinting effect that directs future sexual interests. Images and memories of the deviant experience may be incorporated into masturbation fantasies and further reinforced. Eventually, these deviant preferences become entrenched by adulthood. Individuals who are sanctioned for sex offending as juveniles and then continue to reoffend as adults have higher rates of recidivism than adults who do not have juvenile sex offending histories. This demonstrates a persistence of sex offending that was not deterred by sanctions.

In a similar sense, having two or more prior sentencing dates for coercive sexual offenses was also identified as indicating PCD. When an individual continues to commit coercive sexual acts despite suffering prior legal sanctions for sexual assault, it suggests an underlying deviant arousal to forced sex may be driving the behavior, particularly if this cycle is repeated multiple times. Punishment is intended to inhibit the behavior that caused it, and incarceration is typically a wake-up call for rapists, most of who never reoffend. When they repeatedly do, two factors may be operating suggestive of PCD: (1) persistent urges for coercive sex and (2) a lack of control to inhibit acting on those urges. In this case, PCD becomes a sexual compulsion that overrides the deterrent effects of punishment

and the offender continues to rape to satisfy his sexual desire for power, control, and domination.

Persistence of offending is demonstrated by individuals who commit a coercive sexual act, get caught and sanctioned (sentenced), and then commit another coercive sexual act for which they are caught and sanctioned/sentenced. The more times this offense–sanction–reoffense cycle is repeated, the more strongly respondents to the survey were likely to say that PCD may be driving the coercive sexual behavior. When the cycle occurs only once (one prior sentencing date), the mean rating was only +0.81. For example, the offender who is incarcerated for rape, gets released, then rapes again was less likely to be identified as suffering from PCD than the offender who repeats the cycle a second time (has two priors). By the third sentencing date, the mean rating of this item increased to +1.16. By the fourth sentencing date, (three priors) the mean rating increased to +1.54. Interestingly, the number three was found to be a cut-point between both the number of victims and the number of sentencing dates. This makes sense since three sentencing dates would almost always involve convictions for sexual assaults of at least three different victims. (A possible rare exception would be the offender who gets convicted of raping the same victim at different times.)

It is noteworthy that the number three is emerging as a benchmark for rapists whose behavior is likely to be driven by a paraphilia in contrast to offenders who rape for nonparaphilic reasons. Three was the cut-point in our study for items measuring both number of victims and number of sentencing dates as indicators of PCD. As mentioned earlier, three is also the number of rape arrests identified by Mieth et al. (2006) that defined *serial sexual specialists*, which comprised only 7 % of the rapist sample ($N = 2{,}291$). Finally, seeking "sexual stimulation from forcing sex on three or more nonconsenting persons on separate occasions" is found in criterion B of the proposed diagnosis for paraphilic coercive disorder in the *DSM-5* (APA, 2010 at www.dsm5.org), which was published after our data was collected. We have referred to this numerical congruence as the "magic number three" and suggest that once an offender has sexually assaulted three victims—particularly when these acts result in separate arrests and/or convictions—that a diagnosis of PCD should be strongly considered.

Finally, rapid reoffending (defined as committing a new coercive sex offense within 1 year following sanction/release from a prior coercive sex offense) is perhaps the clearest example of persistence of offending. This item was rated +1.27. These offenders are usually on probation or parole in the community, but the conditions of supervision fail to deter further acts of sexual coercion. As noted by Dennis Doren (2002), "Conceptually, these 'ex-cons' may literally be driven toward nonconsensual sexual contacts with others. The fact that they just experienced a significant period of incarceration does not ultimately alter their behavior even in the short run, when the memory of prison is still presumed to be fresh" (p. 73). What's more, some offenders with PCD continue to commit acts of coercive sex even while incarcerated. They may target female officers or other male inmates and may receive institutional violations or be charged with new sexual crimes in custody.

Behavioral Correlates Domain

Nine items were rated strongly supporting PCD that can be described as behavioral correlates that are often evident by the individual's self-report or may be documented by victim or witness reports or in other criminal records. Several of these items form a cluster indicating premeditated coercive sexual acts. Premeditation or planning a sexual assault—conceived as a "preparation phase"—may accompany a buildup of impulses and sexual tension that culminates in coercive sexual behavior. The items in this group include carrying a "rape kit" (+1.41), advanced planning of coercive sexual acts (+1.30), driving around cruising for victims (+1.16), collecting and saving victim's memorabilia (+1.13), and video or audio recording the coercive sexual act (+1.09). Paraphilic sexual behavior may be ritualized and stereotyped, as if following a script or "MO" (modus operandi). Ritualistic sex offending is also called the "offense signature" that is evident from clues and patterns left behind by the offender. This item assessing ritualized, scripted, sexually coercive behavior was found supportive of PCD (mean +1.39). Finally, committing coercive sexual acts despite the presence of an available consenting sexual partner (+1.20), physical signs of arousal (erection, ejaculation) during coercive sex (+1.11), and involvement with rape pornography (+1.03) were all considered indicators of PCD. (Also see Doren, 2002, for descriptive accounts of these indicators.)

Sexual Deviance

The item describing individuals who self-report rape impulses or fantasies with masturbation (mean +1.19) is conceptualized as an indicator of sexual deviance. Men typically access sexual imagery (fantasies and memories) with private masturbation, and a man's masturbation fantasies usually reflect his favorite or preferred method of sexual arousal. When men report persistent rape fantasies with masturbation, it suggests a sexual preference for coercive sex. Sex offenders often deny rape fantasies or refuse to discuss their sexual interests or masturbation habits, though they may be more inclined to discuss these matters after commitment to and participation in sex offender treatment. Finally, multiple victim types, as noted above, is also considered an indicator of sexual deviance that is associated with increased risk of sexual reoffense.

Items Negatively Related to PCD

There were two items negatively related to PCD that had mean scores lower than −1.0: When the individual stops a coercive sexual act when he sees the victim cry or scream (mean −1.24), and if he loses erection when the victim complains or resists (mean −1.07). These items are consistent with the definition of PCD used in this study in which a male is sexually aroused by a victim's nonconsent or resistance and his ability to overpower that resistance. If the man shows signs of decreased arousal (loss of erection) resulting from the nonconsent, or if he stops the coercive sexual activity due to the victim's signs of nonconsent (crying, screaming), this would suggest a lack of sexual arousal to nonconsent and negate a finding of PCD. This finding is also consistent with PPG literature showing that it is the reaction to the coercive elements of the sexual assault that distinguish rapists from normal men (rapists' sexual arousal is not inhibited by the coercive nature of the rape).

At the time of this writing, the PCD checklist is still in the research stage. We have developed a method for combining and weighting items and a coding manual for scoring. Interrater reliability and construct validity of the checklist are yet to be determined, but at least one reliability study is underway. Nevertheless, we feel the current results can be useful for defining the parameters of PCD in clinical practice because they represent the collective opinion of clinicians, researchers, and evaluators in the field and are thus superior to any currently available diagnostic scheme for assessing PCD.

PCD Case Study

Below is a case study of a sex offender evaluated for civil commitment by one of the authors who we believe characterized Paraphilic Coercive Disorder. Every effort was made to accurately describe the case, while at the same time, disguise and protect the identities of the offender and the victims. The case description is followed by a discussion of the items from PCD checklist that suggest Roger's rape behavior was motivated by PCD.

Roger

> Roger's criminal career began at age 10, and by early adolescence he had been arrested for multiple burglaries, robberies, battery, and assault. He committed his first rape at age 14 with a male peer. This was a home invasion assault of an elderly female stranger. The crime started as a burglary, but both boys ended up raping the victim. This was Roger's first sexual experience with another person in which he penetrated the victim and ejaculated. He was caught and spent an unknown amount of time in custody. His next rape was another home invasion of an 70 year-old female stranger committed when he was 17. After the rape he robbed the victim and fled. Within the following month Roger committed three more rapes of elderly female strangers in a similar fashion. He also became more violent, slapping one victim in the face, choking another, and throwing a third victim on the floor and covering her face with a towel. Roger was subsequently arrested for charges not related to the rapes and sent to a work camp. After one month he escaped and the next day committed another home invasion rape and robbery of an elderly year-old female stranger. He was arrested a few days later and identified by all five victims. They all reported that he achieved erections and ejaculated during the rapes. Roger was remanded to adult court and sentenced to state prison for three years. During his term he received several disciplinary violations for "sexually pressuring" and "sexually molesting" other inmates. One incident was submitted to the local district attorney's office that was rejected for prosecution, but the violation was found true and additional time was added to Roger's prison sentence. Roger was age 20 when he paroled. Five months later he committed two sexual attacks two days apart. The first attack involved an adolescent year-old female stranger riding a bicycle. Roger approached the victim from behind and grabbed her around the waist but she was able to struggle free and rode away. Two days later Roger drove behind an adult female stranger who was walking and carrying a bag of groceries. She noticed that he was following her slowly in his car and a cloth was placed in such a manner as to cover the car's license plate. Roger pulled up and forced the victim into his vehicle and drove away. A few moments later he was stopped by police for driving in a suspicious manner and the victim was discovered. Roger was sentenced to state prison for kidnapping, attempted rape, and annoying/molesting a child. He paroled four years later at age 26. He spent the next four years in and out of custody for multiple parole violations, property crimes, and weapons charges. He was never out more than a few months. At age 30, Roger forced entry into the house of a 13 year-old female stranger after she arrived home from school and then raped her. Six weeks later he committed another sexual assault of a 13 year-old female stranger in a similar fashion. The records note that the victim resisted until she was choked into submission. Both victims report Roger achieved vaginal penetration and ejaculation. Roger was convicted of both assaults and spent nineteen years in prison. He was age 49 when referred for evaluation for civil commitment.

Based on the facts of Roger's case, he demonstrates many characteristics of PCD discussed above that also appear in Table 1 (Appendix). He shows a *persistence of sexual offending* that began as a minor and resulted in both juvenile and adult convictions. He has *four sentencing dates* for assaulting female victims. He was also sanctioned with added prison time for molesting a male victim in custody, which could be considered another sentencing date. He has assaulted *multiple victims* (11+) and *mixed victim types* that include male adults and female adolescent, adult, and elderly victims. He also demonstrates *rapid reoffending*; in one example, he was paroled at age 20 and 5 months later committed two sexual attacks separated by two days. Roger demonstrates *behavioral correlates of PCD* that include *advanced planning* and *driving around cruising for victims* in his car. He demonstrates *physical signs of arousal during coercive sex* (erection and ejaculation). His choice of six elderly women victims as a juvenile suggests *stereotyped behavior* and a *repetitive pattern* or *modus operandi*, though he shifted to

younger victims as he became an adult. In sum, Roger's case highlights many characteristics identified in this study that were strongly associated with paraphilic coercive disorder.

Conclusion

The purpose of this chapter was to discuss the epidemiology of rape with special focus on the construct of nonsadistic paraphilic serial rape known as paraphilic coercive disorder. We believe that there is sufficient theoretical, clinical, and scientific basis for the mental health and criminal field to recognize PCD as a legitimate diagnostic entity. As noted, PCD has a long and controversial history in the mental health community that dates back to the 1980s when the proposal to include it in the *DSM* was derailed primarily for political rather than scientific reasons. However, mental health professionals treating and evaluating sex offenders continued to identify serial rapists who appeared to demonstrate a paraphilic arousal to coercive sex. With the introduction of a new generation of sex offender civil commitment laws in the mid 1990s, PCD reappeared of sorts under the rubric paraphilic disorder not otherwise specified, nonconsent. Partly due to renewed legal interest, but also due to the ongoing need to diagnose, manage, and treat dangerous sex offenders, PCD is now proposed for inclusion in the next edition of the diagnostic manual, the *DSM-5*. Yet the controversy in the psychiatric community over PCD is no less heated now than during the original debate in the 1980s. Despite the legal and political ramifications, there is a growing consensus among sex offender professionals that PCD exists and motivates sexual aggression among some serial rapists. We have not discussed etiology and theories of how PCD develops, which goes beyond the scope of this paper.

New lines of research, including PPG studies and recidivism research, support the existence of a subgroup of rapists who are erotically aroused by power, dominance, and control over a nonconsenting victim. But unlike sexual sadists, PCD rapists stop short of injury and do not employ force greater than necessary to subdue the victim. Furthermore, PCD occurs not merely as a failure to inhibit arousal to the violent elements of violent sex, as in normal males. Rather, the sexual and aggressive elements in coercive sex fuse in an additive fashion to enhance arousal in PCD.

Trends in the research suggest that there may be several types of rapists who are the product of different developmental pathways leading to an erotic interest in coercive sex (Harris et al., 2007; Knight, 2010b; Knight & Guay, 2006; Thornton, 2010). The first form is a fixated sexual deviance in men who are not otherwise highly antisocial or criminally oriented. The second form is coercive sexuality as an inherent component of life course persistent antisociality. A third pathway may be a blended form of the these two. Diagnostically, they may appear the same in terms of serial rape behavior, but their amenability to treatment and intervention may be different.

In this respect, persistent arousal to forced sex by serial rapists (PCD) is a *mental disorder* as defined in the *DSM*, because it creates *dysfunction* and *disability* in the individual that, in the very least, results in an "important loss of freedom" (incarceration) (APA, 2000, p. xxxi).

PCD may be controversial and hard to identify and discriminate from other rapist types. This is all the more true because incarcerated rapists are typically uncooperative and not inclined to reveal their private sexual fantasies and urges. While the effort to identify the existence of PCD among persons who commit repeated rapes is difficult, clearly it should not be abandoned. Behaviorally based criteria, informed by the consensus of sex offender professionals, and supported by laboratory findings, appears to offer a promising direction. As discussed previously, the proposed *DSM-5* criteria for PCD includes forcing sex on three or more nonconsenting persons on separate occasions. In addition to PCD, the *DSM-5* trend toward behaviorally based diagnosis of paraphilic disorders has also been proposed for voyeuristic disorder (three nonconsenting persons), exhibitionistic disorder (three nonconsenting persons), sexual sadism disorder (two nonconsenting persons), and pedohebephilic disorder (two children if both are prepubescent, three children if one or more are pubescent). This change also addresses the past criticism that the word "recurrent" in the *DSM-IV-TR* criterion "A" of the paraphilias says nothing beyond "more than once" and is too vague to be clinically useful (from www.dsm5.org).

It would be reasonable to expect that all paraphilias (including PCD) at this point can be best described in dimensional terms, and cutoffs need to be established to discriminate them from non-paraphilic sexual interests. For example, at what point does an arousal to sex with women wearing high heels develop into a shoe fetish? Or when does spanking one's partner during sex cross the threshold into sexual sadism? Indeed, all human sexuality can be viewed as dimensional ranging along a continuum from nondeviant (statistically common and "normal") to deviant, rare, and disordered.

There are no bright lines separating PCD from nonparaphilic rape, and diagnostic criteria are to some extent arbitrary. With this problem in mind, determining cutoffs for PCD will be a major focus of future research and should take into consideration the consequences for both false positive and false negative decisions. We concede that there will always be disagreement about where the line should be drawn, but getting consensus data is an important beginning. In this spirit, we offer our empirical findings from the first stage of constructing the PCD checklist.

Appendix

Mean respondent ratings of the final 70 items of the paraphilic coercive disorder rating scale

Item	Mean score
1. The individual has committed documented acts of coercive sex with 15+ victims	1.74
2. The individual has committed documented acts of coercive sex with 11–14 victims	1.70
3. The individual has committed documented acts of coercive sex with 8–10 victims	1.64
4. The individual has committed documented acts of coercive sex with 5–7 victims	1.59
5. The individual has three or more sentencing dates for coercive sexual offenses prior to the index coercive sexual offense	1.54
6. The individual possesses evidence of a "rape kit": rope, bindings, tape, blindfold, scissors, tools, binoculars, lubricants, etc.	1.41
7. The individual engages in stereotyped rituals or repetitive patterns of behavior during coercive sex, as if scripts are being enacted, repeated "M.O."	1.39
8. The individual exhibits advanced planning or premeditation prior to committing coercive sexual acts	1.30
9. The individual reoffends quickly and commits a new coercive sex offense within 1 year following sanction/release for a prior coercive sex offense	1.27
10. The individual has committed documented acts of coercive sex with 3–4 victims	1.24
11. The individual commits acts of coercive sex despite the presence of an available consenting sexual partner	1.20
12. The individual reports having rape impulses or fantasies with masturbation	1.19
13. The individual drives around cruising for victims with whom to engage in coercive sex	1.16
14. The individual has two sentencing dates for coercive sexual offenses prior to the index coercive sexual offense	1.16
15. The individual committed coercive sexual acts as a minor and as an adult	1.15
16. The individual collects and saves victim's memorabilia (photos, jewelry, hair, items of clothing) gathered during coercive sex	1.13
17. The individual displays a pattern of recurrent coercive sexual behavior with persons over a period of at least 6 months	1.13
18. The individual engages in coercive sex with a wide range of victims including two or more of the following: male, female, children, adolescents, adults, elderly, or disabled	1.11
19. The individual shows physical signs of arousal (erection, ejaculation) during coercive sex	1.11
20. The individual video or audio records the coercive sex	1.09
21. The individual was arrested/charged for coercive sex as a juvenile and again as an adult	1.06
22. The individual reads, watches, or writes pornography with themes of coercive sex	1.03
23. The individual reports having rape impulses or fantasies without masturbation	0.98
24. The victim makes statements that indicate the perpetrator was sexually aroused by her nonconsent to coercive sex	0.97
25. The individual commits acts of coercive sex when he is fully sober (i.e., not under the influence of alcohol or drugs)	0.94
26. The individual is a "sexual specialist" (virtually all criminal behavior is sexual)	0.94
27. The individual engages in home invasion (breaking and entering) to commit coercive sex	0.91
28. The individual has PPG results showing sexual arousal to rape scenes	0.91
29. The individual uses restraints or blindfold during coercive sex	0.89
30. The individual commits acts of a coercive sex that involve the element of surprise (e.g., "Lying in wait")	0.88
31. The individual kidnaps victim and moves/transports victim to a different location to commit coercive sex	0.87
32. The individual shows a trend of escalating violence with successive instances of coercive sex	0.86
33. The individual has engaged in coercive sex with strangers (known less than 24 h)	0.85
34. The individual has one sentencing date for a coercive sexual offense prior to the index coercive sexual offense	0.81
35. There is evidence that the individual is not aroused by sex with a consenting partner	0.80
36. The individual commits coercive sex in a public place (suggesting lowered inhibitions and greater risk of getting caught)	0.79
37. The individual lures the victim to a secluded area to commit coercive sex	0.76
38. The individual stalks victim before committing coercive sexual act	0.76
39. The individual uses more force than necessary to subdue the victim during coercive sex	0.76
40. The individual uses weapons during coercive sex	0.75
41. The individual makes verbal statements of feeling sexually out of control before, during, or after coercive sex	0.74
42. The individual has committed documented acts of coercive sex with two victims	0.70
43. The individual seriously injures or kills the victim during coercive sex	0.61
44. The individual enjoys being watched while committing coercive sex	0.55
45. The individual engages in coercive sex with victims who are asleep, intoxicated, unconscious, developmentally delayed, or otherwise particularly vulnerable and unable to resist	0.53

(continued)

(continued)

Item	Mean score
46. The individual has been arrested more than once for a coercive sexual offense but never convicted of a coercive sexual offense	0.45
47. The individual displays attitudes of hostility toward women	0.41
48. The individual has engaged in coercive sex with a male victim	0.41
49. The individual has coercive sex only with children	0.40
50. The individual shows indicators of other paraphilias (pedophilia, exhibitionism, voyeurism, fetishes)	0.39
51. The individual enjoys consenting sex but also pursues nonconsenting sex	0.37
52. In addition to committing acts of coercive sex, the individual has a criminal history of prowling, loitering, attempted burglary, or trespassing	0.28
53. The individual reports excessive masturbation (i.e., every day for many days or several times a day)	0.25
54. The individual expresses distress, remorse, or guilt for coercive sex behaviors or fantasies	0.24
55. The victim does not cooperate with the coercive sex and actively fights and resists	0.21
56. The individual demands that the victim tell him she loves him and/or she enjoys the coercive sex	0.20
57. The individual uses alcohol or drugs to subdue the victim during coercive sex	0.20
58. The individual engages in coercive sex in concert with others (gang rape)	0.19
59. The individual displays nonsexual violence toward females (battery, assault, domestic violence)	0.16
60. The individual and the victim consume alcohol or drugs after which the individual commits coercive sexual acts	−0.02
61. The individual robs the victim in addition to coercive sex	−0.11
62. The victim initially consents to sexual activity but later withdraws consent, says "no" or physically resists further coercive sex	−0.33
63. The individual is severely mentally ill (e.g., psychotic)	−0.40
64. The individual has a history of coercive sexual crimes but has lived offense free in the community for five or more years	−0.46
65. The individual has a history of coercive sexual crimes but has lived offense free in the community for 15 or more years	−0.83
66. The individual has a history of coercive sexual crimes but has lived offense free in the community for 10 or more years	−0.88
67. The individual shows physical signs of non-arousal (such as inability to achieve an erection) during coercive sex	−0.96
68. The individual's preference is for noncoercive sexual acts with children	−0.99
69. The individual loses erection when the victim complains or otherwise resists	−1.07
70. The individual stops the coercive sex when he sees the victim cry or scream	−1.24

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Drug-Facilitated Sexual Assaults

Jain Ashok, Mohan Nair, and Robert Friedman

The terms *sexual assault* and *rape* are used indiscriminately in medical literature, often causing confusion over statistical numbers reported. Sexual assault describes a broader range of sexual offenses involving touching or penetration of an intimate part of a victim's body without due consent, while rape is generally defined as forced or nonconsensual sexual intercourse.

The U.S. Department of Justice Bureau of Justice Statistics reported that there were 260,940 rapes/sexual assaults in 2006 that were reported to law-enforcement agencies in the United States (RAIN, 2009; U.S. Department of Justice, 2008). These numbers are under-representative as evidenced by a study documenting that almost 59–84 % of victims did not report being raped (Tjaden & Thoennes, 2000).

Assaults are not reported for various reasons that include feelings of shame, embarrassment, guilt, confusion, uncertainty of being sexually assaulted, or uncertainty regarding the definition of rape (Fitzgerald & Riley, 2000). In the majority of sexual assault cases, the perpetrator is an acquaintance of the victim. Spousal and date rapes are often not considered by many victims to be sexual assault because the perpetrators are acquaintances of the victims (Koss, 1993; Rickert & Wiemann, 1998).

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Drug-Facilitated Sexual Assault

Drug-facilitated sexual assault (DFSA) simply implies the use of a mind altering chemical being used in the course of a sexual assault. Emergency room physicians, law enforcement, toxicologists, forensic psychologists, lawyers, and judges may be confronted with the scenario of a subject who may have been sexually assaulted while under the influence of a substance that affected their ability to resist or, in some cases, even to recall the assault (Goulle & Anger, 2004; LeBeau & Mozayani, 2001).

Drugs incapacitate victims physically as well as mentally, rendering them powerless to resist an attack or unable to provide conscious, valid consent. The ability to consent is affected even though the victim may be in a state of vigilant consciousness but experiencing muscle paralysis or weakness due to the ingested chemicals or drugs (LeBeau & Mozayani, 2001; Linden, 1999).

A large number of drugs are used to facilitate sexual assault. The choice of drugs depends on ease of administration and availability. These drugs are usually odorless, tasteless, and colorless so that a beverage or food can be covertly spiked. Some like "Spanish fly" may have aphrodisiac properties. (It may be argued that the active ingredient of Spanish fly, cantharidin, does not induce drowsiness, but rather causes inflammation of urogenital structures causing swelling and stimulation and, therefore, is not an aphrodisiac per se.) Others drugs like MDMA ("Ecstasy") may act by lowering sexual inhibitions, thereby decreasing the threshold of an unwanted sexual act. Steroid use may also contribute to the higher number of athletes who commit sexual assault by increasing aggression called "roid" rage. The most common class of drugs used in DFSA are central nervous system depressants, primarily hypnotic sedatives. Drugs like Rohypnol have become notorious for causing lack of recall of the sexual assault, but all benzodiazepines and even the "safer" imadazopyridine drugs like zolpidem (Ambien),

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eszopiclone (Lunesta), and zaleplon (Sonata) can cause anterograde amnesia.

By impairing the consciousness and inducing sedation, assailants can subdue and dominate their victims. These drugs are also capable of depersonalizing their victims, altering the victim's ability to judge, impairing motor skills, and rendering their muscles relaxed. The victims usually describe being in a dreamlike state. The anterograde amnesia caused by these drugs results in inability of the victims to recall the details of the assaults, sometimes in their entirety. This fragmented recall of the events during the attacks makes victims unreliable witnesses for the prosecution of rapists.

Due to the lack of reporting and incomplete recall abilities, actual numbers of DFSA victims are not available. Many of the factors that lead to the well-recognized underreporting of sexual assault are even greater concerns in these cases, especially when the victim has recall problems. A significant proportion (as much as two-thirds noted by some studies) of sexual assault victims show evidence of voluntary intoxication (ElSholay, 1999; Slaughter, 2000). A recent study, conducted in 2007, of sexual assault on college campuses suggested that about one in twelve undergraduate women had been victims of at least one completed sexual assault since entering college; 7.8 % of women were sexually assaulted during voluntarily intoxication, and 0.6 % were sexually assaulted after being drugged surreptitiously (Krebs, Lindquist, Warner, Fisher, & Martin, 2007).

DFSA does not mandate a covert administration of the chemical agent and can also occur without deliberately spiking beverages or food by the assailant. Social lubricants like alcohol and drugs like LSD, MDMA, GHB, marijuana, uppers, and downers are all popular and freely used in night clubs, bars, and disco-dance/rave parties (Fendrich, Wislar, Johnson, & Hubbell, 2003). The victim's use of alcohol or other recreational drugs as well as prescription and OTC medications make them vulnerable to sexual assault (Abbey, Zawacki, Buck, Clinton, & McAuslan, 2001). (Assailants tend to prey on susceptible victims.) The use of ethanol alone increases the risk of sexual assault as it produces paradoxical disinhibition resulting in increased sociability at lower doses, while causing amnesia and sedation at higher doses. Perpetrators are often under the influence of alcohol or drugs, which may eliminate physical and psychological inhibitors, thereby enabling them to carry out these acts of violence. About half of all sexual assaults occur under the influence of alcohol or drugs. Most often these intoxicants are used voluntarily by the victim and assailant. The stereotypical drug-facilitated rape (i.e., the deliberate, covert drugging or drink spiking) is much less common than the media leads the public to believe and probably represents around 2 % of reported DFSA cases (Beynon, McVeigh, McVeigh, Leavey, & Bellis, 2008; Juhascik et al., 2007; Scott-Ham & Burton, 2005).

Commonly Encountered Drugs in DFSA

At least 20 different substances are commonly encountered and implicated in DFSA. The chemical substances used to subdue victims of DFSA could be licit or illicit. The most common legal substance encountered in DFSA victims is alcohol. The use of alcohol by the perpetrator increases the perpetrator's aggression and the severity of the physical injury to the victim. The recent practice of making alcoholic beverages more palatable by mixing with fruit juices (energy drinks and fruit-flavored alcoholic beverages, called "alcopops") targets underage adolescents. The other commonly used licit substances are prescription medications belonging to the class of anxiolytic, sedative, hypnotic drugs includes benzodiazepines, barbiturates, chloral hydrate, codeine, propoxyphine, antihistamines, muscle relaxants, and others. Among these prescription medications, Flunitrazepam (Rohypnol), diazepam, triazolam, tetrazepam, clonazepam, lorazepam, zolpidem, zopiclone, eszopiclone, zaleplon, and ketamine are the most commonly implicated medications. Concurrent use of alcohol with these medications intensifies the effects of these prescription medications (Anglin, Spears, & Hutson, 1997; Bechtel & Holstege, 2007).

The commonly implicated illicit drugs are familiar recreational drugs (cannabinoid, cocaine, opioids, and amphetamines, including MDMA and LSD) as well as present day "knockout" drugs (GHB, ketamine, rohypnol, scopolamine, and datura). Recently, reported cases have involved use of datura as a plant extract called burundanga (should have a citation if available).

GHB ("Liquid X", Blast, G3, Sulcel-B, V35), a drug commonly used at all night dance parties or "raves," has been implicated in up to 7 % of DFSA cases (Stillwell, 2002). GHB produces euphoric intoxication and is perceived to enhance sexual experience. Rohypnol or "roofies," while highly publicized, has been found in less than 1 % of these victims. About 35 % of the victims who test positive have multiple drugs in their system. Sixty to sixty-five percent of victims have alcohol in their screening tests. The presence of alcohol alone is reported in about 40 % of these victims. Following alcohol, the second most common drug found in these victims is cannabinoids, reported in up to 30 % of victims. Cocaine and amphetamines have been discovered in about 10–15 % and 10 % of victims, respectively. Benzodiazepines are involved in about 10–13 % of these cases. Opiates are found in about 5–10 % while Barbiturates are found in only 1–2 % of these victims. Thus, implicated drugs in order of frequency are:

- Alcohol
- Marijuana
- Cocaine
- Amphetamines that include MDMA

- Benzodiazepines
- Opiates
- GHB
- Barbiturates
- Rohypnol

About 10–12 % of sexual assault victims in emergency rooms are suspected to be DFSA victims. Among these, about 60 % are positive for drugs, while 40 % are negative. The inability to detect a drug in the biological specimen of the suspected DFSA victim does not rule out DFSA. Late presentations to the healthcare facility and the inability to screen for all potential drugs have lead to falsely negative results for drugs among many of these victims. This makes it difficult to prove drug-facilitated sexual assault.

As new drugs and chemicals, including prescription as well as illicit drugs, are constantly creeping into society, one should be vigilant about such products when a case of suspected DFSA is being investigated. Recently, cases of DFSA were reported implicating the therapeutic form of GHB (Xyrem) (Akins, Miranda, Lacy, & Logan, 2009) and OTC ocular solution containing tetrahydrozoline (Visine) (Spiller, Rogers, & Sawyer, 2007).

Traditionally, drugs in cases of DFSA have been delivered to the victims by surreptitious administration into a beverage or food. Recently, cases have been reported in which volatile agents were delivered via the respiratory route. In one case it was chloroform and in another case it was mixture of aromatic solvents delivered via a soaked cloth placed over the mouth of the victim (Gaillard, Masson-Seyer, Giroud, Roussot, & Prevosto, 2006; Martínez & Ballesteros, 2006).

Even old drugs may resurface for facilitating sexual assault for their amnesic and other desirable properties. Scopolamine was recently being reported to have been used for such purpose, although it has been extensively used for robbery in Columbia in the form of Burundanga powder.

Forensic evaluators also need to consider the possibility that commonly used general anesthetics and hypnotic drugs, such as chloroform, midazolam, and propofols, can, in some instances, produce sexual hallucinations (Balasubramaniam & Park, 2003; Brahams, 1990; Thomson & Knight, 1988; Weller, 1933). Clinicians may become victims of allegations stemming from these hallucinogenic effects if not handled carefully (Hansen-Flaschen & Adler, 1999).

Index of Suspicion Factors Regarding DFSA

Less likely to resist, DFSA victims have less serious physical injuries (genital or extragenital), when compared to other sexual assault victims. They can also involve multiple perpetrators involving a single victim (Marc, 2008). The victims' altered mental status during and post-sexual assault makes it less likely for them to involve law-enforcement officials. The delayed presentation to the emergency room by these victims as a result of the drug effects and the subsequent delay in collecting forensic specimens reduces the probability of detecting many drugs commonly seen in these offenses (McGregor, Lipowska, Shah, Du Mont, & De Siato, 2003).

DFSA victims may present various symptoms that provoke suspicion. DFSA should be investigated when the following historical clues are noted:

- Intoxication or hangover disproportionate to the amount of alcohol consumed
- Witnessed to have been acting inconsistent to the amount of alcohol or drugs used and one's personality
- Unexplained dizziness, disinhibition, impaired judgment, impaired motor coordination, slurred speech, impaired vision, nausea, and vomiting
- Altered mental states including confusion, partial or total amnesia, dreamlike state, delirium, or hallucinatory state
- Drowsiness, loss of consciousness or blackouts, recurrent lapses of consciousness and flashes of memory ("cameo appearances"), conscious paralysis
- Inexplicable genital, anal, oral, or bodily soreness and injuries
- Sudden awakening in a strange place or in compromised circumstances or with clothing in disarray or with uninvited person in bed
- Unexplained discovery of body fluid or used condom
- Vague sensation of being sexually assaulted

Forensic Evaluation of DFSA Victims

Sexual assault victims may often present to hospital emergency rooms for an initial evaluation. A thorough and systematic history must be taken, which includes a physical examination and evidence collection. Appropriate treatment including prophylaxis and crisis intervention should be provided. Some cities have rape crisis or sexual assault centers that are dispatched to hospitals when rape victims are seen in the emergency room. Hospitals may provide a sexual assault resource service (SARS) or a sexual assault response team (SART) that use trained sexual assault nurse examiners (SANEs). In most of these cases, however, an emergency physician performs the initial evaluation. SANEs work closely with medical staff and coordinate with sexual assault crisis centers, law-enforcement agencies, social services, and forensic laboratories.

The priority during the initial evaluation is to recognize life threatening physical injuries and provide appropriate medical care to DFSA victims. A detailed history of the events surrounding the assault and other medical complaints should be obtained in a safe and secure environment. A thorough physical examination must be performed and appropriate evidence should be collected, after obtaining consent.

For evidence collection and storage, physicians must use the standardized "rape kit." All personal items including clothing and debris should be placed in paper bags. During initial history taking, the physical examination, and evidence collection, it is prudent to have an advocate or rape crisis counselor present. It is advised to use patients' direct quotes when notating history: provide details about the patient's mental status, not only at the time of presentation to the emergency room but also during and prior to the incident.

During the physical examination, medical professionals must look for the subtle signs of trauma, suggesting use of force (e.g., echhymotic areas on the inner aspect of thighs). The collection of evidence and appropriate documentation is of paramount importance in the evaluation of sexual assault victims (Gray-Eurom, Seaberg, & Wears, 2002). Consent should be obtained before the examination and evidence collection. Significant (biologic) evidence can be collected from the victim up to 5 days after the sexual assault. Victims should be persuaded to consent to evidence collection, with the reassurance that this does not mandate them to press charges.

A thorough pelvic examination should be performed, preferably including a colposcopy, which increases detection of more subtle injuries. The examiner must look carefully for the evidence of trauma, not only on the involved orifices (oral, rectal, vaginal) but also in the area of back, buttock, breasts, etc. for bruises, lacerations, abrasions, cuts, swelling, and tenderness. A Wood's lamp (ultraviolet light) is used to identify semen, saliva, and other body fluids on skin and belongings. A moistened cotton swab is used to collect suspicious specimens (suspect's saliva, dried blood, semen, etc.) from the victims' bodies and belongings for forensic examination that includes DNA testing. Swab samples are also collected from oral, rectal, and vaginal orifices for forensic examination. Other biological specimens collected may include head and pubic hair combings, fingernail scrapings, or other situation specific evidence depending on the circumstances of the attack.

A recent sexual act can be determined by the sperm acid phosphatase test. Urine and blood samples should be collected as soon as possible for determination of blood typing, drug screening, DNA, or other evidence. A strict chain of custody procedures for collection and storage of the evidence must be maintained. Once history, physical examination, and evidence collection are completed, a physician must make decisions regarding treatment and prophylaxis for sexually transmitted diseases (STDs) and pregnancy. At the conclusion of the initial evaluation in the hospital emergency department, it is of paramount importance that victims get appropriate emotional support and follow-up care arranged by hospital special services (rape counselor, psychologist, and physician) to lessen the ensuing psychological trauma of rape.

In suspected DFSA victims, additional collection of special biological specimens may be required to detect certain classes of drugs. This is dictated by the nature of the suspected chemical, as well as the time elapsed since assault. Specific tests for metabolites with long half-lives, such as ethyl-glucuronide (alcohol) and trichloroacetic acid (chloral hydrate), may be needed. In special situations, such as a delayed presentation, scalp hair and sweat may be needed to test for cumulative toxins.

Drug Detection in DFSA Victims

In suspected cases of DFSA, 60–100 cc of urine needs to be collected as soon as possible, but at least within 4 days of alleged incident. At least 30 cc of blood is required within the first 24 h of the suspected drugging. Additionally, for the forensic investigation, it is preferred to have a urine specimen because it allows a longer window of detection for the drugs and their metabolites commonly encountered in these victims.

Blood should be collected in containers with preservatives such as sodium fluoride and potassium oxalate and stored in a refrigerator promptly. If a drug is detected on the screening immunoassays, it must be confirmed by gas chromatography, mass spectrometry, or other advanced methods. If the drug is identified in urine, it should also be determined in the blood specimen, as this helps when determining the time period since ingestion.

The absence of a drug in either urine or blood specimens does not rule out DFSA. Negative findings can come from a failure to look for all potential drugs involved. Poorly cross-reacting immunoassay antibodies of the same class of drugs may cause false negative results. Drugs or alcohol are often not detected in the blood or urine because the subjects present late in the course after the chemicals have been eliminated. This absence of evidence is particularly common when attackers use rapidly metabolized and short half-life drugs as their weapon to subdue victims. Drugs not administered by the assailant may be found in victims that are using over-the-counter or prescription drugs recreationally or those who have a legitimate prescription for the medication found in their system.

Sweat and hair are other biological specimens used for drug detection particularly when presentation is delayed to detect chemically unstable compounds and low dosage drugs. A sweat patch, which is removed after a few days, can be used for the analysis of suspected drugs excreted in sweat. Hair analysis is of great value in cases of sexual assault victims presenting weeks to months later as the window of drug detection is significantly longer due to stability of the deposited drug. Hair analysis is never an alternative method to blood and urine analysis but should be considered as

complementary and adjunctive testing. This procedure has been used in DFSA cases to detect drugs of abuse such as GHB, MDMA, and heroin, as well as therapeutic drugs like Rohypnol (Negrusz et al., 2001), Zolpidem, lorazepam, Zopiclone, thiopental (Frison, Favretto, Tedeschi, & Ferrara, 2003), and phenobarbital (Villain, Chèze, Tracqui, Ludes, & Kintz, 2004).

One should wait for about a month after the assault to collect the hair for analysis. Segmental hair analysis may also help to differentiate single vs. multiple exposures. In case of multiple positive segments, difference in levels among different segments of hair may indicate possible timing of administration of the drug based on rate of hair growth. For collection of the hair sample, a tuft of hair is clipped as thick as a pencil close to the scalp. In rare cases, pubic hair may also be analyzed particularly if there is significant time delay and scalp hair is not present (Kintz, Villain, & Ludes, 2004; Rossi, Lancia, Gambelunghe, Oliva, & Fucci, 2009).

Many state forensic laboratories use a three-tier chain of testing to analyze drugs used in these cases. The first tier of testing quantitatively screens for blood ethanol using GC-FID or GC-MS (gas chromatography-mass spectrometry or gas chromatography with flame ionization detection). The second tier of testing quantitatively screens for drugs of abuse using immunoassays and fluorescent polarization assays. Then positives are confirmed by GC-MS or HPLC-MS/MS (high pressure liquid chromatography linked to tandem mass spectroscopy). The drugs included are benzodiazepines, barbiturates, cannabinoids, cocaine, amphetamines, opioids, GHB, LSD chloral hydrate, and dextromethorphan. The third tier of testing analyzes a broad array of 300–400 amine containing compounds by advanced methods which are highly sensitive and specific. In many cases, once first-tier testing determines alcohol levels to be higher than 0.08 in the victim, further testing is not done unless specifically suspected by medical histories. Thus, it is important for the physician to document suspected drugs involved in DFSA case so that justification for further testing is documented.

Selected Drugs Requiring in Depth Forensic Interpretation

Ethanol

Alcohol levels in blood and urine are confirmed by GC-FID or GC-MS. By these methods one can detect concentrations as low as or even lower than 1 mg/dL, thus extending the widow of detectability. Reverse extrapolation based on rate of elimination may establish levels at the time of assault.

Chloral Hydrate

Chloral hydrate is metabolized by reduction to trichloroethanol by alcohol dehydrogenase. Trichloroethanol has a half-life of about 6–10 h. The trichloroethanol is further metabolized to trichloroacetic acid by chloral hydrate dehyrogenase, which has a half-life of about 4–5 days. Trichloroethanol is also conjugated to glucuronic acid. Thus in a patient who present days after overdose, one can look for trichloroacetic acid in urine as an indication of past overdose.

Currently, chloral hydrate is used occasionally in pediatric dentistry. It is also present in medications used for migraines and can give positive results on victims using these drugs for migraines. If alcohol is consumed along with chloral hydrate, the effects of alcohol will be exaggerated. Spiking of alcoholic beverages with chloral hydrate is known as "Mickey Finn" and has been used in criminal activities for theft as well as in drug-induced rape. As alcohol dehydrongenase is utilized for chloral hydrate metabolism, the levels of ADH decrease, thus reducing the metabolism of alcohol. This prolongs alcohol's effects. Alcohol also reduces the conversion of trichloroethanol to trichloroacetic acid, as chronic alcoholic has a reduced ratio of NAD/NADH. Thus, the elevation of trichloroethanol would result in exaggerated effects of chloral hydrate. Thus, a combination of chloral hydrate and alcohol would increase the effect of alcohol, as well as the effect of chloral hydrate.

Chloral hydrate is rapidly metabolized to trichloroethanol and, therefore, to detect the presence of chloral hydrate, one measures the levels of trichloroethanol, which is also an active metabolite. In the early state of overdose, both free trichloroethanol and conjugated trichloroethanol levels need to be measured. Part of trichloroethanol is conjugated to glucuronic acid. These levels should be measured in plasma as well as in urine. In the case where the ingestion occurred several days prior, one should measure levels of trichloroacetic acid. Increased trichloroacetic acid in the absence of trichloroethanol indicates past exposure to chloral hydrate. Levels of trichloroethanol could be also positive in patients who had exposure to trichloroethylene (which is used as a solvent in garment industry and is also produced during the chlorination of water). Trichloroethylene is metabolized to trichloroethanol, hence gives false positive results for chloral hydrate ingestion (Larson & Bull, 1989).

GHB

GHB is present endogenously, but the concentration is so low (less than 1 mg/L) that it is usually not detected in urine and blood. The usual concentration in overdosed patients is equal to or more than 100 mg/L in blood and equal to or

more than 1,000 mg/L in urine. Urinary concentrations are usually much higher than blood concentrations. GHB is metabolized rapidly and has a half-life of around 30 min; blood must be collected within 6–8 h and urine within 12 h of ingestion to render tests positive. The most common method utilized to detect GHB is by GC employing flame-ionization, electron-capture, or mass spectrometry. Simple qualitative spot tests have been employed in some studies. Sweat collected by a "sweat patch" can be used to document exposure when sampling is done 12 h after the crime. In delayed presentations, segmental hair analysis could document presence of GHB. It is believed that small quantities are transferred from the circulation to hair follicles and sweat and consequently incorporated in the hair structure. GHB is normally present in the hair because of endogenous presence. As the physiological concentration is stable along the entire hair shaft, one would expect similar concentration in all the segments of the hair. In case of exogenous exposure, the segment corresponding to the time period of exposure would have marked increase in the concentration of GHB. While interpreting, one must be careful to the potential contamination by sweat. Hence, it is advised that in such situations, one should wait for a few weeks before the collection of hair, so that this time period would allow the migration of GHB spot along the length of the hair shaft. Hair analysis is also useful if one needs to identify the source of GHB. If the precursors of GHB are sought as the source (1,4-Butanediol or GBL), then the parent compound would also be detected in the hair shaft and will confirm the source.

Rohypnol

Flunitrazepam ("Roofies," "Mexican Valium"). Chemical structure: $C_{16}H_{12}FN_3O_3$—5-(2-Fluorophenyl)-1,3-dihydro-1-methyl-7-nitro-2H-1,4-benzodiazepin-2-one. Rohypnol is a white solid, colorless, odorless, and tasteless compound with a melting point between 166 and 167 °C, a molecular weight of 313.3, and is soluble in ethanol. Flunitrazepam is a benzodiazepine that takes effect as quickly as 10 min after ingestion. Peak plasma concentrations occur after 45 min. Flunitrazepam takes effect within 20–30 min of administration and lasts up to 8 h. It acts as a sedative by inducing amnesia, relaxing the muscles, and slowing down psychomotor responses. It has a synergistic effect with alcohol. Decreased blood pressure, severe drowsiness, visual disturbances, dizziness, confusion, gastrointestinal disturbances, and urinary retention are noted.

MDMA

MDMA (also known as Ecstasy) is a phenylethylamine related to methamphetamine that has stimulant and psychedelic effects. Rapidly absorbed with a half-life of about 7 h, MDMA is metabolized to MDA which is the only metabolite reported in blood and plasma. There is no clear correlation between MDMA blood concentrations and effects. Peak concentrations of MDMA and MDA are observed within 1.5–2 h and 4 h, respectively. Effects of the drug are noted in 20–30 min and last an hour or more, depending on the dosage. Other general effects last for approximately 2–3 h. Doses used vary between 50 and 700 mg, averaging about 150 mg (Jacobs, 1987).

Burundanga

Burundanga is light yellow powder from a raw plant extract of Borrochio (drunken) tree belonging to the genus of Brugmansia that is found in Columbia, South America. Burundanga has the reputation of being used in voodoo rituals and induces waking-trances like zombies. This plant genus is a close cousin of the Datura found in North America. The active toxins are scopolamine and other yet unknown amines have also been extracted. The drug is widely used in Columbia mainly as a weapon for robberies and kidnappings as well as sexual assault. Most Americans are unaware of its existence, although it can be found here in the United States (Gold & Hofheinz, 2000). Several deaths have been reported in the northeastern United States as a result of mixing scopolamine with heroin (MMWR, 1996). Blood and urine scopolamine analysis will confirm its presence along with clinical anticholinergic syndrome.

Case Examples

Case examples illustrate the necessity for and the process of thorough history taking, adequate evidence collection, and careful evaluation of the results.

Case 1

A 22-year-old female was evaluated in the emergency room for DFSA. The subject visited the suspect at his apartment for a photo shoot for a book. Around 5:30 p.m., the suspect provided her with a glass of wine. Between 6.00 p.m. and 6:30 p.m. she recalled walking around the suspect's apartment. From 6:30 p.m. to 10:00 p.m. her memory of the events is vague, but she does remember coming in and out of a comatose state. Around 10:00 p.m., she suddenly awoke, and completely aware of her surroundings, found herself fully dressed, in the living room of the suspect's apartment. At that point, she suspected that something was wrong. She called a friend, left the apartment, and went to the emergency room. The subject arrived to the hospital emergency department

around 11:30 p.m. but was not examined until 4:00 a.m. at a rape crisis center. Toxicological analysis of the urine for metabolites of cocaine and cannabinoids, amphetamines, PCP, ketamine, and rohypnol were negative. As there was a strong suspicion of drug-facilitated sexual assault, additional tests were performed on the urine after consultation with a toxicologist. High levels of trichloroethanol, a metabolite of chloral hydrate, were found in her urine. Further investigation including review of medical records revealed that the patient had a history of migraine. It was determined that the victim had high levels of trichloroethanol secondary to the use of drug Midrin, a drug commonly used in treating migraines. Further analysis of urine for the Midrin associated ingredients were also discovered strongly suggesting that positive trichloroethanol results must be from Midrin drug and not from pure chloral hydrate. Based on analysis of various ingredients in Midrin, it was determined that each 100 mg Midrin pill would contain 64 mg of chloral hydrate. Based on the levels in her urine, it was concluded that the victim must have consumed four to five tablets of Midrin. Consumption of four to five tablets of Midrin during a migraine headache is considered medically appropriate. Forensic investigation revealed assailant's salivary amylase to be positive on a swab taken from the victim's breast area, but was negative from the swab taken from her vaginal area. It was concluded the victim may have suffered a sexual assault, but the assailant did not give the drug to the victim.

Case 2

The 42-year-old victim alleges that around 11:00 p.m. the suspect gave her a sport drink. The victim stated that soon after drinking the sports drink, she lost consciousness and then remembers waking up in the early hours the next day. She woke up to find the suspect choking her with a rope. The suspect left the scene immediately. The victim passed out again, then woke up a few hours later and went to the hospital. She arrived at the hospital around 4:00 p.m. and the blood samples were drawn around 5:00 p.m. (18 h after the alleged drug ingestion). Significant history indicated that the victim had consumed methamphetamine at approximately 8:00 p.m. and was also drinking alcohol.

A blood sample was collected and analyzed but no urine samples were collected. A blood test by radioimmunoassay was negative for cocaine, barbiturates, and opiates, but was positive for amphetamines and methamphetamines. By GC analysis, the amphetamine levels were 37 ng/mL, methamphetamines 247 ng/mL, and MDMA 84 ng/mL. In addition, ethanol levels were measured which were 0.12. Blood was also analyzed for flunitrazepam, norflunitrazepam, 7 aminoclonazepam, and clonazepam. All these tests were negative. A blood test was also done for GHB, which was positive and revealed the concentration of 3.5 mg/L.

Considering the half-life of GHB to be a maximum of 1 h, it was determined that 18 h earlier, her levels would have been so high that it would be impossible to consume that amount of GHB. Considering the presence of other drugs and alcohol, it was concluded that this victim had probably taken GHB prior to arriving at the hospital and not at the time of the alleged assault.

Legal Considerations in DFSA Cases

Since the mid-1990s, DFSA has been under particular law enforcement and legislative scrutiny with the implication that it is surging public danger. The Drug-Induced Rape Prevention and Punishment Act of 1996 provides penalties of up to 20 years imprisonment when rape involves providing the victim with a controlled substance without the victim's knowledge, making such a charge extremely serious. The majority of American jurisdictions explicitly include rape of intoxicated or drugged victims in their sexual offenses. Enhanced punishment of these offenses is provided by laws that (1) grade sexual offenses committed by giving intoxicants as higher crimes, (2) enhancing penalties for the use of drugs, (3) noting victim incapacity as an aggravating factor in sentencing guidelines, or (4) making DFSA as SVP qualifying offenses (Falk, 2002).

Rape is a serious crime with significant impact on victims, up to 2/3 of whom may go on to develop Posttraumatic Stress Disorder, a serious, potentially chronic psychological disorder. Charges of rape can be devastating to the alleged offender since convictions draw long prison sentences. Individuals convicted of multiple rapes may face indeterminate civil commitment under Sexually Violent Predator or Sexually Dangerous Persons (SVP/SDP) laws after they serve the criminal sentence. While rape is an underreported crime, false accusations of rape are not uncommon, even given poor statistical data (Greer, 2000; Kanin, 1994; Katz & Mazur, 1979; Torrey, 1991). The assessment of drug-facilitated rape is more complex than a nondrug involved rape. Distortions in the media create the impression that DFSA is of epidemic proportions when, in fact, they constitute a very small portion of rapes. The picture in the minds of most juries is of a man (usually) moving, positioning, and penetrating the various orifices of an apparently lifeless victim (most commonly a female) can be very prejudicial to the defendant. In 1997, Max Factor heir Andrew Luster was sentenced to 128 years in prison on multiple counts of rape of unconscious victims. His videotaped activities showed him positioning his victim(s) "limp as a rag doll" in various sexual positions and inserting objects such as a marijuana cigarette and a candle in the victim's vagina. The victim was described wincing in pain as Luster sodomized her. Another victim is described as "audibly snoring" while he sexually assaulted her. Luster was reported to have commented,

"I dream about this; a strawberry blonde passed out on my bed, waiting for me to do with her what I will."

Yet many cases of DFSA allegations are far removed from this scenario and may simply be variations of individuals getting intoxicated and having sex with varying levels of consent or lack thereof. One of the concerns is that DFSA laws can take commonplace behavior between individuals and mistakenly or intentionally reframe the acts as heinous crimes.

False reporting can occur with individuals who are confused, delirious, hallucinating, delusional, or from misidentification. Elderly nursing home residents constitute a special high risk population for both actual and mistaken drug-facilitated rape given the occurrence of medically induced delirium, multiple psychotropic medications, and dementia coupled with constant need for hands on care by others. False accusations can be intentional, for the purpose of revenge, extortion, or to mislead a significant other. False victimization claims may also occur in individuals who are pathologically attention seeking. Clues to the presence of false victimization include discrepancy between victimization history and clinical findings; evidence of self-inflicted injury; allegations that are bizarre or highly improbable; allegations that change constantly and/or take on new details with repetition; individuals more focused on receiving attention (i.e., from the media), than getting help; improbable claims of serial victimization; victims who go "shopping" trying to convince law-enforcement officers, attorneys, and/or therapists about being sexually victimized; individuals with a history of frivolous litigation.

The litigation of DFSA cases presents many obstacles for both the prosecution and defense attorneys. There appears to be no requirement that the prosecution identify the specific drug used because the conduct involved in DFSA cases is, by its very nature, surreptitious and will usually be difficult to identify the precise substance administered. For example, in *People v. Wojahn* (1959), the victim consulted the defendant, a physician, for chest pains because she feared tuberculosis. The defendant administered a shot, which he said was to remove the mucous in her throat and gave her a capsule to quiet her nerves. After receiving the drugs, the victim was unable when standing against a wall with her eyes closed to touch her nose with her fingers. She felt light and relaxed, her feet felt glued to the floor, and she felt as though her body was swaying. Nevertheless, she became aware that the defendant had one or more acts of sexual intercourse with her. A neighbor that was assisting the victim observed her to be nervous, upset, red-eyed, her lipstick looked smeared, her hair mussed, and her legs shaky after the visit. The neighbor accompanied the victim to the police station where the police captain observed her hair to be disheveled, her eyes red, and crying hysterically. The victim appeared to be drugged. Later, she was examined by a doctor at the county hospital, but not tested for drugs. The doctor at the county hospital concluded that she had been sexually assaulted. The state expert testified that her presenting symptoms indicated that she was under the influence of drugs even if no drug testing had been done. The *Wojahn* court stated, "A rape by drugs may be proved by circumstances and surroundings. The fact that [the victim] was not given any test for drugs on the day of the attack is not fatal to the prosecution's case."

Several courts have held that an expert may testify to the symptoms described by an alleged victim of rape when they are consistent with the administration of a drug to facilitate the attack. For example, in *Sera v. State* (2000), the Arkansas Supreme Court rejected a sufficiency of the evidence claim regarding the defendant's conviction for administering a controlled substance, the date-rape drug Rohypnol, to the victim, and engaging in sexual intercourse with the victim, who was incapable of consenting due to the drugs. The victim testified that she went out to dinner with the defendant. She recalled having a glass of wine and a glass of water at dinner. At one point, the victim left the table to go the bathroom. When she returned, she finished her water and soon thereafter began feeling ill. After remembering leaving the restaurant and getting into the defendant's car, the victim could not recall any further details until the next morning, when she woke up in bed with the defendant.

In *Sera v. State* (2000), there was no specific testimony that the victim had ingested Rohypnol. In fact, one of the state's experts, after viewing a videotape secretly made by the defendant showing him having sex with the victim, and reviewing the victim's description of events, could only testify that the victim's behavior was consistent with the effects of Rohypnol. Another expert, a pharmacologist who had created a test to detect Rohypnol in urine, testified, after reviewing the videotape, that it was possible that the victim was under the influence of Rohypnol, but could not rule out different drugs as well. The Arkansas Supreme Court concluded that the evidence was not such that the jury was reduced to mere speculation and conjecture. In so holding, the court noted that the defendant was in possession of Rohypnol during a relevant time period and that the victim's symptoms and behavior on the videotape were consistent with the ingestion of Rohypnol.

Similarly, in *State v. Nunes* (2002) the defense argued against DFSA, because chloral hydrate was not tested for and there were significant inconsistencies between the victim's symptoms and the physician's testimony regarding the effects of chloral hydrate. Expert medical testimony was required to establish within a reasonable degree of medical certainty that the victim's symptoms had been caused by chloral hydrate. The Connecticut Supreme Court disagreed with the defense's contention. In *Nunes*, the victim self-reported several symptoms that included drowsiness, dizziness, fogginess, only partially recalled events, nausea,

vomiting, and lack of a hangover. The state's experts testified that these symptoms were consistent with the effects of chloral hydrate. The court held the fact that chloral hydrate was not tested for was not determinative. On the basis of the expert's testimony in the case, the court concluded that the jury could have found that the victim's symptoms and those attributed to chloral hydrate were consistent within a reasonable degree of medical certainty.

A typical defense to DFSA is that the sex was consensual. Typically, the defense will argue that there is no evidence of a date-rape drug particularly in cases where no testing was done. The court, in *State v. Sosa* (2008), allowed expert testimony about the effects of date-rape drugs even though none were tested. In *Sosa*, a medical doctor testified that a date-rape drug is a drug typically put in a drink, and it will generally not be detected by the person ingesting it because it renders a victim unconscious but leaves the system quickly, before the victim awakes. The expert also testified that a victim will generally have no memory of what happened and that she would not be surprised that a toxicology report on blood drawn several days after ingesting the drug would have no traces of the drug. The expert further testified that the victim's symptoms in this case, slurred speech, the feeling of a thickened tongue, and the loss of memory, reinforced the possibility that she was drugged.

On cross-examination, the defendant pointed out that the expert had not seen the toxicology report and that there were other ways of testing for drugs besides analysis of blood, namely analysis of urine and hair samples and perhaps by testing a person's vomit. The court held that since the expert opinion went only as far as describing typical date-rape drug symptoms, that were consistent with what the victim in this case had described, the testimony was admissible.

What is clear from the above appellate court decisions is that experts are permitted to testify about their analysis of the drug used to assault the victim, how the particular drug affects the human body in general, how the victim's symptoms are typical of someone who has ingested a particular drug, and explain the absence of a positive toxicological result in a particular case. Typically, these experts include toxicologists, pharmacologists, and medical doctors. An expert witness must be a medical doctor in order to testify as to matters of physical causation. Thus, a pharmacologist, whose training does not qualify him to do physical examinations, is not allowed to offer a medical opinion at trial concerning whether someone was the victim of drugging on the night of the alleged sexual assault. However, a pharmacologist does ordinarily possess the requisite degree of knowledge, skill, and education in order to provide general testimony about the usual symptoms produced by ingestion of a drug and to contrast it with the effects of other drugs or alcohol.

An alleged victim's ability to consent is often an issue in DFSA cases. Serious consideration should be given by the defense to request a *Daubert v. Merrell Dow Pharmaceuticals* (1993) or *Frye v. United States* (1923) hearing on the issue of whether a victim was incapable of consent. Expert medical testimony which is not based on any scientific analysis or data but is based merely on unsupported speculation or subjective belief should be excluded by the courts under the authorities of *Daubert v. Merrell Dow Pharmaceuticals* (1993) or *Frye v. United States* (1923). False accusations and wrongful convictions are a legitimate concern in sexual assault cases where the prosecution has framed the case as one involving an incapacitated victim. It is entirely possible for the prosecution's case to be based on a false hypothesis. While an alleged victim of a sexual assault may exhibit symptoms such as memory loss or nausea that are consistent with the administration of a drug by a defendant, this does not necessarily establish non-consent. A thorough inquiry should be made of any history of drug use, including prescription medication, or alcohol use or abuse by an alleged victim. Oftentimes, the morning after, an alleged victim may realize what they had done and an accusation follows.

Summary

Sexual assault and rape are not clearly differentiated in the medical literature reports. Significant number of sexual assaults are drug facilitated, although are highly underreported. Most of DFSA occurs from voluntary intoxication, and covert drugging is an uncommon occurrence. Although a large number of drugs are reported causing DFSA and the list keep growing, alcohol ingestion is responsible in at least half of cases. High index of suspicion and vigilant look out for DFSA in sexual assault cases by the initial evaluating healthcare provider can help provide a detailed history of assault and mental status of the victim at the time of presentation. Timely and appropriate physical examination and evidence collection by the initial evaluating physician is an important factor for the prosecution of the alleged perpetrator. An expert toxicologist can guide regarding type of biological specimen collection and methodology used to determine the chemicals involved. A thorough knowledge of pharmacokinetics/pharmacodynamics and clinical effects of various drugs is necessary for interpretation of drugs and/or their metabolites in biological specimens requiring expertise of medical/clinical toxicologist physician

Professional involvement in suspected DFSA cases requires the following steps in order to conduct thorough tests and derive relevant evidence:

- Careful review of a database: crime reports, victim/suspect accounts, emergency room records, and results of sexual assault examination findings
- Knowledge and familiarity of the various drugs that can be used in DFSA and their psychological and medical presentation

- Able to review and interpret toxicological findings
- Be cognizant of issues such as sexual deviance, false victimization and false memories, suggestibility, and eye witness identification

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Noncontact Paraphilic Sexual Offenses

Richard B. Krueger and Meg S. Kaplan

Introduction

This chapter will review the noncontact crimes of exhibitionism, voyeurism, possession of child pornography, and interacting with children over the Internet. Epidemiology, comorbidity, offender characteristics, risk of recidivism, relevant diagnoses according to DSM-IV-TR and NB-DSM-5 including methods for making them, and relevant treatment modalities will be discussed. Diagnostic methods and issues are relevant to all of these disorders; so a brief discussion of methods and limitations of diagnosis relevant to all of these disorders will be made initially. Finally, conclusions and future directions will be given. It should be noted that while an attempt will be made to be thorough in literature selection, the broad scope of this chapter makes an exhaustive review, particularly of the psychometric properties of assessment and actuarial instruments, impossible. Literature will be confined to those aspects most salient to these noncontact offenses.

The class of sexual offenders which does not involve touching has traditionally been called "hands off" and thought to be relatively insignificant; such crimes are often prosecuted as misdemeanors. The Crime Classification Manual (Douglas, Burgess, Burgess, & Ressler, 1992) described in its chapter on Rape and Sexual Assault the category of "Nuisance Offense": "The defining characteristic is that the offense involves no physical contact between victim and offender. Police need to investigate and deal with these offenses given the amount of time and the priority they have available" (p. 202). Voyeurism and exhibitionism were mentioned as examples. Since this Manual was written in 1992, there has been a dramatic increase in individuals being arrested for child pornography or for attempting to meet children over the Internet. These crimes are also noncontact crimes, although the fact that they are usually felonies and that there are significant prison sentences associated with them suggest that these noncontact crimes are now considered to be me much more consequential.

The computation of the frequency of occurrence of the terms "exhibitionism" and "voyeurism" in subject headings, which are terms chosen for indexing done in major databases (Lane, 2010), has suggested less recent enquiry into these disorders than in the past. "Exhibitionism" was found in 312 references in PubMed between 1950 and 2004, but only 36 between 2005 and 2011; "voyeurism" was found in 82 references in PubMed between 1950 and 2004 and only 14 references between 2005 and 2011. This same pattern was true for PsycInfo.

Paralleling the growth of the Internet, the term "child pornography" has increased in subject headings. This term was found in 22 references in PubMed between 1950 and 2004 and in 30 references between 2005 and 2011. For subject headings relevant to crimes against children over the Internet, the terms "sex offenses" or "sex abuse" and "Internet" or "online" were used; in PubMed between 1950 and 2004, there were 15 references and between 2005 and 2011, 53 references. The same pattern for both child pornography and crimes against children over the Internet was found in PsycInfo. These figures substantiate a rapidly growing academic interest in studies involving child pornography and child sexual abuse involving the Internet.

Noncontact sex offenses also have relevance for assessing the risk of recidivism for more severe sexual crimes. The Static-99, for instance, has a category, Item #7, involving "Any Convictions for Non-contact Sex Offenses" (Harris, Phenix, Hanson, & Thornton, 2003). This category includes exhibitionism, voyeurism, illicit sexual use of the Internet, and possessing obscene material. Convictions for any of these offenses can increase a subject's score and risk of recidivism. Likewise, the term "sexual deviation," which would include exhibitionism, voyeurism, and possibly individuals involved with child pornography or meeting children over the Internet,

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is a risk factor included in numerous other risk assessment and actuarial instruments (Boer, Hart, Kropp, & Webster, 1997; Hanson & Harris, 2000; Hanson, Harris, Scott, & Helmus, 2007; Harris & Hanson, 2003; Quinsey, Harris, Rice, & Cormier, 2009; Schlank & Cohen, 1999). Paraphilic fantasy and behavior have been identified as one factor in the histories of offenders who commit sexually motivated homicides (Harris & Pagé, 2008; Holmes, 1991), although the likelihood of an individual progressing from a noncontact offense to a lethal offense is unknown.

It should be noted that the courtship disorder hypothesis (Freund, Scher, & Hucker, 1983, 1984; Freund & Seto, 1998) has proposed that voyeurism, exhibitionism, frotteurism, and preferential rape (all representing distortions of typical courtship, which would usually involve visualization of a prospective mate, interacting with her, touching her, and then engaging in intercourse with her) could be viewed as expressions of a disturbance of an underlying regulatory system. Thus, it is asserted that these four disorders might be more likely to cluster together; however, evidence for this has been limited (Freund & Seto, 1998).

Several studies have also documented that men have multiple paraphilias, either sequentially or concurrently (Abel, Becker, Cunningham-Rathner, Mittelman, & Rouleau, 1988; Bradford, Boulet, & Pawlak, 1992; Freund & Watson, 1990), and have suggested either that noncontact paraphilias serve as a "gateway" to contact paraphilias or that individuals "cross over" from less severe noncontact paraphilias to more severe contact ones. There are many explanations or theories to account for such a progression, such as that an individual who might be thrill-seeking keeps looking for more exciting behavior or that an individual who engages in initial noncontact paraphilic behavior becomes disinhibited or inured to any adverse consequences and progresses to more severe paraphilic behavior. However, at this point such theories remain speculative, and we have confined the information in our chapter to reviewing the empirical evidence relevant to the risk of subsequent crimes, given the existence of at least one of the noncontact crimes discussed in this chapter, and have not presented an explanatory theory.

Finally, the biases inherent in the extant literature and the limitations of past research cannot be overemphasized. With few exceptions, all studies cited are from samples of convenience (i.e., from samples that are readily available and not from random samples drawn from the community or other populations). Thus, even statements of association have to be interpreted with extreme caution because the underlying population may itself be extremely skewed. Many studies are retrospective. Many studies do not use standard diagnostic criteria or structured diagnostic instruments. Objective assessment is likewise limited because of lack of validation of stimulus sets (Marshall, 2006) or use of polygraphy. Unfortunately, the paraphilias have not received much in the line of research funding; hopefully, this will change in the future.

General Comments on Assessment and Making Diagnoses

The Association for the Treatment of Sexual Abusers has set forth its set of standards and guidelines for the evaluation, treatment, and management of adult male sexual abusers (Association for the Treatment of Sexual Abusers, 2005), which details many aspects of the evaluation of sex offenders. Because evaluation of individuals involved with noncontact sexual offenses occurs mostly in a forensic context, it is especially important to obtain informed consent, which involves informing the person being evaluated about the nature and purpose of the evaluation, who requested the evaluation, who will receive the results of the evaluation, and the potential consequences of the evaluation. The person being evaluated should also be presented with an opportunity to participate or refuse to participate in the evaluation (p. 12). Written consent should be obtained. A comprehensive psychiatric and psychosocial history should be obtained with attention to developmental history, general psychiatric history, sexual history, and deviant sexual history (p. 13).

Given the forensic context, the tendency of most individuals being evaluated is to minimize or deny any deviant behavior (Kaplan, Abel, Cunningham-Rathner, & Mittleman, 1990). Thus, it is extremely important to have an official criminal record (to ascertain both current and previous sexual and nonsexual charges and offenses) and to obtain other official legal documents such as search warrants, arrest warrants, victim's statements, supporting depositions, or indictments in order not to rely solely on self-report. Collateral history from family or significant others is also important, when available. In the case of evaluations of individuals facing charges of child pornography or of enticement or coercion of children over the Internet, it is extremely important to have a report of the contents of the subject's media (computer hard drive, external hard drive, chats, and some idea of the organization of the hard drive). As a matter of interviewing technique, it is important not to ask close-ended questions which a patient can answer with "yes" or "no," but rather to present open-ended questions such as "How many times have you had sexual fantasies or masturbatory fantasies involving children?"

Abundant literature supports the utility of structured diagnostic instruments in increasing interrater reliability (Kranzler et al., 1995; Kranzler, Kadden, Babor, Tennen, & Rounsaville, 1996; Miller, Dasher, Collins, Griffiths, & Brown, 2001; Shear et al., 2000; Steiner, Tebes, Sledge, & Walker, 1995), and there is a large variety of written diagnostic instruments for diagnosing or assessing conventional sexuality (Davis, Yarber, Bauserman, Schreer, & Davis, 2000), deviant sexuality (Prentky & Edmunds, 1997), and psychiatric syndromes (Rush, First, & Blacker, 2008). While many of the diagnostic instruments used to diagnose and assess general psychiatric

syndromes (First, Spitzer, Gibbon, & Williams, 1997, 2008; Spitzer, Williams, Gibbon, & First, 1992) are validated, the many clinical interviews for the diagnosis of paraphilic disorders that have been written are not (Black, Kehrberg, Flumerfelt, & Schlosser, 1997; Grant, 2005; Kafka & Hennen, 2002; Marsh et al., 2010; Prentky & Edmunds, 1997; Raymond, Coleman, Ohlerking, Christenson, & Miner, 1999). A number of inventories contain questions concerning noncontact sexual behaviors (Abel, 1995a; Langevin & Paitich, 2002; Simkins, Ward, & Bowman, 1989), but these rely on self-report and have not been tested for their ability to discriminate groups with a disorder from control groups.

Neurological or medical causes of paraphilic behavior should always be part of the differential diagnosis (Berlin, 2008; Hooshmand & Brawley, 1969; Kafka, 2008; Kaplan & Krueger, 2010b; Krueger & Kaplan, 2000; Stein, Hugo, Oosthuizen, Hawkridge, & Heerden, 2000). We routinely administer a Mini-Mental State Examination to screen for cognitive impairment (Folsetin, Folstein, & McHugh, 1975).

While plethysmography and, more recently, viewing time have been used to assess sexual interest and arousal in patients, and its use is discussed in the Association for the Treatment of Sexual Abusers Guidelines (The Association for the Treatment of Sexual Abusers, 2005) (pp. 37–42), we have found only limited use for the evaluation of individuals presenting exhibitionism and voyeurism. Plethysmography has recently been criticized (Laws, 2003; Marshall, 2006) as lacking standardization (i.e., not all laboratories use the same stimulus sets or the same procedures) and thus not meeting satisfactory standards for reliability and validity. Furthermore, faking will always be a problem in assessing the validity of phallometric assessments (Marshall, 2006). While some stimulus sets which are used in Canada may have data which meets satisfactory standards for reliability and validity, the transportation of such sets across international borders is problematic because where these sets involve images, these images could be construed as consisting of child pornography, which is illegal to possess in the United States. In other instances, sets cannot be distributed because of issues of consent in the original acquisition of the images. Nevertheless plethysmography remains the best available measure of deviant sexual interest for male sex offenders (Seto, 2001) and, along with the Hare Psychopathy Checklist (Hare, 2003), the best predictor of recidivism (Gendreau, Little, & Goggin, 1996; Hanson & Morton-Bourgon, 2005; Hildebrand, De Ruiter, & De Vogel, 2004; Seto, 2008; Rice & Harris, 1997).

Viewing time assessment (Abel, 1995b; Abel & Wiegel, 2009; Krueger, Bradford, & Glancy, 1998; Laws & Gress, 2004) is a newer technology. One study (Abel, Huffman, Warberg, & Holland, 1998) found high reliability and validity in the use of visual reaction time and plethysmography in assessing 157 males who had admitted to inappropriate sexual behavior. Letourneau (2002) compared visual reaction time with penile plethysmography with audio stimuli on a sample of 57 sex offenders in a high-security prison; both measures were consistent and identified offenders against young boys, and the visual reaction time significantly identified offenders against adolescent girls. Generally speaking, however, the literature on viewing time assessment is much more limited than that of plethysmography, and no stimulus sets have been used to differentiate groups of voyeurs or exhibitionists from controls.

Polygraphy has been advocated mostly for post-conviction examination of convicted sex offenders (Sosnowski & Wilcox, 2009; The Association for the Treatment of Sexual Abusers 2005). While the National Research Council (Committee to Review the Scientific Evidence on the Polygraph, 2003) concluded that it could detect deception at odds well above chance, they noted that it was far from perfect. Polygraphic evidence is not admissible in US Courts under the Frye test, but was admissible, as of 2003, in 19 states in the United States (Wilcox & Madsen, 2009). This may still be useful on a case-by-case basis for negotiations with prosecutors or at times when an individual has agreed to be polygraphed in the presence of his or her attorney.

We will discuss each noncontact crime separately, presenting DSM-IV-TR critiera and NB-DSM-5 criteria where they exist. In the case of new hypersexual disorders relevant to child pornography offenders or offenders who victimize children over the internet, the Paraphilias Workgroup proposed diagostic criteria for Hypersexual Disorder (Kafka, 2010) which were not contained in DSM-IV-TR. However, the APA Board of Directors ultimately rejected the suggested diagnosis of hypersexual disorder. However, such a hypersexual diagnosis could still be made using the NB-DSM-5 diagnoses of Other Specified Disruptive, Impulse-Control, and Conduct Disorder, Unspecified Disruptive, Impulse-Control, and Conduct Disorder, Other Specified Mental Disorder, or Unspecified Mental Disorder. Diagnostic practices utilizing DSM-IV-TR would allow for the application of the diagnosis of a sexual disorder not otherwise specified, with further description as elaborated in peer-reviewed literature (Kafka, 2010a; Kaplan & Krueger, 2010a).

Finally, we would note that the NB-DSM-5 acknowledged the difficulty in making diagnoses in forensic contexts and at one point on its website suggested a specific victim number for the diagnoses of exhibitionism and voyeurism. The rationale section on the paraphilias on the NB-DSM-5 website stated:

> The second broad change applies to paraphilias that involve nonconsenting persons (e.g., Voyeuristic Disorder, Exhibitionistic Disorder, and Sexual Sadism Disorder). We propose that the B criteria suggest a minimum number of separate victims for diagnosing the paraphilia in uncooperative patients. This was done to reflect the fact that a substantial proportion—perhaps the majority—of patients referred for assessment of paraphilias is referred

after committing a criminal sexual offense. Such patients are not reliable historians, and they are typically not candid about their sexual urges and fantasies. The criteria have therefore been modified to lessen the dependence of diagnosis on patient's self-reports regarding urges and fantasies. This change also addresses the past criticism that the word "recurrent" in the DSM-IV-TR A criteria says nothing beyond "more than once" and is too vague to be clinically useful. The reason for diagnosing specific paraphilic disorders from multiple, similar offenses in uncooperative patients is to achieve a level of diagnostic certitude closer to the certitude in diagnosing these disorders from self-reports in cooperative patients. It is not derived from legal theory or practice.

It should be noted that ultimately the use of victim number as part of the B criterion was rejected by the workgroup.

The recognition of the importance of context is also apparent in the severity ratings, where there is a code 99 (Missing data), which designates that a rating cannot be assigned because of the patient's mental condition or the circumstances of the assessment (Sexual and Gender Identity Disorders Workgroup, 2010a); such a circumstance could be incarceration or supervision by probation or parole.

Exhibitionism

Epidemiological Samples

No questions regarding paraphilias or paraphilic behavior have been included in any of the national surveys of sexual behavior in the United States (Hite, 1976, 1981; Kinsey, Pomeroy, Martin, & Gebhard, 1953, 1975; Laumann, Gagnon, Michael, & Michaels, 1994) or in national surveys of mental disorders in the United States (Robins & Regier, 1991). Arrests for exhibitionism in the United States are usually classified as misdemeanors (Dietz, Cox, & Wegener, 1986) and thus not recorded in the national crime databases. Finally, most of the literature concerning exhibitionism comes from Europe or America. The only enquiry into exhibitionism outside of these countries was in 1973 by Rooth (1973a), who reported on a survey he sent to doctors and psychiatric facilities in 40 Asian, African, and South American countries; only 24 responded. He summarized his report saying that exhibitionism in general in these countries was very rare and that in Japan it was virtually unknown. There are also socially sanctioned forms of exhibitionism (Forsyth, 1992; Forsyth & Deshotels, 1997), such as parade strippers or nude dancers, which are not criminal.

Some epidemiological data on exhibitionism exists, which suggests that exhibitionistic acts are among the most common of potential law-breaking sexual behaviors. Långström and Seto (2006) analyzed a group of 2,450 Swedes (ages 18–60) who had been randomly selected and interviewed in a broad survey of sexuality and health. Seventy-six (3.1 %) of respondents reported at least one incident of being sexually aroused by exposing their genitals to a stranger. This behavior was associated with being male, having more psychological problems, lower satisfaction with life, greater alcohol and drug use, greater sexual interest and activity, more sexual partners, greater sexual arousability, higher frequency of masturbation and pornography use, and greater likelihood of having a same-sex partner. Respondents who reported greater exhibitionistic behavior had substantially greater odds of reporting other atypical sexual behavior, such as sadomasochistic or cross-dressing behaviors. It should be noted that this survey recorded acts only and not the presence of a diagnosed paraphilic disorder.

Clinical and Other Samples

Another way of obtaining information on the frequency of exhibitionism is to look at its frequency in samples of convenience, i.e., in clinical or other samples that are not randomly selected epidemiological samples but rather consist of samples which exist for other reasons, such as groups of patients who present for an evaluation or other groups who are studied. These studies suggest there is a substantial occurrence of exhibitionism and that those subjects who were diagnosed with exhibitionism also had other paraphilic diagnoses. Abel et al. (1988) reported on types of deviant sexual behavior of 561 nonincarcerated paraphiliacs in Memphis, Tennessee, and New York, New York. DSM-II and DSM-III criteria were used, with the modification that one completed act could qualify a subject as making a diagnostic category. Most subjects had a history of multiple paraphilias and most progressed through a variety of paraphilias to express one, which was preferred. Some expressed several paraphilias at the same time, and subjects could be diagnosed with multiple paraphilias simultaneously. One-hundred and forty-two subjects were diagnosed with exhibitionism; of these, only 7 % had this as a sole diagnosis. Forty-six percent were also diagnosed with female nonincestuous pedophilia, 28 % with voyeurism, and 25 % with rape.

Freund and Watson (1990) reported on a data gathered from 1,572 heterosexual males seen at a psychiatric teaching hospital; 1,198 were sex offenders and 374 individuals had no charges against them. Individuals were assessed by interview and by completion of an "Erotic Preferences Examination Scheme." Two-hundred and fifty-eight were exhibitionists; only 25 % of these had this as a sole diagnosis and the rest had co-occurring preferences consisting of voyeurism, exhibitionism, toucherism-frotteurism, and a preferential rape pattern, which together were termed courtship disorder.

Maletzky (1991) reported on the percentage of offenders in his clinic who were exhibitionists; between 1973 and 1978, 57 % of those attending his clinic were exhibitionists; from 1978 to 1990, this number had reduced to 15 %. A study

of 60 male college students in a rural setting in the United States (Templeman & Stinnett, 1991) reported that only one acknowledged exhibitionism.

Bradford et al. (1992) reported on a sample of 443 adult males consecutively admitted to the Sexual Behaviors Clinic at the Royal Ottawa Hospital for a forensic psychiatric assessment; the self-report Male Sexual History Questionnaire developed at the Clarke Institute was utilized. Sixty subjects admitted to exhibitionism. Of these, 52 % admitted to voyeurism, 30 % to frotteurism, and 22 % to scatologia (lewdness).

In a later sample of 2,129 patients evaluated at 140 sexual treatment clinics in North America reported as a personal communication in the volume *Dangerous Sex Offenders* (American Psychiatric Association, 1999), Abel reported that 13.8 % of this sample engaged in exhibitionism, presumably based on their responses to the questionnaire of the Abel Assessment of Sexual Interest (Abel, 1995a).

A recent update of this database (Abel & Wiegel, 2009), which contained 47,265 males and 1,684 females from throughout North America who had taken the Abel Assessment of Sexual Interest, revealed that 10.1 % (4,762) of males and 6.2 % (105) of females admitted to exhibitionism; 8.3 % (3,904) of males and 2.6 % (44) females to public masturbation, 23.8 % (6,525) of males and 2.6 % (43) of females to voyeurism; 29.4 % (13,901) of males and 15.9 % (268) of females to child sexual abuse; and 26.5 % (12,519) of males and 9.9 % (166) of females to problems with the use of pornography.

Kafka and Hennen (1999) reported on a sample of 206 consecutively evaluated males seeking help for paraphilias or sexual impulsivity disorders; semistructured intake questionnaires and sexual inventories were used. Of this group, 143 had paraphilias and 52, or 37 %, were exhibitionists. Eighty-six percent of the group with paraphilias had at least one lifetime paraphilia-related disorder, now known as a hypersexual disorder.

Marsh et al. (2010) reported on the prevalence of paraphilias in an adult inpatient psychiatric population, interviewing 112 consecutively admitted, voluntary male psychiatric inpatients recruited in Minnesota and Florida, using a Structured Clinical Interview for DSM-IV, Sexual Disorders Module; 5.4 % (6) had a diagnosis of exhibitionism.

Legal Samples

In an early report from Chicago (Arieff & Rotman, 1942), indecent exposure was the most common of all sex offenses (about 35 %) seen at the Psychiatric Institute of the Municipal Court of Chicago. A study from Britain (Taylor, 1993) reported on 98 cases admitted to Brixton Prison during 1946; this represented 32.2 % of sexual offenses, and 1.95 % of all offenses admitted into the prison during that year. In an extensive study of 1,356 white males who had been convicted for one or more sex offenses, along with control groups, Gebhard, Gagnon, Pomeroy, and Christenson (1965) reported that 135 (10 %) offenders were exhibitionists. Bancroft (2009) reported that the number of convictions for indecent exposure in England and Wales declined from 1990 to 2000; in 1990, the number was 1294; in 2000, it was 553. These figures are about 20 % of what they had been in 1970; no explanation was apparent for this decrease. Also, in the United States, reviewing the above data, it seems that exhibitionism represented a much higher percentage of all reported sexual crimes in the two studies in the 1940s (35 and 32 %), than would seem to be the case currently. Unfortunately, exact statistics are not available in the United States because often such crimes are misdemeanors and not captured in national databases, or such crimes are pled to nonsexual crimes and thus not captured at all. One could speculate that recently fewer resources are devoted to apprehending and prosecuting exhibitionists because such crimes are seen to represent low-risk or "nuisance" behavior and have been overshadowed by arrests for other more serious sexual crimes. It could also be the case that the incidence of exhibitionism is decreasing, perhaps because of the effects of general deterrence arising from the prosecution of other sexual crimes or from the growth of the Internet or other vehicles that have allowed for the expression of sexually impulsive or compulsive behavior that might otherwise find its expression in exhibitionism.

Victim Reporting of Exhibitionism

Another way of establishing the occurrence of exhibitionism is to examine the incidence of victim reports. In a survey of 13,551 women and 11,375 men in Great Britain (Walby & Allen, 2004), 12.8 % of women reported being the victim of indecent exposure, 8 % since the age of 16, and 0.5 % in the last 12 months; 1.2 % of men reported having been the victim of indecent exposure, 0.5 % since the age of 16, and 0.1 % in the past 12 months. Cox (1988) reported on a sample of 846 college women taking general psychology at nine universities randomly selected from across the United States; 33 % reported being victims of indecent exposure and one-third of these at least twice. Only 15 % of these episodes were reported to police (Cox, Tsang, & Lee, 1982).

Offender and Offense Characteristics and Comorbidity

An early report (Henninger, 1941) described 51cases of indecent exposure or open lewdness in Allegheny County in Pennsylvania; 1 was a woman, the rest men. 8 were psychotic,

19 "mentally deficient," 3 had "psychopathic personality," 1 marijuana intoxication, 4 chronic alcoholism, 4 were "organic unstable type," 2 psychoneurosis, and 19 were "normal, emotionally unstable." Smukler and Schiebel (1975) reported on an early chart review of 41 exhibitionists and found no definite character type or evidence of severe pathology.

Gebhard et al. (1965), in his study of incarcerated exhibitionists, reported that 31 % were married. Regarding their victims, 92 % were strangers, 5 % acquaintances, 2 % friends, and 1 % relatives. The exhibitionists frequently had committed other sex offenses prior to their exhibitionism. Thirty-eight percent were first offenders, slightly more than one-quarter second offenders; 13 % third time offenders, 7 % fourth time offenders, 6 % fifth time offenders, and 10 % six or more offenses. Only 3 % had a previous history of mental difficulty. "On the other hand, a substantial proportion (nearly one third) of the offenses involved drunkenness, and an additional 8 % involved mild to moderate intoxication. As usual, drugs were of no consequence. Only three offenses involved drug-users and none of them were using 'heavy' drugs" (p. 395).

Forgac, Cassel, and Michaels (1984) reported on the severity of psychopathology as measured by the MMPI in 84 exhibitionists and found that there was no relationship between the severity of psychopathology as measured by the MMPI and the chronicity of exhibitionistic activity. Dietz et al. (1986) in an early review reported that exposure incidents occurred most frequently in the spring, during daylight hours, and in public outdoor places. The age of exhibitionistic behavior showed a bimodal distribution, peaking in the age ranges of 11–15 and 21–24, with the most frequent age of arrest being in the mid-20s. 52–79 % of exhibitionists 21 or over were married at some time. It was cautioned that efforts to describe a "typical exhibitionist" with psychological testing or via other means had not been useful in predicting recidivism and that arrested exhibitionists were not necessarily representative of all exhibitionists.

Lang, Langevin, Checkley, and Pugh (1987) reported on a study of two offender groups, 34 "persistent" exhibitionists, and 20 nonviolent nonsex offender controls, comparing them on measures of gender identity and sexual and criminal variables. Forty-one percent of the exhibitionists were transvestitic, with masculine gender identity. They engaged in other paraphilic behaviors, including voyeurism (71 %), obscene telephone calling (32 %), frottage (38 %), toucherism (26 %), and attempted rape (18 %). Ninety-four percent of exhibitionists reported that they hoped the unsuspecting female would enjoy the experience; 56 % of them said they would have gone with their victims, if invited to do so. Twenty percent of exhibitionists had a history of violence-related offenses (5 charged with indecent assault, 2 with attempted rape, and 3 with common assault). The violent exhibitionists were older than the nonviolent sex offenders (mean 31.0 years vs. 25.4 years) and had significantly more sexual offenses (4.43 convictions vs. 2.30 convictions). The violent exhibitionists were more likely to make obscene phone calls, touch female strangers in a crowd and in lonely places, and use vulgar language when exposing. It was concluded that the violent subgroup tended to engage in a greater diversity of outlets more often.

Abel et al. (1988) reported that of those diagnosed with exhibitionism, only 7.0 % reported this to be the only paraphilia; 20.4 % of exhibitionists had 2 paraphilias; 22.5 %, 3; 15.5 %, 4; 7.0 %, 5; 7.0 %, 6; 9.2 %, 7; 4.9 %, 8; 2.8 %, 9; and 3.5 %, 10. Exhibitionists had an average of 4.2 paraphilias and a total of 596 paraphilias. Forty-six percent were diagnosed with female nonincestuous pedophilia, 22 % with male nonincestuous pedophilia, 22 % with female incestuous pedophilia, 5 % with male incestuous pedophilia, 25 % with rape, 28 % with voyeurism, 16 % with frottage, 1 % with obscene mail, 1 % with transsexualism, 8 % with transvestitism, 3 % with fetishism, 4 % with sadism, 4 % with masochism, 2 % with homosexuality, 9 % with obscene phone calls, 9 % with public masturbation, 4 % with bestiality, 1 % with urolagnia, 1 % with coprophilia, and 1 % with arousal to odors.

Bradford et al. (1992) reported that 20 % of exhibitionists reported heterosexual pedophilic activity, 20 % heterosexual hebephilic activity, 10 % homosexual pedophilic activity, 8 % homosexual hebephilic activity, 11 % transvestism, 51 % voyeurism, 21 % obscene telephone calls, 30 % frotteurism, 13 % attempted rape, and 6 % committed rape.

In the most detailed report on exhibitionists available, Grant (2005) reported on a group of 25 males with DSM-IV exhibitionism studied with structured clinical interviews. The reported mean age at onset of exhibitionism was 23.4 years. 56 % reported age of onset during adolescence. The mean duration of exhibitionism was 11.6 years. Episodes were frequent, with subjects reporting a mean number of 1.5 times per week. Subjects reported being unable to resist an urge to expose themselves 64.0 % of the time; 88 % reported that at least 50 % of the time they experienced an urge they were unable to resist. Triggers in descending order were boredom (reported by 44 %), stress (32 %), attractive person (28 %), interpersonal conflict (24 %), feeling down or sad (24 %), feeling inadequate (16 %), no precipitants (16 %), or a particular place (4 %). Sixty-eight percent reported they exposed themselves while driving, 48 % in stores or parking areas near stores, 40 % in parks, and 28 % in their own yards. Their social functioning, role limitations due to emotional problems, and mental health were all decreased compared with scores of a US population sample on a 36-Item Short-Form Health Survey. There was very substantial comorbidity with 36 % (9) of the sample being diagnosed with current major depressive disorder and 40 % (20) lifetime major depressive disorder, 8 % (2) with current obsessive-compulsive disorder, 20 % (5) with current alcohol abuse/dependence, 16 % (4) with current drug

abuse/dependence, 28 % (7) with current compulsive sexual behavior, and 12 % (3) with pathological gambling. Twelve percent (3) had lifetime pedophilia, 16 % (4) fetishism, 8 % (2) sexual sadism, 8 % (2) urophilia, 8 % (2) voyeurism, 8 % (2) male erectile disorder, and 56 % (14) any sexual disorder.

In a report focusing on the use of "deviant" fantasy, Dandescu and Wolfe (2003) gave a questionnaire to 25 exhibitionists; 24 % reported no masturbation to deviant fantasies prior to their first offense, but 76 % reported having had deviant masturbation prior to their first offense. Twelve percent reported no masturbation to deviant fantasies after their first actual offense, but 88 % reported deviant fantasies after their first actual offense. The average number of deviant masturbatory fantasies prior to the first offense was 93.9, and the average number of deviant fantasies after the first offense was 292.78. Exhibitionism has not been confined to men; there is one case described of a female (Hollander, Brown, & Roback, 1977).

Neurological and Biological Factors

Reports of neurological etiology for exhibitionism exist with Hooshmand and Brawley (1969) reporting on temporal lobe seizures causing exhibitionism and Comings and Comings (1982) reporting on a case of familial exhibitionism associated with Tourette's syndrome. Flor-Henry, Lang, Koles, and Frenzel (1988) reported on quantitative EEG assessment of 43 male genital exhibitionists and 46 normal controls. EEG power and coherence were significantly different in the exhibitionistic group, particularly during verbal processing, suggesting altered left hemispheric functions and disruption of interhemispheric relationships. Langevin, Lang, Wortzman, Frenzel, and Wright (1989) found subtle differences between a group of 15 male exhibitionists compared with 36 nonviolent, nonsex offender controls on CT brain scans, the Wechsler Adult Intelligence Scale, and the Halstead-Reitan Neuropsychological Test Battery, but no global differences. Lang, Langevin, Bain, Frenzel, and Wright (1989) reported on a hormonal study of 16 male exhibitionists compared with 15 controls and found that exhibitionists had lower estradiol and testosterone, but higher overall free testosterone. Overall, however, there have been no consistent biological markers or findings diagnostic of exhibitionism.

Diagnosis

The DSM-IV-TR diagnostic criteria for exhibitionism are (American Psychiatric Association, 2000):

A. Over a period of at least 6 months, recurrent, intense sexually arousing fantasies, sexual urges, or behaviors involving the exposure of one's genitals to an unsuspecting stranger.

B. The person has acted on these sexual urges, or the sexual urges or fantasies cause marked distress or interpersonal difficulty (p. 569)

Långström (2010) reviewed the empirical literature relevant to diagnostic criteria for exhibitionism for the upcoming Diagnostic and Statistical Manual of Mental Disorders (NB-DSM-5) and made several suggestions, some of which were adopted by the NB-DSM-5 Sexual Disorders Workgroup. The diagnosis of exhibitionism was changed to exhibitionistic disorder and the NB-DSM-5 criteria are as follows (APA, 2013).

Exhibitionistic Disorder

A. Over a period of at least 6 months, recurrent and intense sexual arousal from the exposure of one's genitals to an unsuspecting person, as manifested by fantasies, urges or behaviors.

B. The individual has acted on these sexual urges with a nonconsenting person, or the sexual urges or fantasies cause clinically significant distress or impairment in social, occupational, or other important areas of functioning.

Specify whether:

Sexually aroused by exposing genitals to prepubertal children

Sexually aroused by exposing genitals to physically mature individuals

Sexually aroused by exposing genitals to prepubertal children and to physically mature individuals

Specify if:

In a controlled environment: This specifier is primarily applicable to individuals living in institutional or other settings where opportunities to expose one's genitals are restricted

In full remission: The individual has not acted on the urges with a nonconsenting person, and there has been no distress or impairment in social, occupational, or other areas of functioning, for at least 5 yeasts while in an uncontrolled environment (p. 689)

Many of the changes in NB-DSM-5 were criticized (Frances, 2009a, 2009b, 2009c; Hinderliter, 2010). In terms of making a diagnosis, it should be noted that this is a significant change from DSM-IV-TR, inasmuch as even if an individual does not admit to such sexual arousal, the text allows that such a diagnosis can be made if there is a criminal record or other evidence suggesting that a pattern of sexual arousal is present. In an individual who is willing to admit, self-report can be given substantial credence.

As far as the use of specialized testing, to our knowledge, no study involving psychological testing has isolated exhibitionists as a separate category with a clearly defined set of characteristic responses on any single or multiple reliable and validated psychological tests (Maletsky, 1997). This lack of assessment studies on exhibitionism alone is surprising because exhibitionists have comprised the largest diagnostic groups treated as sex offenders (Maletzky, 1991; McConaghy, 1993).

Plethysmography, viewing time assessment, and other laboratory examinations are not useful because of the lack of

validated stimulus sets, which would distinguish exhibitionists from controls. Freund et al. (1984) compared 16 exhibitionists with 16 sexually normal controls on penile responses to auditorily presented descriptions of the four phases of normal sexual interaction and found no differences between the two groups. Marshall, Payne, Barbaree, and Eccles (1991) reported on plethysmographic assessment of 41 men who were exhibitionists compared with 20 controls; exhibitionists had greater arousal to exposing tapes than did non-offenders, but the arousal of the exhibitionists did not correlate with the number of victims or chronicity and led the authors to question the value of erectile testing for this group. Indeed, Marshall and Fernandez (2003) reviewed 10 studies employing phallometry with exhibitionists and found that 9 of 10 suggested that exhibitionists in clinical settings did not have a preference for exposing themselves. Maletsky (1997) opined that the use of plethysmography to assess exhibitionists remained controversial. Differential diagnosis should focus on other paraphilias, sexual disorders, and other psychiatric disorders, including substance use and affective disorders given the very high occurrence of comorbidity cited in the above studies; the possibility of a neurological disorder should be kept in mind.

Risk for Other Crimes and Risk of Recidivism

Several early studies reported that exhibitionists also had histories of crimes of sexual violence. Radzinowicz (1957) in a large survey reported that exhibitionists accounted for about a third of recidivist sexual offenders in England and Wales and that about half of her sample had a prior history of a previous sexual assault. Rooth (1973b) reported on a series of 30 persistent exhibitionists, 3 also had histories of indecent assault against adults, but 11 had a history of offenses against minors. Myers and Berah (1983) compared psychiatric assessments of 65 pedophiles and 45 exhibitionists in Australia, all of whom had pled guilty and who were interviewed in a semistructured way over a 9-year period. Exhibitionists were younger, less likely to have problems with alcohol, remained in school longer, performed better educationally, and had better work histories.

Lang et al. (1987) found that 20 % of exhibitionists had a history of violence-related sexual offenses. Grassberger, cited in Sugarman, Dumughn, Saad, Hinder, & Bluglass (1994), in a 25-year study of a large sample of indecent exposures in Austria found that 12 % were later convicted of rape. Abel et al. (1988) found that 93 % of 142 sex offenders with exhibitionism had other paraphilias and had committed sexual assaults; for example, 25 % had committed rape. Freund (1990) found that 15 % of exhibitionists had committed rape. A serious drawback of these studies is a bias toward serious offenders, as many with exhibitionism first came to legal notice because of offenses involving physical contact. Another confound is the fact that different criteria are used for exhibitionism, ranging from DSM criteria of the period to as few as one instance of exhibitionism.

Berlin et al. (1991) reported on a 5-year follow-up survey of criminal recidivism in a treated cohort of 111 exhibitionists. The sexual recidivism rate for this group was 23.4 %; treatment compliant exhibitionists had a 12.5 % sexual recidivism rate. Exhibitionists who did recidivate generally did not commit more serious sexual offenses.

Sugarman et al. (1994) reported on a study in Great Britain of the case records of 210 subjects who were arrested for exhibitionism, with criminal record data extending for a follow-up period of 8–25 years. It was found that at least 26 % had at least one conviction for a contact sex offense. Unpublished data cited by Långström (2010) found that of all 16,000 men convicted of sexual offenses in Sweden between 1973 and 2004, 15 % had been convicted of sexual harassment offenses (which were heavily dominated by exhibitionistic acts), and at least one had a prior or subsequent conviction for a contact sexual offense (such as rape, sexual coercion, or child molestation).

Rabinowitz Greenberg, Firestone, Bradford, and Greenberg (2002) reviewed archival data from medical files and police files of 221 exhibitionists who were assessed at a university teaching hospital between 1983 and 1996. A mean follow-up period of 6.84 years was obtained; 11.7 % of exhibitionists were charged with or convicted of a sexual offense, 16.8 % a violent offense, and 32.7 % a criminal offense. Sexual offending recidivists had more prior sexual and criminal offenses and were less well educated. Hands-on sexual recidivists had higher PCL-R scores (Hare, 1990), higher pedophile and rape indices on plethysmography, and more prior sexual, violent, and criminal offenses than did hands-off counterparts.

Finally, looking at extremely serious sexual crimes, Ressler, Burgess, Hartman, Douglas, and McCormack (1986), in a study of 28 sexual murderers, reported that 25 % had indicated an involvement with indecent exposure. Dietz, Hazelwood, and Warren (1990) in a review of 30 sexually sadistic criminals reported that 20 % had a history of peeping, obscene telephone calls, or indecent exposure. Hill, Habermann, Berner, and Briken (2007), reviewing psychiatric and court records of 166 sexual murderers in Germany, found that 3.6 % (6) had a history of exhibitionism. Stermac and Hall (1989), in a review of the criminal histories of 50 sexual offenders from the Clarke Institute of Psychiatry, classified offenders as escalators, non-escalators, and first-time offenders and found that escalators committed more serious sexual assaults against strangers, were younger, and had a previous psychiatric history.

Another way of determining dangerousness is to examine diagnoses of individuals civilly committed in the United

States. Becker, Stinson, Tromp, and Messer (2003) reported on 120 men petitioned for civil commitment within the State of Arizona using DSM-IV criteria; 14 % had exhibitionism. Levenson (2004) reported on DSM-IV diagnoses of 450 men evaluated for Florida's civil commitment program. Of 229 recommended for commitment, 8 % had a diagnosis of exhibitionism; of 221 recommended for release, 4 % had a diagnosis of exhibitionism. Elwood, Doren, and Thornton (2010) reported on DSM-IV criteria for 331 men committed under Wisconsin's civil commitment program; 7 % had a diagnosis of exhibitionism. Jackson and Richards (2007) reported on a chart review of diagnoses of 190 civilly committed men in Washington State. Diagnostic criteria were not specified but 27 or 14.2 % of subjects received a diagnosis of exhibitionism.

Treatment and Risk Management

The above data suggest that exhibitionism, far from being a nuisance crime, can be associated with other paraphilias and violent sexual behavior. A careful assessment is the cornerstone of any treatment, with establishment of diagnoses and targets for treatment. Alcohol use disorder, drug use disorders, personality disorders, and psychotic disorders increase the risk of relapse of sex offenders (Langstrom, Sjostedt, & Grann, 2004), and it is important to treat these in order to reduce this risk. It also is important to perform a careful risk analysis using a clinical interview and appropriate actuarial instruments. Most treatment studies have been developed with other types of offenders and used with exhibitionists on the expectation that they will be effective (Morin & Levenson, 2008). Cognitive-behavioral treatment, covert sensitization, masturbatory satiation, and relapse prevention are all behavioral methods which can be employed (Abel et al., 1984; Abel & Osborn, 1996; Krueger & Kaplan, 2002a; Maletzky, 1991). Berlin et al. (1991) reported on a 5-year follow-up survey of criminal recidivism in a treated cohort of 111 exhibitionists and found a sexual recidivism rate for this group of 23.4 %; treatment compliant exhibitionists had a 12.5 % sexual recidivism rate. Treatment methods were not specified for the group of exhibitionists in particular, but for the entire cohort of 406 men; the primary mode of treatment was a 90-min group therapy; about 40 % had testosterone-lowering medications. Biological treatments are available but have not been studied on a group of exhibitionists. The largest open label study of androgen reduction therapy for the treatment of individuals with paraphilias was reported by Rosler and Witztum (1998) on a group of 30 males treated with triptorelin for 4 months to 4 years. No one relapsed while on treatment; 7 of these individuals had a diagnosis of exhibitionism. Open treatment of this group has continued, with the number being increased to 100 individuals and the period of follow-up to 15 years, with similar results (Rosler & Witztum, 2009). In our experience (Krueger & Kaplan, 2001) gonadotropin-releasing hormone agonists have worked very well for some exhibitionists who have a high frequency of sexual outlet.

Voyeurism

Epidemiology

Traditionally, individuals in the process of committing voyeuristic acts are arrested for other crimes, such as "trespassing" (in the United States) or "breach of the peace" or "being a public nuisance" (in Great Britain). Therefore, it has been difficult to assess the prevalence of voyeurism. However, in Great Britain in the Sexual Offenses Act of 2003, voyeurism was created as an offense, criminalizing those who watch people engaged in a private act without their consent (The Crown Prosecution Service, 2010). This protects against the installation of cameras in public changing areas or being spied upon inside public buildings where there is an expectation of privacy (Bancroft, 2009) (p. 468). In the United States, Simon (1997) reported on several cases of video voyeurs who had covertly videotaped unsuspecting victims and recommended the inclusion of appropriate criminal sanctions in privacy statutes; these exist in several states. The fact that voyeurism has been added as a separate offense category will make it easier to track its prevalence in the future. Långström and Seto (2006) reported in their study of 2,450 randomly selected 18- to 60-year-olds who were interviewed that 191 (8 %; 12 % of men and 4 % of women) reported at least one incidence of being aroused by spying on unsuspecting others having sex. Mann, Ainsworth, Al-Attar, and Davies (2008) commented that research on voyeurism has been "extremely limited," and there is not nearly the amount of literature on voyeurism that there is on exhibitionism.

Clinical and Other Samples

Clinical or forensic samples have generally found a high rate of voyeurism and of co-occurring paraphilias. Yalom (1960) reported that of 8 voyeurs, only 1 had engaged in exhibitionism; 6 of his patients had serious charges of assault. Gebhard et al. (1965) reported that of 56 voyeurs, 34 of the criminal convictions had been for sex offenses, and of these, 25 (45 %) had been convicted solely of sex offenses; 24 had been convicted of exhibitionism, and 11 had been convicted of offenses involving coercion.

Langevin, Paitich, and Russon (1985) reported on two studies, the first of 422 sexually anomalous men, none of whom were "pure" voyeurs. Of the 45 who admitted to

voyeurism, 33 had masturbated outdoors, 25 exhibited, 22 engaged in frottage, and 20 in toucherism. In a second study of 31 men who admitted to voyeuristic behavior, voyeurism was the dominant outlet for only 7; 24 had engaged in outdoor masturbation and 23 in exhibitionism.

Lang et al. (1987) reported that of 34 exhibitionists, 71 % (22) had peeped at solitary females disrobing, and 41 % (14) had peeped at intercourse. Freund and Blanchard (1986) reported that of 7 voyeurs, 2 had engaged in exhibitionistic behavior and of 86 exhibitionists, 22 were also voyeurs. In an additional analysis of 950 sexual offenders from their clinic, 87 % of those who admitted to voyeurism had at least one other sexual anomaly.

Freund (1990) reported that of 94 men who had admitted to voyeuristic activity, 77 (82 %) had also engaged in exhibitionism, 36 (38 %) had also engaged in toucherism or frottage, and 18 (19 %) had engaged in rape. Ninety percent of these men (85) had engaged in at least one other sexual anomaly. Freund and Watson (1990) reported that of 125 voyeurs, 50 were also exhibitionists, 52 touchers, and 73 (58 %) had other paraphilias (including rape).

Abel and Rouleau (1990) reported that of 62 voyeurs, only 1 was a "pure" voyeur. Six had one additional paraphilia, 17 two additional paraphilias, 9 three additional paraphilias, and the remaining 29 (46.8 %) had four or more additional paraphilias. In another report (American Psychiatric Association, 1999), Abel indicated that 20.2 % of 2,129 patients assessed acknowledged voyeurism. In a more recent report of 47,265 males and 1,684 females, Abel and Wiegel (2009) reported that 6, 525 males (13.8 %) reported voyeurism and 43 (2.6 %) of females reported voyeurism.

Bradford et al. (1992) reported that of 443 adult males studied, 115 admitted to voyeurism, and of these 30 % were diagnosed with heterosexual pedophilia, 30 % with heterosexual hebephilia, 15 % with homosexual pedophilia, 10 % with homosexual hebephilia, 15 % with cross-dressing, 20 % with scatologia (lewdness), 33 % with frotteurism, 23 % with attempted rape, 12 % with rape, and 27 % with exhibitionism.

A study by Templeman and Stinnett (1991) of 60 male college students in a rural town in the United States reported that 42 % had secretly watched others in sexual situations. When students were asked to rank order their preference in a variety of paraphilic behaviors, voyeurism and frotteurism were the most popular.

In a more recent study of 61 adults of both genders in a small town in South India, 41 % reported voyeurism (Kar & Koola, 2007). Rye and Meaney (2007) asked university students about the likelihood on a scale of 1–100 % that they would secretly watch two attractive people having sex or an attractive person undress. When the risk of being caught was changed from 0 to 25 %, the mean likelihood fell from 84 to 61 % for men and 74 to 36 % for women. We have found no reports enumerating the number of victims or victim accounts of voyeurism, although a substantial number must exist, given prosecution for this behavior or crimes, such as trespassing, associated with it.

Offender and Offense Characteristics and Comorbidity

Abel et al. (1988) reported on types of deviant sexual behavior of 561 nonincarcerated paraphiliacs in Memphis, Tennessee, and New York, New York. DSM-II and DSM-III criteria were used, with the modification that one completed act could qualify a subject as making a diagnostic category. Most subjects had a history of multiple paraphilias, and most progressed through a variety of paraphilias to express one, which was preferred. Some expressed several paraphilias at the same time, and subjects could be diagnosed with multiple paraphilias simultaneously. Sixty-two had this as a diagnosis, and only 1.5 % of these had this as a sole diagnosis. Voyeurs had an average of 4.8 paraphilias.

Kafka and Hennen (1999) reported on a sample of 206 consecutively evaluated males seeking help for paraphilias or sexual impulsivity disorders; semistructured intake questionnaires and sexual inventories were used. Of this group, 143 had paraphilias and 35, or 24 %, were voyeurs. Eight-six percent of the group with paraphilias had at least one lifetime paraphilia-related disorder, now known as a hypersexual disorder.

Långström and Seto (2006) additionally reported on association between voyeuristic behaviors and correlates and risk factors. Voyeuristic behaviors were weakly to moderately but positively associated with being male, having more psychological problems, lower satisfaction with life, greater alcohol and drug use, and greater sexual interest and activity in general (more sexual partners, greater arousability, and higher frequency of masturbation and pornography use and greater likelihood of having a same-sex sexual partner).

Diagnosis

The DSM-IV-TR diagnostic criteria for voyeurism are (American Psychiatric Association, 2000):

> A. Over a period of a least 6 months, recurrent, intense, sexually arousing fantasies, sexual urges, or behaviors involving the act of observing an unsuspecting person who is naked, in the process of disrobing, or engaging in sexual activity.
> B. The person has acted on these sexual urges, or the sexual urges or fantasies cause marked distress or interpersonal difficulty. (p. 575)

Långström (2010) reviewed the diagnostic criteria for exhibitionism, voyeurism, and frotteurism for the NB-DSM-5

and made a number of suggestions, some of which were adopted by the workgroup. NB-DSM-5 changed the diagnostic name from voyeurism to voyeuristic disorder. The NB-DSM-5 criteria for voyeuristic disorder are (APA, 2013):

> Voyeuristic Disorder
>
> A. Over a period of at least 6 months, recurrent and intense sexual arousal from observing an unsuspecting person who is naked, in the process of disrobing, or engaging in sexual activity, as manifested by fantasies, urges or behaviors.
> B. The individual has acted on these sexual urges with a nonconsenting person, or the sexual urges or fantasies cause clinically significant distress or impairment in social, occupational, or other important areas of functioning.
>
> *Specify if:*
> In a controlled environment: This specifier is primarily applicable to individuals living in institutional or other settings where opportunities to expose one's genitals are restricted.
> In full remission: The individual has not acted on the urges with a nonconsenting person, and there has been no distress or impairment in social, occupational, or other areas of functioning, for at least 5 yeasts while in an uncontrolled environment (p. 686-687).

Virtually all authorities recognize the importance of a clinical interview (Hanson & Harris, 1997; Mann et al., 2008). Freund, Watson, and Rienzo (1988) reported on the Erotic Preferences Examination Scheme (EPES) developed by Freund and others at the Clark, which contains 6 items addressing voyeurism. This scale appears to be clinically useful and has been psychometrically validated. Nichols and Molenda (1984) developed the Multiphasic Sex Inventory (MSI), which has face validity, but its ability to distinguish voyeurs from other groups has yet to be tested (Hanson & Harris, 1997). They have developed a Multiphasic Sex Inventory-II (Nichols and Molenda (2005) which contains items on voyeurism and exhibitionism. The Clarke Sex History Questionnaire (Langevin & Paitich, 2002) contains a six-item peeping scale, but has not yet been used to compare known groups of voyeurs with other paraphiliacs. The Abel-Becker Card Sort (Holland, Zolondek, Abel, Jordan, & Becker, 2000) contains 5 of 75 items targeting voyeurism; it showed a high level of reliability and concurrent validity. We have been unable to locate phallometric studies that differentiate voyeurs from controls, but, in theory, it would be possible to develop such stimuli (Hanson & Harris, 1997).

Risk for Other Crimes and Risk of Recidivism

Ressler et al. (1986) in a study of 28 sexual murderers reported that 71 % had indicated an involvement with voyeurism. Dietz et al. (1990) in a review of 30 sexually sadistic criminals reported that 6, or 20 %, had a history of peeping, obscene telephone calls, or indecent exposure. Hill et al. (2007) reviewing psychiatric and court records of 166 sexual murderers in Germany found that 10, or 6.0 %, had a history of voyeurism. Langevin (2003) reported on a study of 33 sex killers compared with 80 sexual aggressives, 23 sadists, and 611 general sex offenders examining a number of characteristics; he found that 42.42 % of the sex killers were diagnosed with voyeurism, 33.75 % of the sexual aggressives, 34.78 % of the sadists, but only 20.95 % of the general sex offenders.

Another way of determining dangerousness is to examine diagnoses of individuals civilly committed in the United States. Becker et al. (2003) reported on 120 men petitioned for civil commitment within the State of Arizona using DSM-IV criteria; 13 % had voyeurism. Levenson (2004) reported on DSM-IV diagnoses of 450 men evaluated for Florida's civil commitment program; of this group, only 12 had noncontact offenses (exhibitionism, voyeurism, and computer-related sex crimes). Voyeurism was not specifically reported on. Subjects could have more than one diagnosis. Elwood et al. (2008) reported on DSM-IV criteria for 331 men committed under Wisconsin's civil commitment program; voyeurism was not specified. Jackson and Richards (2007) reported on a chart review of diagnoses of 190 civilly committed men in Washington State. Diagnostic criteria were not specified but 12.6 % (24) of subjects received a diagnosis of voyeurism. It should be noted that no studies reported that they had used structured diagnostic instruments to establish paraphilic or other diagnoses and none utilized polygraphy.

Treatment and Risk Management

There are a number of case reports of voyeurs treated with behavior therapy which are described by Mann et al. (2008). Given the popularity of specific cognitive-behavioral treatment for sexual offenders (Marshall, Anderson, & Fernandez, 1999), it is surprising that there are no accounts that we have been able to find of comprehensive cognitive-behavioral treatment of voyeurs. Rather, methods developed on groups of sex offenders generally have been applied to voyeurs (Krueger & Kaplan, 2002a). Likewise, pharmacotherapy has been studied on heterogeneous groups of sexual offenders and used with voyeurs without any controlled documentation of effect for this specific disorder (Gijs & Gooren, 1996; Rösler & Witztum, 2000). Rosler and Witztum (1998) in their series of 30 males treated for 4 months to 4 years identified 2 as having voyeurism. Krueger and Kaplan (2001) in their series of 12 cases treated with depot-leuprolide acetate had 3 individuals whose deviancies included voyeurism; this treatment was given after individuals failed to respond to cognitive-behavioral treatment and in once case to depot-provera. A new algorithm for biological

treatment has been proposed (Thibaut et al., 2010) which may be consulted and which contains only suggestions for treatments for paraphilias in general but not for specific paraphilias such as voyeurism. As with all sex offenses, it is important to complete a comprehensive assessment using appropriate actuarial instruments and treat disorders which are related to the criminal behavior in order to reduce recidivism (Andrews & Bonta, 2006; Kutcher, 1982; Langstrom et al., 2004).

Possession of Child Pornography

Prevalence

The Internet has transformed child pornography into a lucrative criminal trade (Bryan-Low, 2006). *The Wall Street Journal* reported in 2006 an estimate that the child pornography business could bring in billions of dollars annually (Bryan-Low, 2006). Along with the growth of child pornography, there has been a growth of arrests for federal offenses against children. Motivans and Kyckelhahn (2007) reported that during 2006, 3,661 suspects were referred to US attorneys for offenses involving child sexual exploitation. Six in 10 child sex crime suspects were prosecuted in 2006, up from 4 in 10 in 1994. Child pornography offenses constituted 69 % of these referrals, followed by sex abuse (16 %) and sex transportation (14 %). Overall, 9 of 10 defendants were convicted and sentenced to prison, up from 8 in 10 in 1994. Wolak, Finkelhor, and Mitchell (2009) reported that including the Internet Crimes Against Children agencies and State and Local Agencies, the total number of arrests for online child sexual exploitation crimes (including both child pornography and exploitation of children) had increased from 2,577 in 2000 to 7,010 in 2006, an increase of 272 %. There was also an increase in the median prison sentence from 36 months to 63 months over this period; most suspects were white, male, US citizens, and had attended some college. Federal arrests for child sex offenses have grown at a 15 % rate, making these among the fastest growing crimes in the federal justice system (Motivans & Kyckelhahn, 2007). Under one federal statute (18 U.S.C. 2252) used to prosecute child pornography, convictions rose from 58 in 1994 to 442 in 2000 to 1295 in 2008 (Stewart, 2009).

Furthermore, sentences for such crimes are increasing (Hessick, 2010). In 1990, federal law punished the possession of child pornography by up to 10 years of imprisonment; in 1996, this was increased to 15. In 2003, a mandatory minimum of 5 years sentence was added, and the statutory maximum was raised to 20 years. All 50 states have specific provisions criminalizing the possession of child pornography, and 30 states have increased penalties for possession of child pornography since criminalizing it (Hessick, 2010).

Offender and Offense Characteristics and Comorbidity

Most studies to date have reported on demographic and psychological features of men arrested for child pornography or reported on the relationship between child pornography offenses and contact sexual offenses, but have not examined psychiatric diagnoses in this population. Galbreath, Berlin, and Sawyer (2002) reported on a review of cases of 39 outpatients who had entered their program for sexual problems involving the Internet. Of these, 54 % had looked at child pornography, and 33 % had tried to meet a minor over the Internet for sexual purposes. Of the whole group, 49 % received a diagnosis of paraphilia not otherwise specified (which was not further characterized), 23 % pedophilia, 8 % voyeurism, 3 % exhibitionism, and 18 % received no paraphilic diagnosis.

Quayle and Taylor (2002) reported on interviews of 13 men convicted of downloading child pornography; of these, 4 had also been convicted of assault on children. Frei, Erenay, Dittmann, and Graf (2005) reviewed files of 33 offenders convicted of child pornography in Switzerland; only 1 had a "relevant" criminal record, suggesting that most had not been arrested for sexual offenses before. Alexy, Burgess, and Baker (2005) reviewed 225 cases published in the news media, classifying these as "traders" (individuals who traded or collected child pornography), "travelers" (individuals who engaged in discussion with children online and used their skills at manipulation to try and meet a child for sexual purposes), and "trader-travelers" (individuals who engaged in both activities). They found no common profile and suggested that the classification of Internet offenders would be complicated.

Wolak, Finkelhor, and Mitchell (2005b) in a study regarding child pornography offenders reported that law enforcement agencies made an estimated 1,713 arrests nationally during the 12 months beginning July 1, 2000. Ninety-one percent of these men were white, 8 % older than 25, and 3 % younger than 18. Eighty-three percent had images of prepubescent children, 80 % of these graphically depicting sexual penetration. Twenty-one percent had images depicting sexual violence toward children, such as torture, rape, or bondage; 39 % had at least 1 video depicting child pornography. Forty percent of those arrested for child pornography were "dual offenders" who both sexually victimized children and possessed child pornography with both crimes discovered in the same investigation. In the overall study, 39 % of arrested offenders who met victims online and 43 % of offenders who solicited undercover agents were dual offenders. Ninety-six

percent of child pornography offenders were convicted or pled guilty, and 59 % were incarcerated.

Seto, Cantor, and Blanchard (2006) assessed 685 men referred to their clinic with penile plethysmography and found that possession of child pornography was a valid diagnostic indicator of pedophilia as represented by an index of phallometrically measured sexual arousal toward children. Indeed, as a group, child pornography offenders showed greater arousal to children than to adults and demonstrated greater arousal to children than did contact sex offenders against children, sex offenders against adults, and general sexology patients. Conversely, Blanchard et al. (2007), in an analysis of 832 males assessed in their clinic with plethysmography, reported the absence of any relations between output index (a measure of phallometric response to stimuli involving children) and child pornography offenders. The difference in the two studies can be explained by a difference in the two types of plethysmographic analyses. In the study by Seto et al. (2006), plethysmographic responses for each individual were ipsatively standardized, i.e., each subject's phallometric test scores were transformed to have a mean value of zero and a standard deviation of one, which allowed for the computation of the relative interest of a subject in various categories of stimuli. In the later study by Blanchard et al. (2007), absolute values (an output index) were used. These absolute values showed no relation to child pornography offenses. Given that men whose primary sexual interest is in adults can also have substantial responses to stimuli of prepubescent or pubescent children, relative ascertainment of interests is imperative (Blanchard et al., 2009). What is important is not that a patient or subject becomes aroused to a stimulus but how aroused they become to a particular category of stimuli compared with other categories of stimuli. Blanchard et al. (2007) also reported that child pornography offenders were more apt to be intelligent and better educated. Seto, Reeves, and Jung (2010) reported that about half of a combined sample of 84 child pornography offenders acknowledged that child pornography was sexually arousing. Wolak, Finkelhor, and Mitchell (2005a) reported the typical child depicted in child pornography is a prepubescent girl.

A study by Webb, Craissati, and Keen (2007) compared a group of 90 individuals convicted of charges involving child pornography with 120 child molesters. Internet offenders reported more psychological difficulties in adulthood and fewer prior sexual convictions. They were less likely to fail in the community and had fewer antisocial behaviors. A study by Elliott, Beech, Mandeville-Norden, and Hayes (2009) compared a group of 505 Internet sex offenders (convicted of charges involving child pornography) with 526 contact sex offenders on a range of psychological measures and found that the pornography offenders could be successfully discriminated from the contact offenders on 7 out of 15 measures, with elevated scores on scales of fantasy, underassertiveness, and motor impulsivity associated with the Internet offense type and an increase in scores of scales of locus of control, perspective taking, empathic concern, overassertiveness, victim empathy distortions, cognitive distortions, and cognitive impulsivity predictive of a contact offense type.

Bates and Metcalf (2007) compared psychometric test assessments of 39 men convicted of noncontact Internet sex offenses with 39 men convicted of contact offenses against a specific victim. The Internet group had higher rates of socially desirable responding, emotional loneliness, and underassertiveness and lower scores on external locus of control, sexualized attitudes toward children, emotional congruence with children, and empathy distortions with regard to victims of abuse.

Krueger, Kaplan, and First (2009) reported on a chart review of 60 males arrested for crimes against children involving the Internet; of this group, 63 % (38) were arrested for possession of child pornography, and the second group of 22 were arrested for attempting to meet a child (with 20 of 22 of this group also possessing child pornography). Of the entire group, 40 % had at least one paraphilia; 31 % had a diagnosis of pedophilia, and 18 % of a paraphilia not otherwise specified, characterized by a dysfunctional interest in teenagers. Thirty-three percent had a sexual disorder not otherwise specified or a hypersexual disorder. Individuals arrested for pornography only were significantly more likely to have a diagnosis of hypersexual disorder characterized by pornography dependence, and those arrested for trying to meet a child over the Internet were significantly more likely to have a diagnosis of hypersexual disorder characterized by cybersexual dependence. There was no significant difference in the frequency of paraphilic diagnoses in the group arrested for possession only compared with the group arrested for trying to meet a child. Of the entire group, only 1 had a conviction for a prior sexual crime (which involved trying to meet a child over the Internet) and 2 for prior nonsexual crimes. There was also a very substantial comorbidity, with 70 % having an active Axis I disorder associated with the criminal behavior leading up to their arrest. Thirty-seven percent had an associated mood disorder at the time of the commission of the crime and 23 % a substance use disorder. This high rate of comorbidity has been reported in previous studies of men arrested for crimes against children over the Internet (Galbreath et al., 2002), hypersexual males (Black, 1998, 2000), and contact sexual offenses (Dunsieth et al., 2004; McElroy et al., 1999; Raymond et al., 1999). The high rate of paraphilias and of hypersexual disorders has a direct relationship to the criminal behavior. The other comorbid disorders (primarily affective and substance use disorders) have a more indirect relationship. This may stem from some common underlying genetic diathesis, from common environmental or familial influences (such as familial sexual abuse

predisposing to depression, substance use disorders, and a higher likelihood to engage in sexual abuse) or from stressors in the environment impacting on both sexual and mood regulatory systems.

McCarthy (2010) reported on a record review of 107 adult male sex offenders who had participated in a sex offender treatment program in New York City. All offenders had a history of conviction for possession of child pornography, and each offender had passed a polygraph examination concluding that he either had or did not have a history of sexually abusing a minor. Additionally, offenders who admitted to sexually abusing a minor in the absence of a polygraph examination were included. The records were divided into two groups, noncontact offenders ($n=56$) and contact offenders ($n=51$). Diagnoses were made using DSM-IV criteria (American Psychiatric Association, 1994), and in addition, an Abel Assessment (Abel, 1995b), clinical interview, self-report, and records were used to make diagnoses. For the group as a whole, results showed that 82.2 % were white, and 55.1 % were single and had never married. Thirty-five percent had some college, 2 % completed undergraduate school, and 10 % graduate school. Twenty-seven percent of offenders had a history of drug use and 21 % of alcohol abuse, 29 % a history of depression, and 35 % a history of anxiety. Fourteen percent had more than one conviction for a sexual crime, and 21 % had a conviction for a nonsexual crime. Fifty-two percent received a diagnosis of pedophilia, with 26 % of those attracted to females, nonexclusive type. Comparing the two groups, there was no statistically significant difference in age, time at which offenders began viewing Internet child pornography, race/ethnicity, marital status, education attainment, or history of childhood abuse. However, contact offenders were more likely than noncontact offenders to have a history of drug abuse, more than one conviction for a sexual crime, and to receive a diagnosis of pedophilia. Contact offenders were more likely than noncontact offenders to masturbate to child pornography and download child pornography to an external medium. There were no significant differences between groups in trading, paying for, concealing, or organizing child pornography, but when these variables were combined, offenders who engaged in a combination of these behaviors were more likely to be part of the contact group. Contact offenders were more likely than noncontact to view child modeling websites and view erotic stories involving minors. Contact offenders had significantly more involvement with minors online than noncontact offenders, being more likely to chat in a sexual manner, send child pornography, adult pornography, and attempt to meet a minor. Contact offenders were more likely than noncontact to communicate both online and in person with others who shared their deviant interests. The percentage of offenders trading adult pornography online and paying for adult pornography online was higher for adult offenders. Contact offenders were more likely to engage in cybersexual behavior with adults than noncontact offenders.

Henry, Mandeville-Norden, Hayes, and Egan (2010) reported on a cluster analysis of 422 men who were Internet-based sex offenders; this sample was extracted from an initial group of 633 participants, with missing data precluding 211 offenders from the analysis. Of the initial sample, 594 (93.8 %) were convicted of making indecent images of children, 38 (6 %) of taking indecent images of children, and 1 (0.2 %) of inciting a child into sexual activity. Three clusters were identified, the apparently normal, the inadequate, and the deviant. Overall, the clusters were equivalent to contact sexual offender groupings.

Sheehan and Sullivan (2010) reported on an in-depth study of four males convicted of manufacturing indecent images of children. While all made reference to the Internet as having an impact on their sexual interest in children, analysis suggested that most had developed a sexual interest in children before using the Internet. All had downloaded indecent images of children prior to embarking on the manufacture of images.

Diagnosis

The DSM-IV-TR criteria for pedophilia are relevant for the assessment of individuals involved with child pornography. These are (American Psychiatric Association, 2000):

A. Over a period of at least 6 months, recurrent, intense sexually arousing fantasies, sexual urges, or behaviors involving sexual activity with a prepubescent child or children (generally age 13 years or younger).
B. The person has acted on these sexual urges, or the sexual urges or fantasies cause marked distress or interpersonal difficulty.
C. The person is at least age 16 years and at least 5 years older than the child or children in Criterion A.

Note: Do not include an individual in late adolescence involved in an ongoing sexual relationship with a 12- or 13-year old.
Specify if:
Sexually Attracted to Males
Sexually Attracted to Females
Sexually Attracted to Both
Specify if:
Limited to Incest
Specify type:
Exclusive Type (attracted only to children)
Nonexclusive Type (p. 572)

Blanchard (2010a) reviewed the diagnostic criteria for pedophilia and recommended several significant changes; he wrote, "I recommend that, for diagnostic purposes, photographed children and impersonated children be treated the same as real children." His recommendations were discussed with the workgroup, posted on the NB-DSM-5 website, and modified. These suggestions have been the focus of criticism

and response (Blanchard, 2010; First, 2010; Moser, 2010). Ultimately Blanchard's suggestion for renaming Pedophilia to Pedohebephilic Disorder was rejected. The name of the diagnosis was changed from Pedophilia to Pedophilic Disorder, and the criteria used were drawn almost unchanged from DSM-IV-TR (the only change being the substitution of the word "individual" for the word "person." These criteria are as follows:

Pedophilic Disorder

A. Over a period of at least 6 months, recurrent, intense sexually arousing fantasies, sexual urges, or behaviors involving sexual activity with a prepubescent child or children (generally age 13 years or younger.).
B. The individual has acted on these sexual urges, or the sexual urges of fantasies cause marked distress or interpersonal difficulty.
C. The individual is at least age 16 years and at least 5 years older than the child or children in Criterion A. Note: Do not include an indivdual in late adolescence involved in an ongoing sexual relationship with a 12- or 13-year-old.

Specify whether:
Exclusive type (attracted only to children)
Non exclusive type

Specify if:
Sexually attracted to males
Sexually attracted to females
Sexually attracted to both

Specify if:
Limited to incest

It should be noted that the new criteria now include the use of child pornography under B3. The occurrence of hypersexuality in association with the Internet (Bancroft, 2009), the co-occurrence of hypersexual and paraphilic disorders (Kafka & Hennen, 1999; Kafka & Prentky, 1992), and the study by Krueger et al. (2009) suggest that another diagnosis suggested by the NB-DSM-5 Workgroup would be relevant, that of hypersexual disorder.

The support for this possible diagnostic category was reviewed by Kafka (2010b). It has not been without its critics and debate (Kafka & Krueger, 2011; Kaplan & Krueger, 2010a; Moser, 2011; Winters, 2010; Winters, Christoff, & Gorzalka, 2010). The Paraphilias Workgroup proposed criteria which were posted on the NB-DSM-5 website of the APA; these criteria are no longer available on the APA website. The criteria proposed were quite similar to those originally suggested by Kafka (2010) in his review for the proposed diagnosis of Hypersexual Disorder and these criteria were as follows:

Proposed Diagnostic Criteria for Hypersexual Disorder

A. Over a period of at least 6 months, recurrent and intense sexual fantasies, sexual urges, or sexual behaviors in association with 3 or more of the following 5 criteria:
   (1) Time consumed by sexual fantasies, urges or behaviors repetitively interferes with other important (non-sexual) goals, activities and obligations.
   (2) Repetitively engaging in sexual fantasies, urges or behaviors in response to dysphoric mood states (e.g., anxiety, depression, boredom, irritability).
   (3) Repetitively engaging in sexual fantasies, urges or behaviors in response to stressful life events.
   (4) Repetitive but unsuccessful efforts to control or significantly reduce these sexual fantasies, urges or behaviors.
   (5) Repetitively engaging in sexual behaviors while disregarding the risk for physical or emotional harm to self or others.
B. There is clinically significant personal distress or impairment in social, occupational or other important areas of functioning associated with the frequency and intensity of these sexual fantasies, urges or behaviors.
C. These sexual fantasies, urges or behaviors are not due to the direct physiological effect of an exogenous substance (e.g., a drug of abuse or a medication).

Specify if:
Masturbation
Pornography
Sexual Behavior with Consenting Adults
Cybersex
Telephone Sex
Strip Clubs
Other: (p. 379)

Glasgow (2010) described the use of digital evidence to aid in risk assessment of Internet offenders; it can also be very useful for diagnosis, given the new criteria for pedophilia. A forensic analysis of the computer's content is exceedingly important. How many images are there? Are they still or moving? What dates do they span? Are they segregated or organized? What proportion of the images is of minors and what proportion is of adults? What proportion is prepubescent, pubescent, or older? What proportion is male or female? Is there any evidence that the individual has tried to communicate with minors? Is there any evidence that the individual being investigated has produced images of themselves? What sort of control does the individual report over urges/impulses to view images?

Obviously, here the use of plethysmography, viewing time, and polygraphy, as well as the usual instruments used to assess individuals with pedophilia, can be used to assist in diagnosis.

Risk for Other Crimes and Risk of Recidivism

Wolak et al. (2005b) reported on 429 cases of individuals where data was obtained by interviewing detectives about details of their cases of child pornography arrests made in the year 2000, only 14 % of which were prosecuted in federal courts. Eleven percent had a previous arrest for a sex offense against a minor, and only 3 % were diagnosed with a sexual disorder.

Seto and Eke (2005) identified a sample of 201 adult male child pornography offenders using police databases; 56 % had

a prior criminal record, 24 % a prior contact sexual offense, and 15 % prior child pornography offenses. During an average time at risk of 2.5 years, 17 % of the sample offended again in some way during this time, and 4 % committed a new contact sexual offense. Child pornographer offenders with prior criminal records were more likely to reoffend in any way during the follow-up period, and child pornography offenders who had committed a prior or concurrent contact sexual offense were most likely to reoffend, generally or sexually. In a follow-up study (Eke, Seto, & Williams, 2011), the follow-up time for this sample was extended to 5.9 years, and the same data were obtained for another 340 offenders, increasing the full sample to 541 men, with a total average follow-up tie of 4.1 years. In this new sample, 34 % of offenders had a new charge for any type of reoffense, with 6 % charged with a contact sexual offense against a child and additional 3 % charged with historical contact sex offenses (i.e., previously undetected offenses). There was a 32 % recidivism rate for any crime for the full sample; 4 % of offenders were charged with new contact sex offenses, an additional 2 % of offenders were charge with historical contact sex offenses, and 7 % of offenders were charged with a new child pornography offense. Predictors of new offending were prior offense history and younger offender age. Approximately one-quarter of offenders on probation were sanctioned for a failure on conditional release; in half of these failures, offenders were in contact with children or used the Internet to again access to pornography.

Webb et al. (2007) found that the Stable-2000 (Hanson et al., 2007; Harris & Hanson, 2003), which is an actuarial measure of potentially changeable risk factors, was able to significantly predict "risky sexual behavior" and probation failures in a group of online offenders (none of the child pornography offenders committed another contact offense in the 18-month follow-up period).

In an oft-cited study, Bourke and Hernandez (2009) reported on a group of 155 sexual offenders in an intensive, residential sex offender-specific treatment program at a medium-security federal prison. At the time of sentencing, 115 (74 %) of subjects had no documented hands-on victims. The treatment program was 18 months long, and 80 subjects (52 %) participated in voluntary polygraph examinations. Among these offenders, by the end of the study, 24 % indicated during treatment that they had victimized children of both genders, and 48 % said that they had abused both prepubescent and postpubescent victims. This study was severely criticized in a legal opinion (United States District Court, 2008) which opined, among other things, that the study was not credible, saying that it was "highly coercive" because there was testimony to the effect that unless offender continued to admit to further sexual crimes and say whether or not they had committed them, they were discharged from the program. Thus, they had an incentive to lie. Furthermore, 46 of 201 individuals (23 %) left due to "voluntary withdrawal, expulsion, or death," which was not reported and which would have skewed the results.

Endrass et al. (2009) reported on a group of 231 men in Switzerland who were charged with consumption of illegal pornographic material; the follow-up period was from 2002 to 2008. Two (1 %) members of this sample had a prior conviction for a hands-on sex offense involving child sexual abuse, 8 (3.3 %) for a hands-off sex offense, and 1 for a nonsexual violent offense. Applying a definition of recidivism that included charges and convictions, 9 (3.9 %) of the study sample recidivated with a hands-off sex offense and 2 (0.8 %) with a hands-on sex offense.

Babchishin, Hanson, and Hermann (2010) reported on a meta-analysis of online offenders and off-line offenders to examine the extent to which they differed on demographic and psychological variables. Twenty-seven distinct samples were identified, only 13 of which were classified as published materials; the online offenders were not partitioned into those involved with child pornography only and those involved with trying to meet a child over the Internet. Overall, online offenders were more likely to be Caucasian, slightly younger, had greater victim empathy, greater sexual deviancy, and lower impression management than off-line offenders.

Neutze, Seto, Schaefer, Mundt, and Beier (2010) reported on a sample of 155 self-referred pedophiles and hebephiles (individuals sexually attracted to pubescent children) in Germany. It was explained that a distinctive feature of German law is that there is no mandatory child abuse reporting in Germany unless there is evidence of an imminent risk of child sexual abuse and homicide. Thus, participants were free to report recent crimes. Two sets of group comparisons were conducted on sociodemographic variables and dynamic risk factors. The first was based on recent activity and compared men who had committed child pornography offenses only or child sexual abuse offenses only in the prior 6 months with men who had remained offense free in the same period. The second was based on lifetime offenses prior to the recent 6-month period and compared child pornography offenders with child sexual abuse offenders and men who had committed both kinds of offenses. For the recent offenders, the groups differed only with respect to risk awareness, with recent child sexual abuse offenders demonstrating significantly more awareness of risky situations than recent child pornography offenders or recently inactive participants. In the recent groups, recent child sexual abuse offenders were more likely to be unemployed than child pornography offenders or inactive participants, and the vast majority of recent child sexual abuse offenders admitted prior sexual abuse offenses. No group differences were found for lifetime offense history; child sexual abuse offenders were significantly older than child pornography-only offenders. The overall pattern of

findings was characterized much more by similarities across the groups than by differences.

Seto, Hanson, and Babchishin (2011) reported on two meta-analyses involving "online offenders." The first included both offenders involved with the possession or distribution of child pornography or other illegal pornographic content via the Internet and those who used the Internet to solicit minors for sexual purposes. Twenty-four samples with relevant data were included; 12 % had an officially known contact history at the time of their index offense and 55 % of online offenders admitted to a contact sexual offense in the six studies that had self-report data. The second meta-analysis included child pornography offenders only and included 12 samples; it revealed that 4.6 % of online offenders committed a new sexual offense during the 1.5–6-year follow-up period; 2.0 % committed a contact sexual offense, and 3.4 % committed a new child pornography offense. The authors suggested that there could be a distinct subgroup of online-only offenders who posed a relatively low risk of committing contact sexual offenses in the future.

Treatment and Risk Management

Treatment and risk management will again be guided by a comprehensive assessment including use of actuarial instruments. While many of the same static risk factors that underlie the Static-99 or Static-99R (Harris et al., 2003) apply to online offenders, these instruments would have to be modified before being used because current coding rules preclude their use with child pornography offenders with no identifiable victim (Seto, Hanson & Babchishin, 2011). It should be noted that the Static-99 and Static-99R can be used with offenders who have only committed exhibitionism, voyeurism, or lewd Internet chat with minors (Harris et al., 2003). It cannot be used if the offender only has a category B offense, which includes:

> Consenting sex with other adults in public places, crimes relating to child pornography (possession, selling, transporting, creating where only pre-existing images are used, digital creation of), indecent behavior without a sexual motive (e.g., urinating in public), offering prostitution services, pimping/pandering, seeking/hiring prostitutes, solicitation of a prostitute (p. 15) (Harris et al., 2003).

It can be used with child pornography offenders if they also have a category A offense involving a hands-on victim. In addition, other instruments are valid with this population. The Sex Offender Risk Appraisal Guide can be directly applied (Quinsey et al., 2006; Seto, Hanson & Babchishin, 2011), as can the Level of Service/Case Management Inventory (Andrews, Bonta, & Wormith, 2004). Should the offender be diagnosed with a hypersexual disorder, then treatment focused on that behavior is indicated; generally behavioral techniques have been borrowed from treatment of the paraphilias or substance abuse disorders, and there are not well-developed treatment standards (Kaplan & Krueger, 2010a; Krueger & Kaplan, 2002a). Twelve-step programs may be useful (Krueger & Kaplan, 2002b) for individuals who have contact offenses or who have been diagnosed with pedophilia, then the usual actuarial instruments and traditional methods of treatment may be employed (Seto, 2008). Software is regularly installed by probation to monitor for use of illicit or licit pornography or other communications that may be of concern, such as emails to minors.

Interacting with Children Over the Internet

Prevalence

In a telephone survey in 2000 of 1,501 youths ages 10–17, Finkelhor, Mitchell, and Wolak (2000) reported that approximately 1 in 5 had received a sexual solicitation or approach over the Internet in the prior year; 1 in 4 had an unwanted exposure to pictures of naked people or people having sex. A second telephone survey (Mitchell, Wolak, & Finkelhor, 2007; Wolak, Mitchell, & Finkelhor, 2007) in 2005 of 1,500 youths, 10–17 reported that 44 % had been exposed to online pornography in the previous year; of those, 66 % reported an unwanted exposure. The authors reported that there was a decline in the percentage of youth reporting sexual solicitations for both boys and girls in all age groups, except for minority youth and those living in less affluent households. Internet use had expanded rapidly among this age group from 25 % in 1999–2000 to 87 % in 2005.

Wolak et al. (2009) collected information from a national sample of law enforcement agencies about the prevalence of arrests for online sex crimes against minors during two 12-month periods for their National Juvenile Online Victimization Study. The first period was from July 1, 2000 through June 30, 2001 (Wave 1) and the second was for calendar year 2006 (Wave 2). Data from 612 interviews from Wave 1 and 1,051 interviews from Wave 2 were collected. In 2000, there were 508 arrests of offenders using the Internet to seek sex with minors; in 2006, there were 615, a 21 % increase. In 2000, there were 664 arrests of offenders by undercover agents posing as minors; in 2006, this increased to 3,100, an increase of 381 %. However, arrests of online offenders in 2006 only constituted approximately 1 % of all arrests for sex crimes committed against children and youth. Most online victims were adolescents, rather than younger children; 73 % percent were ages 13–15. Most victims were girls (84 %), but 16 % were boys. Sexual violence against victims was rare, occurring in 5 % of arrests in 2006. Seventy-three percent of cases with youth victims progressed from online contact to face-to-face meetings and illegal sexual

activity. There was a significant increase in arrests of young adult offenders. Only 4 % of those arrested were registered sex offenders. The authors concluded that offenders who victimized children previously known to them within networks or families were much more common than those who used the Internet to meet strangers.

Offender and Offense Characteristics and Comorbidity

Mitchell, Wolak, and Finkelhor (2005) presented a study of 124 offenders who were arrested during proactive investigations on the Internet (i.e., in the course of interacting with an undercover agent posing as a minor as opposed to actually having victimized a minor). Comparing demographic characteristics, all but one of those arrested was male, 7 (10 %) were age 18–25, 62 (61 %) were age 26–39, and 52 (33 %) were age 40 or older. One-hundred and ten (91 %) were white, 7 (4 %) Hispanic, and 3 (1 %) African American. Two (2 %) had not finished high school, 38 (26 %) were high-school graduates, 20 (13 %) had finished some college, and 11 (5 %) had a postgraduate degree. Forty-six (34 %) were single and/or never married, 39 (35 %) were married, 4 (3 %) were living with a partner, 8 (7 %) were divorced, and 26 (19 %) were separated. One-hundred and seven (91 %) were employed full time, 9 (6 %) part-time, 8 (4 %) were unemployed, and 4 (2 %) were in school. Case characteristics were very similar between proactive investigations that involved an undercover agent and juvenile victim investigations that involved an actual victim, except that the mean age of the victim was less for proactive investigations (13.8 years vs. 14.4 years). The Internet chat rooms that actual offenders met children in were less sexually oriented than chat rooms used by undercover operatives. Comparing offender characteristics in those arrested in proactive investigations with those arrested with actual juvenile victims, offenders were older in proactive investigations (mean age 37.7 vs. 34.7), and they were more likely to be employed full time. Offenders arrested with actual juvenile victims, on the other hand, were more likely to have committed violent behavior, to have a prior arrest for a nonsexual offense, and a prior arrest for a sexual offense against a minor.

Wolak, Finkelhor, and Mitchell (2004) in a telephone survey of 2574 law enforcement agencies conducted between October of 2001 and July of 2002 identified 129 sexual offenses against juvenile victims that originated with online encounters. Victims were mainly 13- through 15-year-old girls (75 %) who met adult offenders (76 % older than 25) in Internet chat rooms. Most offenders did not deceive victims about the fact that they were adults. Most of these victims had sex with the adults on more than one occasion, and half of the victims described themselves as being in love or feeling close to their offenders; almost all the cases of male victims involved male offenders. Violence was used in 5 % of episodes.

Krueger et al. (2009) reported that of a sample of 22 males arrested for attempting to meet a child, 8 (36 %) of this group were diagnosed with pedophilia by DSM-IV-TR criteria, 6 (27 %) with a paraphilia not otherwise specified, with an interest in adolescents, and only 1 (4.5 %) with another paraphilia. Eight (36 %) of this group had cybersexual dependence, which significantly differentiated them from the group arrested for child pornography only. None of this group had pornography dependence. Fourteen (64 %) of this group had a depressive disorder, 6 (27 %) had an alcohol use disorder, and 3 (14 %) had a substance use disorder. Thus, there was a high instance of comorbid psychiatric disorder in this group.

Diagnosis

The same DSM-IV-TR and NB-DSM-5 diagnoses used for child pornography offenders in the previous section are appropriate for this group of Internet offenders. Likewise, hypersexual disorder, described in the previous section, is appropriate, except the main types of possible relevant diagnosis would be cybersexual disorder and pornography dependence. Frequently, individuals arrested for trying to meet a minor on the Internet will also be found to have child pornography and may meet criteria for pornography dependence as well. The forensic evidence from the computer or other media (cell phones, blackberries) is important, especially transcripts and chat logs.

Risk for Other Crimes and Risk of Recidivism

Krueger et al. (2009) reported that 20 of 22 subjects arrested for trying to meet a child over the Internet also had charges involving child pornography. Mitchell et al. (2005) reported that 62 (41 %) of offenders arrested in proactive investigations and 53 (39 %) of offenders arrested with juvenile victims were found to be in possession of child pornography. Five percent of offenders arrested in proactive investigations and 14 % of offenders arrested with juvenile victims had a prior arrest for a sexual offense against a minor.

Treatment and Risk Management

Treatment and risk management should be guided by a thorough assessment. It is appropriate to use the Static-99 as well as other actuarial instruments if the offender believed that he was interacting with a minor (Harris et al., 2003). Should the offender be diagnosed with a hypersexual disorder, such as cybersexual disorder or pornography dependence, then treat-

ment focused on that behavior is indicated (Kaplan & Krueger, 2010a; Krueger & Kaplan, 2002a). Treatment should be guided by diagnoses and involve standard treatment offered to those with paraphilias or sex offenses (Abel et al., 1984; Marshall & Laws, 2003; Seto, 2008). Elliot, Findlater, and Hughes (2010) described a program in Great Britain using software that examined computers for specific inappropriate words and phrases, the results of which were monitored remotely by officers. Probation and parole officers in the United States regularly use monitoring software to survey for illicit pornography or communications.

Conclusions and Future Directions

The research reviewed above suggests that some "nuisance crimes" or "noncontact offenses" can be associated with more severe crimes and psychopathology. Clinicians should conduct a thorough assessment to determine risk when evaluating this population.

All of the studies except that by Långström and Seto (2006) are based on samples that are skewed or biased and that collect unrepresentative data. Some of the studies cited in this paper made diagnoses or established a paraphilia by as little as a single act, thus inflating the number of purported paraphilias that an individual has. Furthermore, generalizations from samples of convenience must be done with great caution. It is thus important to remember that much of the current information concerning these paraphilias is limited.

Several studies suggested that child pornography offenders are different from conventional sex offenders, with a lower risk for contact offenses. Given the very substantial penalties that exist for crimes involving child pornography, further research needs to be conducted with a focus on recidivism and on characteristics that predict recidivism. Actuarial instruments should be extended or developed for this population.

Currently, misdemeanors are not reported in any national crime database in the United States, and it is thus not possible to track the incidence of such crimes as exhibitionism or voyeurism; it would be advantageous to do so.

Epidemiological studies need to be done cross-nationally which can report on the prevalence of paraphilias. Metrics that would ascertain if someone has a paraphilia, diagnose a paraphilic disorder, and contain elements of duration, impact on functioning, and severity should be included in such studies.

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Hypersexuality Disorders and Sexual Offending

Drew A. Kingston

Hypersexual Disorder is a clinical syndrome characterized by diminished control over excessive sexual fantasies, urges, and/or behaviors, which are accompanied by adverse consequences and/or personal distress (Gold & Heffner, 1998; Kafka, 2001). Hypersexual Disorder was considered for inclusion in the Sexual Disorders section of DSM-5 (www.dsm5.org) and then in the Appendix for disorders requiring further research. Hypersexual Disorder was ultimately rejected for inclusion in the Appendix. It is generally accepted that the incidence of hypersexual disorder is likely to be low, representing approximately 3–6 % of the general population (Black, 2000; Carnes, 1989; Coleman, 1992; Goodman, 1993), although higher rates are evident in specific populations, such as sexual offenders (Marshall & Marshall, 2006; Marshall, O'Brien, & Kingston, 2009).

Hypersexuality is particularly relevant in forensic settings because of its association with sexual aggression demonstrated in noncriminal sexual aggressors (Malamuth, 2003) and sexual offenders (Hanson & Morton-Bourgon, 2005; Kingston & Bradford, 2013; Knight, 2010). Unfortunately, problems defining and conceptualizing hypersexual disorder, and the lack of clear nosological criteria, have precluded effective assessment and treatment of this syndrome, particularly as it presents among sexual offending populations.

In this chapter, the extant literature on sexual behaviors that are considered excessive and problematic in both forensic and non-forensic populations is reviewed. Current perspectives regarding conceptualization, diagnosis, assessment, and treatment are also critically reviewed. Although excessive sexual behavior has been variously defined (e.g., sexual addiction, compulsive sexual behavior, sexual impulsivity), the term "hypersexual disorder" will be used throughout this review. As indicated below, features of hypersexual disorder are evident among paraphilic and normophilic sexual behaviors (i.e., sexual behaviors that are culturally sanctioned). This chapter is focused predominantly on culturally normative and excessive sexual behavior.

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Defining and Conceptualizing Hypersexual Disorder

Hypersexual disorder is a controversial and elusive concept to define and measure (Giles, 2006; Gold & Heffner, 1998; Levine & Troiden, 1998; Rinehart & McCabe, 1997), and there has been a lack of consensus regarding terminology, definitional properties, symptomatology, and appropriate classification of this syndrome (Kingston & Firestone, 2008; Walters, Knight, & Langstrom, 2011). Historical descriptors have included nymphomania, Don Juanism, and erotomania and have coincided with predominant sociocultural attitudes of the time (Rinehart & McCabe, 1997). More recent labels have included sexual compulsivity, sexual impulsivity, and sexual addiction, which were based on the perceived psychopathological mechanisms guiding behavior (Kafka, 2007).

Despite such descriptive diversity, there is some agreement regarding the essential features of hypersexual disorder, such as the presence of volitional impairment over sexual fantasies, urges, and behaviors, and that these features are repetitive and persistent (Kafka, 2007, 2010; Kingston & Firestone, 2008). In addition, an essential component of the disorder is that the sexual thoughts or behaviors result in some form of personal distress and/or adverse consequences. Several personal distress features associated with hypersexuality have been identified, including social (e.g., relationship instability), emotional (e.g., anxiety, depression), physical (e.g., HIV infection), and legal consequences (e.g., incarceration) (Kafka, 2007; Kalichman & Rompa, 2001; Långström & Hanson, 2006; Schneider, 2004).

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Hypersexual behaviors can manifest as impersonal and/or solo sexual activity (e.g., frequent masturbation, pornography use) or as relational sexual acts (e.g., sex with numerous partners over brief time periods) (Kingston & Firestone, 2008). A further distinction can be made between repetitive sexual fantasies, urges, and behaviors that are excessive but culturally sanctioned (e.g., masturbation, sex with several consenting adults over brief periods of time), referred to as normophilic, and fantasies or behaviors that are defined as paraphilic; that is, directed toward nonhuman objects, the suffering or humiliation of oneself or one's partner, or children/nonconsenting partners (Kingston, Firestone, Moulden, & Bradford, 2007; Kingston, Seto, Firestone, & Bradford, 2010; Kingston & Yates, 2008). As indicated earlier, this review focuses primarily on sexual behaviors that are culturally normative or normophilic (Kafka, 2007).

In terms of clinical presentation, normophilic hypersexual behaviors are more prevalent in males as compared to females (estimated at a 5:1 ratio) (Kafka, 2007), although this difference is less pronounced than the paraphilias (approximately 20:1). Moreover, the clinical phenomenology of hypersexual disorder is such that age of onset typically occurs in adolescence, the intensity of the behavior can increase during periods of intense, negative emotional states and can be either ego-dystonic or ego-syntonic. Such behaviors are often comorbid with other normophilic and/or paraphilic sexual behaviors (Cantor et al., 2013; Carnes, 1991; Kafka & Hennen, 2003).

Several manifestations of hypersexual disorder have been identified in the literature; however, there is a lack of a coherent or reliable classification system for these behaviors (Kafka, 2010; Kingston, 2009). Initial classification systems included several broadly defined categories of sexual behavior (including both paraphilic and non-paraphilic sexual behaviors) that were difficult to operationalize. Examples included fantasy sex, anonymous sex, exploitative sex, multiple sexual partners, voyeuristic sex, seductive role sex, and compulsive masturbation (Carnes, 1991; Wines, 1997).

Although many investigators have suggested different terminology for the many manifestations of hypersexual disorder, Kafka (2001, 2007) provided a relatively comprehensive list of normophilic and excessive sexual behavior, which he termed *paraphilia-related disorders* (PRDs). Kafka's typology included compulsive masturbation, protracted promiscuity, pornography dependence, telephone sex dependence, cybersex, and severe sexual desire incompatibility. Additional manifestations, such as *obsessional fixations* or *love addictions*, were encompassed in a not otherwise specified category.

Kafka and Hennen (2003) reported prevalence rates for the above-noted behaviors among 120 males presenting with a variety of diagnosed paraphilias. The three most common manifestations of hypersexual disorder evident within this sample were compulsive masturbation (72.5 %), pornography dependence (47.5 %), and protracted promiscuity (44.1 %). Other PRDs, such as telephone sex dependence and severe sexual desire incompatibility, were identified in a smaller subset of the population (25 % and 13.3 %, respectively). Reid, Carpenter, and Lloyd (2009) reported similar prevalence rates in a sample of 59 males seeking treatment for hypersexual disorder. Specifically, more than half of the sample reported compulsive masturbation and pornography dependence as the predominant sexual manifestation of concern.

Behavioral Indicators of Hypersexual Disorder

Hypersexual disorder is characterized by behaviors that are recurrent and persistent (Kingston & Firestone, 2008). It is generally acknowledged that behaviors must occur for a period of at least 6 months; a defining feature that conforms to current nosological assessment for other sexual disorders, such as paraphilic disorders. Furthermore, an adequate operational definition of hypersexual disorder includes some frequency of sexual activity and the degree of time consumed while engaged in the sexual act.

Kinsey, Pomeroy, and Martin (1948) described a quantifiable index of sexual frequency, termed total sexual outlet (TSO), which was defined as the number of orgasms achieved through any combination of methods (e.g., intercourse, masturbation) during a specific week. Several large-scale epidemiological studies have utilized this index to determine the normative range of sexual behavior, from which excessive levels of sexual activity may be determined. Based on the epidemiological data, Kafka (2007) proposed a TSO of seven or more orgasms per week to be characteristic of hypersexuality, as this would identify a relatively small portion of the population.

There have been several attempts to determine both normative and statistically excessive rates of sexual activity. In a convenience sample of American males ($n = 5{,}300$), Kinsey et al. (1948) reported that only 7.6 % of males, examined over a period of 5 consecutive years, had an average total sexual outlet of seven or more orgasms per week. Subsequent investigations have shown similar results to the Kinsey et al. study. Atwood and Gagnon (1987), for example, reported that 5 % of high school and 3 % of college age males exhibited a TSO (e.g., masturbation) of seven or more times per week. Laumann, Gagnon, Michael, and Michaels (1994) have conducted the most comprehensive and representative survey of sexual behavior among American adults between the ages of 18 and 59 ($n = 3, 432$). Survey questions covered a variety of sexual behaviors, such as early sexual experiences and masturbation. Results indicated that approximately 80 % of

adults reported having only one or no sexual partners in the previous year, whereas only 3 % of adults reported five or more sexual partners in the previous year. The results also showed that 7 % of males engaged in sex with another person four or more times per week for at least 1 year. With regard to masturbation, 5 % of men and 11 % of women reported to have never masturbated. Thirty-seven percent of men reported masturbating "sometimes," whereas 28 % reported masturbating one or more times per week. Almost 2 % of men reported masturbating on a daily basis for that particular year. In a more recent study, Pinkerton, Bogart, Cecil, and Abramson (2002) reported that undergraduate males ($n=223$) masturbated an average of 12 times per month.

Långström and Hanson (2006) analyzed data obtained from the 1996 national survey of sexuality and health in a large Swedish community sample ($n=2{,}450$). Several sexual outlets were examined, including masturbation and number of sexual partners, and behavioral infrequency was identified using an integer cut-point near the 90th percentile. A high rate of masturbation (defined as 15 times or more per month for men and five times or more per month for women) identified just over 10 % of the sample for each gender. In terms of number of sexual partners, a rate of three or more per year for men and two or more per year for women identified 10 % of men and 12.3 % of women.

There are several problems with purely behavioral definitions of hypersexual disorder. First, there is dissention among researchers regarding the pathological classification of frequent orgasms, suggesting that this endeavor is simply an attempt to classify conventional behavior as disordered (e.g., Giles, 2006). Interestingly, recent data have shown that a greater proportion of individuals may meet the criterion of seven or more orgasms per week than what has been suggested in previous survey studies (Winters, 2010). As such, a significant number of individuals may exhibit a relatively high sexual drive with numerous sexual outlets; however, a *diagnosis* of hypersexuality would not be warranted if their fantasies and/or behaviors do not result in some form of distress or significant impairment in functioning.

In addition, the number of orgasms in a given week is a relatively simplistic indicator of disordered behavior and fails to differentiate among the various ways in which sexual activity is expressed. In fact, both Långström and Hanson (2006) and Laumann et al. (1994), revealed that high rates of sexual activity with a partner (e.g., sexual intercourse) were associated with positive emotional states, whereas high rates of impersonal sexual activity (e.g., masturbation) were more likely associated with negative emotional states, suggesting that type of sexual outlet may be an important factor to consider in sexuality research.

Another problem pertains to the applicability of this criterion to women (Hyde, Delamater, & Byers, 2004), as many women experience difficulty in achieving orgasm, especially during intercourse (Laumann et al., 1994). Although frequent orgasms might indicate the presence of hypersexuality, they are clearly insufficient as a means of measuring or determining hypersexual disorder, as many individuals undoubtedly have frequent sexual activity without experiencing adverse consequences and some might be unable to experience orgasm but still engage in behavior consistent with hypersexual disorder. Additional features of hypersexual disorder, such as the role of negative emotional states (e.g., guilt, shame) and the importance of emotion regulation have been subsumed within various conceptual perspectives.

Conceptual Models of Hypersexual Disorder

Theoretical models are developed to provide heuristic utility for complex behaviors and are intended to explain etiological mechanisms that assist in the formulation of effective treatment. There are several pathophysiological models of hypersexuality that have emphasized the role of neurobiological mechanisms (Bancroft, Graham, Janssen, & Sanders, 2009; Kafka, 2003) or other motivational states related to behavioral addictions (Carnes, 1991), compulsivity (Coleman, 1992), and impulsivity (Schwartz & Abramowitz, 2003).

Neurobiological Models

With regard to neurobiological models, Bancroft and colleagues (Bancroft et al., 2009; Bancroft & Janssen, 2000) proposed a dual-control model of sexual response based on the interaction between principles of sexual excitation and sexual inhibition. In their description of the model, Bancroft and colleagues suggest that most brain functions involve elements of excitatory and inhibitory processes and that the interaction between these mechanisms determines species-specific patterns of sexual behavior. A central tenet of the dual-control model is that individuals vary in their propensity toward sexual excitation (e.g., sexual arousal in the presence of an attractive person) and sexual inhibition (e.g., sexual response becomes reduced when sexual activity is potentially dangerous). It is hypothesized that individuals who demonstrate a low propensity for sexual excitation and/or a high disposition for sexual inhibition are more likely to exhibit problems with sexual arousal and desire (i.e., sexual dysfunctions), whereas, individuals who have a high propensity for excitation and/or a low tendency toward inhibition are more likely to engage in behaviors that are analogous to hypersexuality.

The dual-control model has undergone extensive theoretical development and has received a fair amount of empirical support (Bancroft, 1999; Bancroft & Vukadinovic, 2004),

particularly with regard to sexual risk-taking. Indeed, several studies have shown that a high propensity for sexual excitation and and/or a low propensity for sexual inhibition, as measured by the sexual excitation and sexual inhibition scales, predicted the number of casual sexual partners and was associated with high-risk sexual activity (Bancroft et al., 2004; Carpenter, Janseen, Graham, Vorst, & Wicherts, 2008).

Excitatory and inhibitory mechanisms in the brain are presumed to be adaptive in both animals and humans, and the balance is considered a fundamental feature of neurophysiology. Studies with humans as well as nonhuman primates and rodents have provided support for the excitatory and inhibitory systems within the central nervous system (e.g., Bancroft, 1999). The limbic system, including neuropeptides, steroids, and monoamines, plays a central role in the organization of sexual behavior that includes specific excitatory and inhibitory processes (Bradford, 2000; Kafka, 2003). In a related neurobiological model of sexual dysregulation, Kafka (2003) emphasized the importance of the monoamines, particularly dopamine and serotonin, in the elicitation of the features characteristic of hypersexual disorder (i.e., recurrent and intense sexual urges and behaviors). In general, studies have shown that enhanced dopaminergic neurotransmission is correlated with sexual excitation and that enhanced serotonergic neurotransmission has been associated with sexual inhibition (Kafka, 2003; Maes et al., 2001; Paredes, Contreras, & Agmo, 2000).

In addition to the two neurobiological models indicated above, hypersexual behavior has been conceptualized as an addiction, an obsessive-compulsive disorder, and an impulse-control disorder (Kingston, 2009; also see Kingston & Firestone, 2008 for a review). Although each model contains similar features, such as the criterion for clinical significance (Spitzer & Wakefield, 1999) and the importance placed on disinhibited sexual behavior, the underlying motivational mechanism related to emotion regulation is the fundamental feature distinguishing among these three theoretical models.

Conceptual models of hypersexuality typically emphasize features of compulsivity and/or impulsivity as "driving" motivational states underlying sexual behavior. Although the terms compulsivity and impulsivity are often used interchangeably throughout the literature, these driving mechanisms are fundamentally different (Hollander & Rosen, 2002), such that the former describes individuals who are typically hypervigilant and who demonstrate a desire to avoid harm and reduce anxiety, whereas the latter characterizes individuals who are risk seekers and who are predominantly interested in increasing positive states (e.g., sexual pleasure) (Claes, Vandereycken, & Vertommen, 2002). The distinction between impulsivity and compulsivity has been empirically supported, and several studies have shown positive associations between trait impulsivity and positive emotional states (Abramowitz & Berenbaum, 2007; Claes et al., 2002). Obsessive-compulsive symptoms, conversely, have been associated with negative emotional triggers precipitating the criterion behavior (Ferrão, Almeida, Bedin, Rosa, & Busnello, 2006).

Sexual Addiction

Orford (1978) was one of the first researchers to suggest that hypersexuality was a behavioral syndrome that was characteristic of an addiction. The contemporary formulation of excessive sexual behavior as a behavioral manifestation of addiction, however, is most often attributed to Carnes (1983) book *Out of the Shadows: Understanding Sexual Addiction*. According to Carnes, sexual addiction was characterized as a pathological relationship with a mood altering experience.

The term "addiction" has been conceptualized as a progression from a state which is positive and rewarding, often associated with impulsivity, toward egodystonic experiences of compulsivity, associated with preoccupation, compulsive intoxication, and symptoms of withdrawal (Koob, 2006). Addictive states incorporate elements of physiological dependence on a particular substance that is characterized by tolerance (i.e., the need to use greater amounts of a substance to obtain the desired effect) and/or symptoms of withdrawal (e.g., insomnia) upon removal of the substance. Moreover, psychological dependence, which describes intense craving, compulsive behavior directed toward obtaining the substance, and loss of control, has been emphasized (Lubman, Yücel, & Pantelis, 2004).

Although the traditional notion of addiction has been utilized with substances (e.g., alcohol), there has been a movement in the research community toward the perspective of an overarching structure or underlying addictive process among several disorders (Peele, 1998; Potenza, 2006). According to this broad conceptualization of addiction, any behaviors used to regulate emotional states and that satisfy criteria for addiction (including associated features of tolerance and withdrawal) are potential behavioral manifestations of addiction. Schmitz (2005) and Joranby, Pineda, and Gold (2005) reported similar phenomenological characteristics between substance use disorders and other behavioral disorders, such as compulsive buying, pathological gambling, and eating disorders. With regard to hypersexual disorder, similarities between neurological substrates of addiction (e.g., dopaminergic dysregulation) and sexual appetitive behavior have been identified to support the conceptualization of excessive sexual behavior as a sexual addiction (Keane, 2004).

The movement toward categorizing behaviors, including sexual behavior, under a singular model of addiction has been challenged (Coleman, 1992; Keane, 2004), given the tendency for expansive models to oversimplify complex phenomena and to obscure key differences between disorders.

Although identifying commonalities across chemical and nonchemical addictions promotes heuristic utility, it neglects to elucidate key features among disorders and, therefore, results in decreased clinical utility.

Coleman (1990) argued that the expansive model of addiction failed to adequately differentiate between impulsivity and compulsivity and that each term was often used interchangeably in the literature. As described earlier, the defining characteristics of compulsivity and impulsivity are different and confusing; these terms have important treatment implications, especially when interventions that are designed for behavioral motivations associated with impulsivity are inappropriately applied to behaviors guided by compulsivity (Kingston & Firestone, 2008). Such criticisms have led to the formulation of hypersexual disorder as either a compulsive or impulsive-based disorder.

Compulsive/Impulsive Sexual Behavior

Coleman (1987, 1990, 1992) has been one of the primary advocates for conceptualizing hypersexual disorder as an obsessive-compulsive disorder, based on the shared phenomenological features between the two syndromes. In terms of these features, obsessions are intrusive, repeatedly experienced, and associated with anxiety and/or tension (Black, Kehrberg, Flumerfelt, & Schlosser, 1997). Moreover, the behaviors evident in both disorders are enacted to reduce feelings of anxiety and are often followed by feelings of distress (Coleman, 1992; Raymond, Coleman, & Miner, 2003).

Several studies have supported the predominant features of the sexual compulsivity model, such that individuals repeatedly experience intrusive thoughts that are associated with anxiety and that sexual behaviors are acted upon in order to reduce negative emotional states. Black et al. (1997), for example, reported that 42 % of individuals ($n=36$) exhibiting hypersexuality reported intrusive and repetitive sexual fantasies that were experienced as extremely distressful in nature. They also found that the majority of participants engaged in repetitive sexual behavior, which was initially resisted, and subsequent to the sexual behavior was followed by negative self-evaluation. Moreover, participants reported engaging in sexual behavior in response to specific negative emotional states (e.g., anxiety). Raymond et al. (2003) reported similar results, such that a significant proportion of individuals exhibiting hypersexuality attempted to resist sexual thoughts and urges and that behavioral action (e.g., sexual behavior) was intended to provide temporary relief from anxiety and tension.

The studies described above show important similarities between hypersexuality and obsessive-compulsive disorder and indicate some support for the compulsivity-based conceptualization (Claes et al., 2002).

However, there has also been contrasting evidence with regard to the predominant symptomatology exhibited by individuals with hypersexuality leading to the adoption of an impulsivity-based conceptualization. As indicated earlier, impulsive disorders are characterized by the failure to resist an impulse, drive, or temptation to commit an act that is harmful to oneself or others (APA, 2000). According to this conceptualization, there is often an increased sense of arousal prior to the behavior, a sense of gratification or relief during the behavior, and, for some, feelings of guilt following the act. In support of this conceptualization, Schwartz and Abramowitz (2003) examined a small sample ($n=12$) of patients referred to a clinic for "sexual obsessions." Results indicated that the sexual thoughts reported by patients exhibiting features of hypersexual disorder were predominantly associated with high levels of sexual arousal and low levels of fear and/or anxiety. Despite the small sample, Schwartz and Abramowitz concluded that the compulsivity model was insufficient and that impulsivity was, perhaps, a more accurate characteristic of individuals with hypersexual disorder.

Summary of Conceptual Models

Conceptual models of hypersexual disorder have focused on important neurological mechanisms as well as diverse motivational states driving behavior. With regard to motivational mechanisms, compulsivity and impulsivity have been essential constructs in the development of the sexual addiction, sexual compulsivity, and sexual impulsivity models.

Current data, in my opinion, do not currently support the sexual addiction, sexual compulsivity, or sexual impulsivity conceptualizations. In fact, several studies have explored motivational mechanisms of hypersexuality, and results have been largely inconsistent with regard to the primary mechanisms driving behavior. As indicated earlier, Black et al. (1997) found that negative emotional states (e.g., depression) were predominant reasons for some individuals engaging in sexual activity and that prior urges were distressful and unwanted, whereas, in contrast, Schwartz and Abramowitz (2003) reported that individuals with hypersexual disorder deliberately acted on their sexual urges to promote or achieve sexual gratification and that such behavior was associated with positive emotional states.

In addition to comparisons *across* samples, such contradictions in motivational states have been indicated *within* samples. Raymond et al. (2003) reported that one third of their participants described their thoughts to be intrusive and that 87 % attempted to resist such urges; supporting the compulsivity-based conceptualization. However, mean scores on the impulsivity subscale of the Minnesota Personality Questionnaire (Tellegen, 1992) were actually

indicative of higher levels of impulsivity when compared to normative samples.

Further support for the interrelationship between compulsivity and impulsivity has been demonstrated in other behavioral disorders. In a recent review, Grant and Potenza (2006) described several conditions, traditionally considered impulsive (i.e., pathological gambling, trichotillomania, kleptomania) and demonstrated that features associated with compulsivity were evident at varying points in the behavioral progression. Similarly, Matsunaga et al. (2005) investigated the existence of impulsive features among 153 Japanese adult patients diagnosed with OCD. Results indicated that a significant proportion of the sample (29 %) presented with impulsive traits in addition to compulsive ones. These results suggest that both impulsive and compulsive traits can be evident among individuals with hypersexuality and that a model focused predominantly on just one type of motivational drive is insufficient.

Clearly, an adequate conceptualization of hypersexual disorder must allow for the inclusion of both impulsive and/or compulsive features. The obsessive-compulsive and impulse-control disorder models negate the inclusion of diverse motivational states guiding behavior. Interestingly, substance addiction models have incorporated impulsivity and compulsivity as essential constructs, which interact with one another typically in a sequential fashion. Koob (2006), in his model of drug addiction, described addictive behavior as a progressive state from impulsivity (i.e., using the substance for pleasure) to compulsivity (i.e., using the substance to escape from negative emotional states). Additionally, Goodman (1993) stated that the function of excessive sexual behavior was both to produce pleasure and provide escape from pain, which, again, highlighted the divergent motivations underlying excessive sexual behavior.

Despite the potential utility of the addiction model as a conceptual model for hypersexuality, several problems remain, including, for example, the widespread and ambiguous use of the term "addiction" (see Kingston & Firestone, 2008 for a more detailed and critical review of the sexual addiction model). In addition, the progression from impulsivity to compulsivity, as described in some addiction models, may be evident among individuals exhibiting hypersexual disorder. Alternatively, there is also the possibility that the progression is reversed; that is, individuals may engage in sexual behaviors to regulate negative mood and then, due to principles of reinforcement, engage in such activities to increase pleasure and positive mood states.

Given the problematic application of current conceptual models to the heterogeneous presentation of hypersexuality, a consistent diagnostic and conceptual framework is needed. Kafka (2007, 2010) has proposed an alternative model of hypersexual disorder that is focused on culturally normative sexual outlets. This model of hypersexual disorder is based on current nosological nomenclature and includes criteria that are supported by previous theoretical and empirical research.

Table 1 DSM-5 proposed criteria[a] for hypersexual disorder

A. Over a period of at least 6 months, recurrent and intense sexual fantasies, sexual urges, and sexual behavior in association with four or more of the following five criteria:
A.1 Excessive time is consumed by sexual fantasies and urges, and by planning for and engaging in sexual behavior.
A.2 Repetitively engaging in these sexual fantasies, urges, and behavior in response to dysphoric mood states (e.g., anxiety, depression, boredom, and irritability).
A.3 Repetitively engaging in sexual fantasies, urges, and behavior in response to stressful life events.
A.4 Repetitive but unsuccessful efforts to control or significantly reduce these sexual fantasies, urges, and behavior.
A.5 Repetitively engaging in sexual behavior while disregarding the risk for physical or emotional harm to self or others.
B. There is clinically significant personal distress or impairment in social, occupational, or other important areas of functioning associated with the frequency and intensity of these sexual fantasies, urges, and behavior.
C. These sexual fantasies, urges, and behaviors are not due to direct physiological effects of exogenous substances (e.g., drugs of abuse or medications), a co-occurring general medical condition, or to manic episodes.
D. The person is at least 18 years of age.
Specify if masturbation, pornography, sexual behavior with consenting adults, cybersex, telephone sex, and strip clubs Source: http://www.dsm5.org

DSM-5 Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition

[a]DSM proposed criteria were rejected and will not appear in the upcoming DSM5 text

An operational and criterion-based definition of hypersexual disorder has been proposed (Kafka, 2010) that includes four criteria (see Table 1). These criteria include non-paraphilic recurrent and intense sexual fantasies, urges, and behaviors that result in adverse consequences and clinically significant distress or impairment in important areas of functioning. These symptoms must persist for at least 6 months and are independent of drug use, a general medical condition, or a manic episode. Following the diagnosis, an evaluator would specify the type of normative sexual behavior (e.g., masturbation, use of pornography, sexual behavior with consenting adults, etc.). Kafka as well as others (Briken, Habermann, Berner, & Hill, 2007; Kingston, 2009; Kingston & Firestone, 2008) have highlighted the importance of comorbidity, particularly between hypersexual disorder and the paraphilias.

One of the central advantages of Kafka's model of hypersexual disorder is that it is not entirely bound to current explanatory theories with predetermined etiological mechanisms underlying the behavior (i.e., models based on addiction, compulsivity, and impulsivity). However, these criteria

are somewhat biased toward features of compulsivity. Nevertheless, Kafka's model encourages evaluators to assess for a diversity of motivational mechanisms and other features important for the development of effective interventions.

Another advantage is the implication for nosological assessment. Currently, the DSM-5 does not include a formal diagnosis of hypersexual disorder and attempts at providing an operational definition were rejected.

Despite some recent evidence showing hypersexual disorder to have good reliability and validity (Reid et al., 2012), several researchers have expressed caution about defining this construct as a disorder in current nosology (Winters, 2010; Winters, Christoff, & Gorzalka, 2010). Winters and colleagues correctly identified that there is a significant lack of independent empirical evidence supporting the inclusion of this disorder in current nosology. Additionally, as discussed previously, the pathophysiology of the syndrome is unclear, and the fact that several of the proposed sub-criteria indicated earlier emphasize the compulsive aspects of the behavior may be inappropriate for many individuals.

Winters (2010) has also noted that the distinction between volitional impairment and sexual desire/drive is not entirely clear, and recent data have shown that behaviors associated with hypersexual disorder (e.g., protracted promiscuity) may simply be reflecting elevated levels of sexual drive (Winters et al., 2010). The fact that hypersexual disorder may simply reflect high sexual drive, without an orthogonal construct related to sexual dyscontrol, is inconsistent with previous conceptual models and is problematic for the inclusion of the putative syndrome in current nosology. Of note, hypersexual disorder was ultimately rejected for inclusion in the DSM5 and will not appear anywhere in the upcoming text (www.dsm5.org).

Psychological Tests, Questionnaires, and Inventories

Valid methods of assessing hypersexual disorder are needed in order to further our understanding of this syndrome. Importantly, the veracity of self-reported symptoms will likely depend on the context of the assessment. Non-forensic evaluators will encounter individuals who are relatively concerned about their excessive sexual thoughts or behaviors and, as such, may be motivated to disclose relevant aspects of their sexual behaviors. However, there is some evidence showing that questions related to sexuality and sexual dysfunction result in reduced disclosure among non-forensic populations (Meston, Heiman, Trapnell, & Paulhus, 1998). In contrast, forensic evaluators assess individuals who are, more often than not, reluctant to disclose at least some aspects of their sexual behaviors (Mills & Kroner, 2005). There are a variety of self-report and psychological inventories designed specifically to assess recurrent and intense sexual fantasies and behaviors, particularly for the paraphilias [e.g., the Sex Inventory; (Thorne, 1966), the Aggressive Sexual Behavior Inventory (Mosher & Anderson, 1986), the Coercive Sexual Fantasies Questionnaire (Greendlinger & Byrne, 1987), and the Clarke Sex History Questionnaire (Langevin, Handy, Paitich, & Russon, 1985)]. Several of these instruments (e.g., the Clarke Sex History Questionnaire) contain validity scales that detect impression management.

Unfortunately, far less attention has been directed toward psychological inventories for hypersexual disorder. Table 2 lists some of the more common screening tools and inventories that may be potentially useful in the assessment of normophilic hypersexual disorder. Among these instruments, the Sexual Addiction Screening Test (SAST), the Sexual Compulsivity Scale (SCS), and the Compulsive Sexual Behavior Inventory (CSBI) have received a fair amount of empirical attention. Unfortunately, these scales are generally transparent and, thus, are vulnerable to self-reporting biases. Many evaluators and researchers have utilized measures of social desirability (e.g., *The Balanced Inventory of Desirable Responding*; Paulhus, 1984) as a control variable. However, recent meta-analyses have indicated that social desirability may be an important aspect of personality (Li & Bagger, 2006), which has led some (see Mills & Kroner, 2006) to suggest that partialling out social desirable responding may distort the true relationship between the independent variable and the outcome measure.

The Sexual Addiction Screening Test (SAST; Carnes, 1991) is likely the most widely used screening tool to assess the presence of hypersexual disorder. The measure can be scored continuously or dichotomously. Weiss (2004) indicated that a score of 14 or greater is characteristics of sexual addiction, whereas others (e.g., Carnes, 1989; Marshall, Marshall, Moulden, & Serran, 2008) have stated that a score of 13 accurately reflects hypersexuality, given the significant association with self-reported sexual addiction. Initial psychometric evaluations on the SAST produced good internal consistency (alpha = .85 to .95) and discriminant validity (Carnes, 1989). A recent investigation has shown that the SAST measures a single underlying construct with good reliability and validity (Nelson & Oehlert, 2008); these results have been used with sexual offending populations (Marshall et al., 2008).

The Sexual Compulsivity Scale (SCS) (Kalichman et al., 1994) is a 10-item Likert-type self-report measure. Respondents are asked to endorse the extent to which they agree with a series of statements reflecting hypersexuality and preoccupation with sexual behaviors. Specific items were derived from a self-help guide for problematic sexual behaviors (e.g., my sexual appetite has gotten in the way of my relationships). The SCS scale has demonstrated good internal consistency (alpha = .84 to .89) and construct validity

Table 2 Some potentially useful measures in the assessment of hypersexual disorder

Test (source)	Description
Compulsive Sexual Behavior Inventory (Coleman, Miner, Ohlerking, & Raymond, 2001)	The CSBI is a 28-item self-report measure of hypersexual disorder that includes items related to historical experiences of abuse, volitional impairment, and using sex to cope with negative emotional states.
Garos Sexual Behavior Index (Garos & Stock, 1998)	The GSBI is a 72-item Likert-type self-report measure that assesses the cognitive, affective, and behavioral dimensions of hypersexual disorder. The measure includes four subscales: discordance, sexual obsession, values, and sexual adequacy.
Hypersexual Behavior Inventory (Reid & Garos, 2007)	The HBI is a 19-item self-report measure that examines the use of sex to cope with emotional distress, volitional impairment, and associated negative consequences resulting from sexual behavior.
Internet Sex Screening Test (Delmonico, 1999)	The ISST has undergone several revisions and now includes 117 items with eight subscales (e.g., online and offline sexual compulsivity). Items were adapted from the SAST.
MIDSA (Knight & Cerce, 1999)	The MIDSA is a computerized self-report inventory that includes over 4,000 items resulting in 55 scales, including 3 sexualization scales: Sexual Compulsivity (9 items related to an inability to control sexual urges); Sexual Preoccupation (7 items measuring how often a person thinks about sex); and Hypersexuality (5 items measuring sexual drive).
Sexual Addiction Screening Test (Carnes, 1991)	The SAST is a 25-item self-report measure that requires individuals to respond, in a yes/no fashion, as to whether a statement is characteristic of them. Scores of at least 13 have been suggested to reflect hypersexual disorder.
Sexual Compulsivity Scale (Kalichman & Rompa, 1995)	The SCS is a 10-item Likert-type self-report measure. Participants are asked to endorse the extent to which they agree to a series of statements reflecting hypersexuality and preoccupation with sexual behavior.
Sexual Dependency Inventory-Revised (Carnes & Delmonico, 1996)	The SDI-R includes 179 items in which individuals rate the frequency and power of the statement in their fantasy or actual life. A series of factor analyses produced 10 subscales based on distinct categories of hypersexual disorder (e.g., anonymous sex, fantasy sex, seductive role-playing).
Sexual Inhibition/Sexual Excitation Scales (Janssen, Vorst, Finn, & Bancroft, 2002)	The SIS and SES scales are based on the dual-control model of male sexual response which reflects individual differences in propensities for sexual excitation and sexual inhibition. Questions reflect situations that are either sexually exciting or threatening, and individuals describe their typical sexual response. Factor analyses identified a single excitation factor and two inhibition factors based on threat of performance and threat of performance consequences.
Sexual Outlet Inventory (Kafka, 1991)	The SOI is a clinician administered scale that includes 10 items measuring the frequency of sexual fantasies, urges, and behaviors, and is based on the construct of total sexual outlet.
Sexual Sensation Seeking Scale (Kalichman et al., 1994)	The SSS scale is an 11-item likert-type self-report measure. Respondents indicate the extent to which each statement is characteristic of them.

MIDSA The Multidimensional Inventory of Development, Sex, and Aggression

(Kalichman & Rompa, 2001) and has been used widely for assessing sexual risk-taking among individuals with HIV.

The Compulsive Sexual Behavior Inventory (CSBI) (Coleman et al., 2001) is a 28-item self-report measure of hypersexual disorder that includes items related to historical experiences of abuse, volitional impairment, and using sex to cope with negative emotional states. The initial validation study (Coleman et al., 2001) was conducted with 1,026 Latino men who had reported having had sexual contact with other men. Results of the initial validation study suggested a two-factor structure: behavioral dyscontrol and interpersonal violence. The measure also demonstrated good reliability and validity in the developmental sample as well as in two more recent investigations (Lee, Ritchey, Forbey, & Gaither, 2009; Miner, Coleman, Center, Ross, & Rosser, 2007).

The Hypersexual Behavior Inventory-19 (HBI-19) (Reid & Garos, 2007) is a three-factor, 19-item, self-report measure that assesses features of hypersexuality according to the proposed criteria for hypersexual disorder reported earlier. Items are rated along a 5-point Likert-type scale, yielding a total score ranging from 19 to 95. A score of 53 or higher is considered to be clinically significant. The HBI demonstrated convergent validity with other measures of hypersexuality and related constructs. Internal consistency was high in the initial validation sample ($\alpha = .89$ to .95) and in a subsequent field trial ($\alpha = .96$) (Reid et al., 2012).

In addition to the inventories listed above, there are several screening measures which have been developed specifically for online problematic sexual behavior, although most lack validation (e.g., Young, 2006). One exception is the Internet Sex Screening Test (Delmonico, 1999), which has undergone several revisions and now contains 117 items with eight subscales highlighting varying facets of online sexual behavior. One subtest relates to online sexual compulsivity and

examines indicators of hypersexual disorder (e.g., repeated efforts to stop the sexual behavior), whereas another subtest pertains to offline sexual compulsivity, which utilizes items adapted from the SAST. There is limited information regarding the psychometric properties of the most recent version of the Internet Sex Screening Test, but earlier versions have shown low to moderate internal consistency (alpha's = .51 to .86) (Delmonico & Griffen, 2008).

Hypersexual Disorder Among Sexual Offending Populations

Prevalence

There are few empirical investigations examining the prevalence of hypersexual disorder among sexual offenders. Initially, Carnes (1989) suggested that approximately 50 % of sexual offenders would exhibit hypersexual features, although he provided no empirical data supporting these figures. Subsequent studies, however, have supported Carnes' claims of elevated rates of hypersexual disorder or features among samples of sexual offenders. For example, Blanchard (1990) administered self-report measures to offenders and, along with detailed file review, found that 55 % of his sample of sexual offenders ($n = 107$) met criteria for sexual addiction, although his criteria were not clear and the reliability of his diagnosis was not reported.

More recently, Marshall and colleagues (Marshall et al., 2008, 2009, 2009; Marshall & Marshall, 2006) have examined the prevalence of hypersexual disorder in samples of incarcerated sexual offenders, and they have compared these rates with socio-economically matched community controls. Hypersexual disorder was determined using a clinical cutoff score on the SAST (Carnes, 1989). Results were generally consistent with data reported by Carnes and Blanchard, such that approximately 44 % of sexual offenders were considered to be hypersexual, whereas only 18 % of the socio-economically matched community controls met the criterion.

Several more recent studies employing strict, objective criteria have reported lower rates of hypersexuality among sexual offending populations than the rates reported earlier. Kingston and Bradford (2013) examined the behavioral criterion of hypersexual disorder (i.e., self-reported Total Sexual Outlet) among 553 adult male sexual offenders. Approximately 12 % of the sample, based on their self-report, met the clinical cutoff for problematic hypersexuality (Total Sexual Outlet ≥ 7). Briken (2012) examined a representative sample of 244 adult male sexual offenders with child victims and reported that only 9 % met the diagnostic criteria for Hypersexual Disorder, as defined using the proposed DSM-5 criteria (www.dsm5.org).

Hypersexual Disorder and Sexual Aggression

Features of hypersexual disorder (e.g., sexual self-regulation problems, the drive for impersonal sex, and compulsive masturbation) are essential components among several multifactorial theories and developmental models of sexually coercive behavior (Malamuth, 2003; Ward, Polaschek, & Beech, 2006). The confluence model (Malamuth, 2003), for example, was constructed from research demonstrating that sexual aggressors possess several key characteristics that are present both developmentally and at the time of aggression. These characteristics have been empirically reduced into two main clusters of characteristics or paths labeled hostile masculinity and impersonal sex. Of relevance to this review, the impersonal sex path is characterized by a noncommittal, game-playing orientation toward sexual activity and reflects individual differences in the willingness to engage in such acts without closeness or commitment (Malamuth, 2003). Knight and Sims-Knight (2003, 2004) have also emphasized the role of hypersexuality in adult and juvenile sexual offenders, although emphasis is placed on sexual drive, sexual preoccupation, and sexual deviance rather than promiscuity and a preference for impersonal sex, as these former variables differentiated sexually coercive and noncoercive males.

A number of investigations utilizing self-report among college males have shown that sexually coercive males report higher levels of sexual behaviors and fantasies, including number of sexual partners, when compared to noncoercive males (Abbey, McAuslan, & Ross, 1998; Malamuth, 2003; Malamuth, Linz, Heavey, Barnes, & Acker, 1995). With regard to forensic samples, Gebhard, Gagnon, Pomeroy, and Christenson (1965) found that sexual offenders as a group were categorized by more extensive sexual experiences, such as number of sexual partners (compared to non-offending men). Similarly, Knight and Sims-Knight (2003, 2004) have reported that sexual drive and sexual preoccupation discriminated sexually coercive males from noncoercive males and that such features of hypersexuality were correlated with pornography use, offense planning, and self-reported hostility toward women (Knight, 1999; Knight & Sims-Knight, 2004). More recently, Lussier, Leclerc, Cale, and Proulx (2007) examined the developmental antecedents to sexual offending in 553 adult male sexual offenders and found elements of impersonal sex, sexual compulsivity, and sexual preoccupation (e.g., all identified features associated with hypersexuality) to be important predictors of sexual coercion.

Hanson and Harris (2000) identified sexual preoccupation (generally defined as recurrent sexual thoughts and/or behaviors directed toward numerous casual or impersonal sexual encounters) as one of the most important dynamic risk factors for sexual offending. This finding was subsequently

replicated by Hanson, Harris, Scott, and Helmus (2007). In one of the most recent and comprehensive meta-analyses of adult male sexual offenders, Hanson and Morton-Bourgon (2005) again found that sexual preoccupation was significantly associated with sexual recidivism (d=.39) and any violent recidivism (d=.28). Most recently, Kingston and Bradford (2013) found that the behavioral criterion of hypersexual disorder was significantly associated with sexual recidivism (ROC=.65; 95 % CI=.58 to .71) and violent (including sexual) recidivism (ROC=.67; 95 % CI=.61 to .72). Given the relatively consistent relationship between sexual preoccupation and sexual aggression, it is not surprising that elements of hypersexuality have been included as risk indicators in commonly used personality and actuarial measures for sexual offenders (Hanson & Harris, 2000; Hare, 1991; Prentky, Harris, Frizzel, & Righthand, 2000).

Treatment of Hypersexual Disorder

Hypersexual behaviors can manifest as repetitive sexual fantasies, urges, and behaviors that are directed toward culturally sanctioned sexual activities (e.g., masturbation, sex with several consenting adults over time) or fantasies or behaviors that are defined as paraphilic, that is, directed toward nonhuman objects, the suffering or humiliation of oneself or one's partner, or children/nonconsenting partners (Kingston et al., 2007, 2010; Kingston & Yates, 2008). Treating sexual preoccupation involving paraphilic sexual outlets has been widely discussed in the literature (e.g., Laws & O'Donohue, 2008). Unfortunately, far less attention has been directed toward treating excessive sexual behaviors that are culturally normative in both forensic and non-forensic populations. The aforementioned theoretical conceptualizations of hypersexual disorder have been used in developing specific interventions and overarching treatment models, which included pharmacological treatment, supportive group psychotherapies, and more structured cognitive-behavioral therapies (Kafka, 2007).

Pharmacological Treatment

The association between neurophysiological systems and sexual dysregulation, as emphasized in the two neurobiological models reviewed earlier, has been used to support a pharmacological approach to treating hypersexual disorder. Unfortunately, few well-controlled studies have been conducted evaluating pharmacological interventions for the treatment of hypersexual disorder.

Although several studies have investigated the utility of psychotropic interventions with the paraphilias (e.g., Bradford, 2000), far less attention has been directed toward non-paraphilic sexual behaviors. However, there have been case reports (e.g., Grant & Won-Kim, 2001) and some small, open-label trials supporting the utility of Selective Serotonin Reuptake Inhibitors (SSRIs) (Guay, 2009; Kafka, 2007). Kafka (1991, 2007) reported results from open-label trials of sertraline or fluoxetine in very small samples (n=10–12). Improved symptoms of hypersexuality, including total sexual outlet, were evident, and individuals were generally able to maintain conventional sexual interests and behaviors. In addition to the SSRIs, several other pharmacological agents have been identified as possible treatment options for hypersexual disorder, all of which have been reported in case reports or case series. Recently, Guay (2009), in his review of the pharmacological interventions for paraphilic and non-paraphilic sexual behaviors, found that most interventions targeted either serotonin or testosterone. However, several reports were identified that described the use of mood stabilizers, neuroleptics, opioid antagonists, anticonvulsants/anxiolytics, and antiandrogens in the treatment of non-paraphilic hypersexual disorder. Guay identified various methodological limitations in these studies, including sampling biases and insufficient sample sizes.

Psychological Treatment

Various psychotherapeutic approaches have been used for the treatment of hypersexual disorder, although there are very limited data addressing efficacy of any particular treatment approach. Psychological treatment is typically provided in a residential treatment setting that includes both individual and group therapy modalities. Therapeutic programs are relatively integrative, without strict adherence to any one particular theoretical orientation, and, as such, elements of cognitive-behavioral therapy, relapse prevention techniques, experiential therapy, and support groups based on the 12-step recovery model are often utilized.

Psychological interventions typically include psychoeducation that is provided in the early phases of treatment and provides the individual with information regarding hypersexuality, healthy sexuality, and relationship functioning (Edwards & Colmean, 2004). Treatment programs based on cognitive-behavioral theory emphasize the role of and interrelationships between cognition, affect, and behavior. As such, the identification and modification of cognitive distortions that support and rationalize hypersexual behavior is crucial, and underlying core beliefs about the self and others (e.g., defectiveness/shame) are modified. Relapse prevention strategies are also used, which help the individual to recognize and anticipate high-risk situations associated with previous hypersexual behaviors and to implement effective coping strategies and problem-solving techniques.

In addition to the specific interventions that are used in both individualized and group formats, most treatment programs encourage enrollment in self-help support groups. Carnes (1989) has been one of the predominant advocates for a group psychotherapy model based on the 12-step approach for substance-based addictions.

12-step programs are nonsectarian spiritual programs emphasizing the role of a higher spiritual being and the acknowledged loss of personal control over the addictive substance (or behavior). While such programs designed for hypersexual disorder closely adhere to the principles outlined for substance-based addictions, there is one fundamental difference with regard to the degree of abstinence, such that abstinence is not a stated goal of the program, although celibacy contracts are often recommended while an individual addresses initial treatment targets (Carnes, 1989).

As indicated earlier, there are few well-designed outcome studies regarding treatment efficacy for hypersexual disorder. Quadland (1985) conducted one of the earlier outcome investigations of an outpatient psychotherapeutic group of 30 gay or bisexual men exhibiting features characteristic of protracted "promiscuity." The average course of therapy was 20 weeks, and interventions focused on developing insight and changing problematic sexual behaviors. Results indicated self-reported reductions in the number of different sexual partners, the percent of "one-night stands," and the percent who engaged in sex in public settings.

Wan, Finlayson, and Rowles (2000) reported treatment outcomes for 59 men and women who participated in a 28-day residential treatment program for hypersexuality. Most participants were treated between 1995 and 1998, and follow-up data were gathered via a structured telephone interview. Treatment consisted of psychoeducation, group psychotherapy, and 12-step support meetings. Results indicated that 71 % of individuals subsequently self-reported engaging in at least some of their sexual behaviors that were previously described as problematic.

Klontz, Garos, and Klontz (2005) reported treatment outcome data for 38 male and female self-reported "sexual addicts" who attended a residential treatment program. Treatment was described as an integrated experiential and cognitive-behavioral approach and primarily involved 32 h of intensive psychotherapy, along with additional time devoted to psychoeducation and mindfulness training. A variety of more specific interventions were also noted, including psychodrama, role-playing exercises, as well as art and music therapy. Treatment efficacy was assessed using the Global Measure of Symptom Severity (Garos & Stock, 1998) and the Brief Symptom Inventory (Derogatis, 1993). Results indicated a significant self-reported decrease in psychological distress, sexual obsessions, sexual preoccupation, and difficulty controlling sexual impulses. These changes were stable at the 6-month follow-up period.

Finally, there have been some theoretical concerns identified with twelve-step programs, and several researchers have criticized the utility of the 12-step approach for both substance-based addictions and other "behavioral" addictions. In particular, Coleman (1990) and Keane (2004) have suggested that problems identified within the 12-step treatment approach for hypersexual disorder are indicative of the inappropriate adaptation of the addiction model to out-of-control sexual behavior. With regard to the adapted 12-step approach for sexual behaviors, one predominant concern pertained to the utilization of celibacy contracts in the initial phases of treatment. In addition to being viewed as restrictive and moralistic, the focus on abstinence has been considered problematic and not consistent with positive approaches to healthy sexuality. More specifically, requiring individuals to refrain from sexual activity may reinforce negative and maladaptive attitudes toward sexuality (e.g., sex is inherently bad).

Another predominant concern with the 12-step approach pertains to the notion of rejecting personal control. This perspective is diametrically opposed to empirically validated cognitive-behavioral treatment, in general, and specific models of rehabilitation, in particular. It is important to note, however, that existing investigations have found support groups to be effective for substance dependence (e.g., Ståhlbrandt, Johnsson, & Berglund, 2007) and hypersexuality (e.g., Carnes, 1991). Unfortunately, serious methodological concerns, such as biased samples, have been identified in such studies (Kafka, 2007). Additional concerns evident in the outcome literature include the use of self-report measures, the lack of standardized assessment tools of symptomatology, the relatively short follow-up periods, as well as the lack of control groups.

Psychological treatment of hypersexual disorder should emphasize individualized case conceptualization, which is conducted in collaboration with the individual, reflecting therapeutic changes as they occur. Case conceptualization explores important developmental processes associated with hypersexuality, in addition to identifying affective, behavioral, cognitive, and contextual factors that culminate in unwanted sexual behavior. This process highlights important targets for treatment, such as core beliefs surrounding shame and guilt, emotional and sexual self-regulation problems, insecure attachment formation, previous trauma, and couple/family dysfunction.

Case conceptualization should also focus on the underlying motivational mechanisms that drive sexual behavior. In this review, the importance of differentiating compulsivity and impulsivity among individuals exhibiting hypersexual disorder has been emphasized, which underscores several implications for treatment. As indicated earlier, relapse prevention techniques are useful in identifying high-risk situations and developing comprehensive coping plans.

However, such techniques may be more suitable for individuals with demonstrable skills deficits with behavioral regulation (i.e., compulsive behavior), whereas individuals guided by sensation-seeking and/or behaviors that are ego-syntonic may benefit more from interventions that target underlying core schema and effective emotion management, rather than specific skill deficits.

In addition, impulsivity is a trait associated with decreased treatment efficacy, which is most likely due to the difficulty in motivating such individuals to stop pleasurable activity (Moeller & Dougherty, 2002; Oldham, Hollander, & Skodol, 1996). Maccallum, Blaszczynski, Ladouceur, and Nower (2007) provided support for the negative association between impulsivity and treatment success in an examination of 60 pathological gamblers attending treatment. Results indicated that lower levels of impulsivity were associated with better treatment response in addition to a nonsignificant trend toward treatment completion when compared to individuals with higher levels of impulsivity. As such, individuals with impulsive sexual behaviors would benefit substantially from intensive motivational interviewing techniques in order to facilitate both treatment completion and successful treatment outcomes, whereas individuals guided by compulsivity may benefit less from this approach.

Conclusions and Future Directions

Problematic and excessive sexual behavior has been variously defined throughout the literature (Kingston & Firestone, 2008). Despite such descriptive diversity, hypersexual disorder has been characterized by volitional impairment over excessive sexual fantasies, urges, and/or behaviors, which are accompanied by adverse consequences and/or personal distress. It has been predominantly studied in noncriminal populations, although the relevance to forensic samples has been emphasized (Kingston, 2009; Kingston & Bradford, 2013; Marshall & Marshall, 2006).

Unfortunately, definitions of hypersexuality have been unsystematically applied without any concrete understanding of the underlying theoretical tenets of the putative conceptual model (Kingston & Firestone, 2008; Winters, 2010). Classification systems are intended to elucidate etiological mechanisms and symptom profile and facilitate effective treatment. Unfortunately, several contradictory explanatory models have been utilized to explain hypersexuality, and clinicians and researchers have typically adopted one descriptive model that is unidimensional (i.e., focused on a particular motivational mechanism underlying the behavior) and have applied it to all individuals presenting with such behavior. This approach clearly contrasts with recent data indicating a more complex relationship among compulsive and impulsive traits.

In this chapter, I have supported an atheoretical and criterion-based perspective for hypersexual disorder (APA, 2010; Kafka, 2010), as it allows for the assessment of varied motivational drive states important for the design and implementation of effective treatment. Kafka has provided criteria for individuals exhibiting disinhibited sexual behavior with accompanying distress surrounding culturally normative sexual outlets, although such criteria are biased toward features of compulsivity. In addition, some researchers (e.g., Winters, 2010) have suggested that incorporating Kafka's criteria in current nosology may be premature, as the pathophysiology of the putative syndrome is not entirely clear.

In addition to the problems with conceptualization and diagnosis, there has been limited progress made with regard to the assessment and treatment of hypersexual disorder. The review provided herein indicated the predominant assessment measures that have at least some empirical support for assessing hypersexual disorder; although, future research is needed with regard to validating these measures across samples, particularly among cybersex users and sexually aggressive populations.

Finally, various pharmacological and psychotherapeutic approaches have been applied to the treatment of hypersexual disorder, although there are virtually no well-controlled studies addressing efficacy of any particular treatment approach. There is some evidence that SSRIs are associated with reduced symptoms of hypersexuality, including total sexual outlet, without associated reductions in conventional sexual interests and behaviors. Additionally, several outcome studies (e.g., Klontz et al., 2005) have identified the utility of residential treatment programs that utilize an integrative treatment approach. Unfortunately, these studies have suffered from several methodological limitations, such as lack of control groups and the use of self-report inventories and measures that have not been validated.

In this review, I have emphasized the importance of a comprehensive and individualized case conceptualization that explores important developmental processes associated with hypersexuality, as well as associated affective, behavioral, cognitive, and contextual factors related to the behavior. An individualized case conceptualization will also identify client-specific relevant treatment targets, such as core beliefs or schema, self-regulation problems, insecure attachment, and previous trauma. Importantly, a functional assessment of whether the sexual behavior is guided by impulsivity or compulsivity informs whether interventions should involve motivational enhancement or the recognition of high-risk situations and the facilitation of skill development.

Unfortunately, there are few well-designed outcome studies regarding the treatment of hypersexual disorder and, as such, it is unclear as to the most appropriate therapeutic modality. However, current evidence in related areas suggests

that cognitive-behavioral approaches may be useful (Kingston & Firestone, 2008). Given the importance of self-regulatory failure and the heterogeneity of the motivational mechanisms underlying the behavior, treatment approaches that are flexible and account for impulsive and/or compulsive processes are likely to be more successful than rigid/manualized-based treatment programs.

The evidence reviewed above justifies a refinement in the classification of hypersexuality for future editions of the DSM. Specifically, individuals who experience disinhibited sexual urges, fantasies, and/or behaviors involving culturally normative aspects of sexual expression should be accounted for in future nosological systems, and the evidence supports an atheoretical and criterion-based approach to conceptualization and diagnosis (Kafka, 2010). Given that accurate conceptualization and adequate diagnosis of psychological disorders informs effective treatment, a consistent approach to classification will promote future research into effective assessment and treatment of individuals presenting with hypersexual disorder.

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Personality and Sexual Offending; Non-Sexual Motivators and Disinhibition in Context

Harry M. Hoberman

Sexual behavior, including sexual offending, occurs as the result of various factors. As Meston and Buss (2007) demonstrated, the reasons that persons engage in typical sexual behaviors are multiple and complex. While physical factors (e.g., pleasure, physical desirability) and emotional factors (e.g., love, expression) are related to sexual behavior, so are factors involving goal attainment (e.g., revenge) and insecurity (self-esteem "boost"). Tackett and Krueger (2011) noted that there are multiple pathways to aggressive and violent outcomes including high motivation (e.g., aggression and/or generally unconstrained impulses). Personality characteristics and related aspects of psychological functioning (including motivations and emotions) and disinhibition or "disconstraint" (deficits or limitations in self-control, including those of executive functioning and self-regulation) are of critical importance in the understanding of the nature of sexual offending. Both theoretical and empirical perspectives direct that sexual offenses result from the occurrence of and interactions among multiple sexual and/or other personality characteristics interacting across situations and time. Sexual offenses are most typically the end result of several different types of risk factors and processes. It might be expected that all sex offenses are exclusively the product of atypical or deviant sexual interests, hypersexuality (heightened sexual arousal levels), and/or sexual preoccupation. However, the available empirical data indicate that sexual factors are not always present or determinant of sexual offending (although these findings are potentially limited by research-related assessment issues relative to the self-report or other measurements and determinations of characteristic or episodic sexual interest and arousal levels). Deviant sexual interests, hypersexuality, and/or sexual preoccupation do show moderate correlations (and generally have the relative highest strength of association) with future acts of sexual offending. However, on their own at least as currently measured, they contribute a smaller amount of the variance in sexual reoffending than is commonly believed. In contrast, nonsexual characteristics, predominantly personality and related conditions, also show moderate correlations with future acts of sexual offending, and numerous theorists have suggested that sexual offending may be primarily or exclusively the result of nonsexual risk factors. Thus, various measures of antisocial personality and criminal history show relative similar association to sexual domains with sexual offense recidivism. In addition, research on the explanations provided by sexual offenders themselves shows that while sexual gratification is a key factor identified as related to sexual offending, nonsexual factors are also seen as central. Thus, beyond explicitly sexual motivations, Mann and Hollin (2007) found that child molesters most frequently explained their offending by way of desire to alleviate a negative emotional state or a wish to experience intimacy, while rapists attributed their offending months frequently to grievance and/or impulsivity. Of note, approximately 1/3 of rapists and 1/4 of child molesters did not or could not give any explanation for their offending. Of course, combinations of sexual and personality (and related) predispositions can also result in the particularly increased risk of sexual offending (e.g., Rice & Harris, 1997; Harris et al., 2003, Serin, Mailloux, & Malcolm, 2001; Hildebrand, de Ruiter, & de Vogel, 2004; Hawes, Boccaccini, & Murrie, 2012). Consequently, it appears that persons who commit sexual offenses are a heterogeneous group and that, in certain cases, nonsexual risk factors may predominate in the etiology of specific incidents of sexual offending or sexual offending by particular offenders as well as act in cumulatively with sexual risk factors relative to other incidents. If sexual elements are not always predominant for perpetrators

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in such situations, for a significant set of sexual offenses and select recidivistic sexual offenders, persisting personal characteristics, related processes, and dispositions must likely be centrally or even primarily involved in the enactment of sexual offenses. That is, in many cases, apparently nonsexual predispositions may be sufficient and, in other cases, necessary for sexual offending to occur. In addition, a more limited manner, situational factors might also play an important role in a specific sexual offense. Alternately, there appear to be a large group of persons characterized by deviant sexual interests and sexual preoccupations that do not act on their atypical interests and arousal [e.g., per the DSM-5 (APA, 2013), persons with paraphilias but not paraphilic disorders]. For such persons, the relative presence of personality and related factors would appear to be highly significant in reducing their likelihood of acting on their atypical sexual interests and/or preoccupation (e.g., by the inhibition of such behavior).

Like other specific actions, criminal behaviors, particularly violent criminal behaviors such as sexual offending, most commonly have multiple determinants; multiple factors converge and interact with one another in various ways as well as situational factors resulting in a particular attempt or enactment of a sexual offense. To the degree that there are regularities or reoccurrences in criminal acts such as repeat or intermittent sexual offending, that phenomenon provides an indication that individuals possess relatively uniform or characteristic predispositions or propensities to commit such crimes. Relative to such tendencies, Elwood (2009) noted the most useful definition of the term "predispose" is that the association between the variable of interest is one that is statistically associated with an increased likelihood of future sexual offending. Most generally, a predisposition is simply a tendency to act in a particular or expected way or susceptibility toward particular behavior or actions and may exist more or less uniform ally across time and particular contexts. Thus, while the known commission of a specific criminal or sexual offending act may reflect an increased or primary role of situational or circumstantial factors (e.g., acute intoxication, antisocial associates), repeated criminal or sexual offending suggests that something more than just situational factors are at play. In addition, the specificity and continuity of types of particular violent behaviors, such as sexual offending (both in the context of other antisocial behavior and as a more unique and specialized form of repeated criminal offending), indicate that there are more than simply situational factors involved. Rather, that continuity or recurring violent and/or sexual behavior highlights the likelihood of more enduring and persistent characteristics of an individual over time. Enduring predispositions of persons are generally thought of as related to their "personality" (and associated conditions) and, in the case of illegal sexual behavior, persistent or recurring sexual offense-related characteristics. Thus, in addition to sexual interests and varied sexual motivational factors, both personality and related dimensions of a person are appropriately viewed, both conceptually and empirically, as factors that can and do predispose individuals to commit criminal sexual offenses.

Both theory and research have identified the central role that varying aspects of personality and related conditions play in sexual offending as well as both criminal and violent offending (Eysenck, 1964; Gottfredson & Hirschi, 1990). Nestor (2002) identified that personality dimensions and/or motivational elements (e.g., self-control, hostility) were strongly associated with general criminal behavior and violence toward others. Theorists have also identified and demonstrated that personality factors are central to sexual offending as a specific form of criminal and violent behavior (e.g., Groth, Longo, & McFadin, 1982; Finkelhor, 1984; Knight & Prentky, 1990; Marshall & Barbaree, 1990; Hall & Hirschman, 1992; Ward & Beech, 2006; Ward, Polaschek, & Beech, 2006; Beech & Ward, 2004). Individual studies and various meta-analyses of risk factors or criminogenic needs have identified sets of personality and related psychosocial characteristics as primary dimensions of sexual offending and sexual offense recidivism in particular (e.g., Hanson & Bussiere, 1998; Hanson & Morton-Bourgon, 2004; Mann, Hanson, & Thornton, 2010). Theories and available body of research identify several domains of psychologically meaningful predisposing conditions to sexual offending that are largely personality based: affective dispositions (e.g., anger, hostility, diminished empathy), general problem-solving and self-regulation (or executive functioning) issues (impulsivity, failure to learn from consequences, resistance to rules and norms), distinctive attitudes about society and potential victims (entitlement, emotional congruence toward women), and issues related to social relationships (lack of intimacy, recurrent conflict). Each of these empirically identified elements would be encompassed by personality, particularly aspects related to motivations, emotions, and self-regulation/self-control. In various combinations, these and other personality and related characteristics appear to coalesce into various forms of interacting psychological characteristics, which in turn predispose individuals to commit sexual offenses against youth and adults in specific immediate and recurrent social contexts. Predominantly, nonsexual personality and related conditions disorders related to sexual offending can be viewed as relating to the specific and cumulative effects of essentially dysfunctional or prepotent nonsexual *motivators* (including sensation-/thrill-seeking/risk-taking/novelty-seeking, anger/hostility, narcissism and entitlement, activating sexual offense-supportive attitudes, dominance/control (sadism), and desire for social belonging/nurturance) and varied and interacting factors of disinhibition, including failures of self-regulation and executive functioning. In addition, both other mental disorders (e.g., alcohol and drug use and ADHD) and select situational contexts also constitute potential nonsexual factors related to sexual offending. Despite the increasing

identified importance of nonsexual predisposing conditions to sexual offending, they have received remarkably little attention beyond that identification. Further, the field of personality and related predisposing conditions has changed dramatically over the past 20 years with important implications toward understanding the nature of nonsexual predisposing factors toward sexual offending. The purpose of this chapter is to review current perspectives on personality and related conditions and then to discuss their implications for sexual offending.

Toward A Contemporary Understanding of Personality and Related Conditions

Key Personality and Related Constructs in Relation to Sexual Offending

Personality, motivation, and self-control (inclusive of executive functioning and self-regulation) are all "fuzzy" concepts, each of whose boundaries and content are not fixed and precise. Moreover, each of these constructs overlaps, although both motivation and self-control (executive functioning and self-regulation) would all appear to be subsumed under the construct of personality. Costa and Widiger (2002) wrote: "Personality traits are often defined as enduring dimensions of individual differences in tendencies to show consistent patterns of thoughts, feelings, and actions" (p. 5). Others include attitudes and motivation as primary components of personality. The contemporary understanding of personality and its related conditions includes a number of perspectives that offer an updated and altered view of the nature, determinants, and organization of personality. More broadly and conceptually, personality has been understood as including regularities in or relatively enduring motivations; characteristic emotional orientations; mental representations (e.g., schemas) of self, others, and the "world"; interpersonal interaction sequences (e.g., social scripts); expectancies, goals, and motivation; regularities of appraisals and encoding of other persons and situations; self-regulation, executive functioning, and coping in reaction to stressors and distress; and strategies, competencies, and tactics in goal-directed action (e.g., Smith & MacKenzie, 2006). Relative to appreciating the role of nonsexual characteristics related to criminal sexual behavior, these perspectives are important in capturing the manner in which personality and related conditions function as key determinants in the occurrence of sexual offending. Current understanding of the interrelationship between personality, motivation, and self-regulation/self-control (executive functioning) offers valuable ways of considering relevant nonsexual factors in sexual offending. Other recent theoretical and empirical developments demonstrate that personality and related conditions are relatively consistent across similar situations and that individual differences in an individual's personality are best understood in characteristic behavioral signatures involving relatively consistent predispositions interacting with particular environmental characteristics. The core dimensional nature of personality has become clarified as a result of research, and the significant heritability of personality and related conditions has been demonstrated. In addition, it is now widely appreciated that personality has significant "unconscious" aspects and involves "dual" coexisting systems, both reflective and "hot" components. Both theory and scientific research have accrued that provide several frameworks for identifying those nonsexual personality and related conditions that appear important in the enactment of sexual offending. In turn, perspectives provide the framework for a discussion of personality and related conditions that interact with one another, as well as sexual factors, in the onset and maintenance of sexual offending.

Definitions and Aspects of Personality and Related Conditions

Personality Personality, although a term commonly used in varied communications, is actually quite a complex phenomena, one with many definitions and less than uniform agreement as to its nature. There is a common, everyday recognition that people manifest relatively uniform characteristics that allow them to be viewed as relatively constant, consistent, and unique (as a "particular" or "specific" person) and that persons have a relatively unique and consistent "identity" from the perspective of particular others and in common situations. From this more common perspective, personality is a global evaluation of a person's distinguishing attributes or characteristics of their inner experience and behavior; it can be viewed as an assessment of their individual distinctiveness or so-called individual differences. Personality refers to some consistency of predisposing elements for similar inner experiences and behavior over time that distinguishes persons from one another and is generally used to refer to those patterns of characteristic motivations, cognition content and processes, emotions or affective states, and behaviors that distinguish one person from another (systematic "distinctive" characteristics). At the same time, despite the perception that persons display relatively consistent features which distinguish them, there is also a secondary recognition that a person's experiences and behavior can be at least somewhat inconsistent to different degrees across situations and that there is some variation (and sometimes even complexity) to "who people are," temporally and situationally. Thus, personality can also be viewed as a "fuzzy" or multidimensional construct, a meaningful concept but one in which the content or boundaries vary—perhaps even considerably—according to context

or internal/external conditions and are not completely fixed; it has multiple meanings or manifestations which are clarified by elaboration and specification, particularly relative to context. Thus, within the personality literature, there is extensive discussion of "traits" [constructs of enduring characteristics as continuous dimensions (content and processes)] for which individual differences may be viewed and understood quantitatively in terms of the degree to which that characteristic applies to a particular individual (e.g., their degree of anger or concern for others) as well as a literature that identifies variation in personal characteristics across variations in internal and external factors, albeit still with consistency across those specific variations.

Motivation and Emotions Motivation and emotion are related constructs in that each is an affective and valenced (e.g., positive or negative toned) phenomena of psychological arousal that typically result in behavior; absent motivation or affect, it seems likely that no behavior will ensue. Both motivation and emotion are central dimensions of individual differences in personality, and each involves arousal as in physiological and/or psychological state of reaction to internal and external stimuli. They also exist in relation to one another, where the experience of or enacted motivation can elicit emotions and emotions can also serve as motivations. Emotions are most often considered the affective aspect of consciousness, the subjective experiences or reactions to events that occur in daily life, filtered by cognitions and accompanied by physiological changes. Motivation is considered to refer to the "impetus" or "movement" for action, for behavior; it is a process or experience of affective arousal that directs and impels a person toward particular "goals." Motivation is the "why" related to people's behavior and reflects internal states that "seek" external goals via behavioral enactment and that arise internally or are elicited or aggravated by environmental factors; these internal and external stimuli are seen as having the potential for two functions: informational and arousing or goal identification. Per Schultheiss, Strasser, Rosch, Kordik, and Graham (2012), "The term motivation characterizes an *affectively charged state* that energizes and directs action aimed at the attainment of a reward or avoidance of a punishment" (p. 650, emphasis added). Such stimuli initiate motivational and affective processes and are encoded and typically "matched" to memories based on previous learning. Common dimensions of motivation include activation (the sensitivity to and responsiveness of a range of stimulation to initiate arousal), persistence (continued effort toward a goal, often despite obstacles), and intensity (the vigor or strength over time) demonstrated in the pursuit of particular goals. Emotions are not typically associated with specific goals but may come to be stimuli for goals or experienced responses to goal-directed action. Hofmann and Kotabe (2012) distinguished between motivation and desire. They identified "desire" as an *affectively (emotionally) charged* motivation toward a certain object, person, or activity that is associated with pleasure or relief from displeasure. Desire refers to wanting to have or do something that instigates behavior. Desires are distinguished from general motivational states in that they are "about" *specific* objects or people and arise from the interplay of external stimuli, the individual's general motivational states, and a particular person's learning history. Motivations can and commonly do evolve or consolidate into dispositional states, where a specific individual is characterized by relatively persisting motivational factors and desires.

Corr, DeYoung, and McNaughton (2013) identify that most important classes of motivational stimuli can be grouped into "rewards" and "punishments" (or stimuli/behaviors desired and those avoided due to anticipated or associated fear), but point out that the *omission* of a perceived loss of an anticipated or expected "reward" is also experienced as punishment, a "frustrative non-reward." Per Corr et al., multiple motivational systems control both approach and avoidance behavior. Approach behavior includes *appetitive motivation* related to behavior directed toward goals that are usually associated with positive hedonic processes, while avoidance is related to *Aversive motivation* which involves escaping from some hedonically unpleasant condition (e.g., a reaction to a feared stimuli). Loewenstein (1996), in examining the discrepancies between actual behavior and perceived self-interest, emphasized the distinction between "visceral factors," which include motivational drive states including sexual desire and varied emotions, largely with hedonic qualities for the individual. He identified that the visceral factors had two implications:

> First, immediately experienced visceral factors have a disproportionate effect on behavior and trend to 'crowd' out virtually all goals other than that of mitigating the visceral factor. Second, people underweight, or even ignore, visceral factors that they will experience in the future, have experience in the past, or that are experienced by other people. (p. 272)

He noted that visceral factors, at higher levels of intensity, "can be so powerful as to virtually preclude decision making" (p. 273). More specifically, he argued that as visceral motivating factors increase in intensity, they overly focus attention and motivation on more proximal object goals and related "consumption," leading to suboptimal patterns of behavior and self-destructive behavior. Thus, he noted, "intense visceral factors tend to narrow one's focus inwardly"—to heighten self-centeredness and undermine concern for others. Put another way, visceral motivation impels individuals to myopically fixate on satisfying their immediate urges. Further, he noted that as time passes, persons tend to forget the degree of influence that such visceral motivations previously had on their own past behavior; consequently, most typically, past behavior that occurred under the influence of visceral factors will be increasingly forgotten.

Corr et al. (2013) noted that investigators such as Berridge (e.g., Berridge, Robinson, & Aldridge, 2009; Kringelbach & Berridge, 2012) have identified at least two major reward or motivational systems, one *incentive*-based ("wanting") and one *hedonic*-based ("liking"), each controlled by different brain sites. The incentive reward system involves motivation to seek reward (e.g., as iron toward a magnet) by commanding attention and enacting "approach"; an internal or external sensory experience causes some object or experience to be sought out. "Wanting" can range from particularly directional and "target-focused" to a broader projected range of more general rewarding stimuli. In contrast, the hedonic reward system is related to the "pleasure" or satisfaction (positive affect) experienced following attainment or contact with a reward/goal (which they note, as reinforcement, is relatively likely to produce enhanced motivation to subsequently approach similar "rewards"). These two reward systems constitute what is referred to as the pleasure system; further, it is noted that activation of the pleasure system aids in forming a cognitive representation of the rewarding stimulus in memory, which then renders that stimulus more likely to trigger later, repeated approach behaviors. This may represent a third aspect of motivation (learning), namely, the development of associations, representations, and anticipatory beliefs about future rewards. [In addition, subjective pleasure is but one element of reward, and "rewards" may influence behavior even in the absence of conscious awareness of them.]

However, dysfunctions of these motivational systems can occur. While wanting and enjoying typically go together, they may not always do so; typically, people want what they like and like what they want. In addition, sensitization occurs relative to motivated behavior, an *increase* in responsiveness to a stimulus (goal) or greater generalization to related (conditioned) stimuli. Within the context of sexual offending, motivation can be viewed as potentially expanding factors that create the intention or desire to enact what constitutes a sexual offense; in addition, related facilitatory factors increase the likelihood of committing a sexual offense, given the presence of relevant dispositions. In certain instances or for particular periods of varying time, habituation can also occur after repeated exposure to a specific stimulus, leading to at least temporarily decreased shifts in pursuit of particular stimuli but often associated with later renewed increase in reinforcement and more intensive pursuit of a goal. However, Kringelbach and Berridge noted that the incentive salience or "wanting" might become pathologically amplified so that the actual potency of liking or pleasure may actually decrease. Following the repeated gratification of goal seeking in behavior or imagination, an individual may become hyperresponsive and goal-cues become hyper-salient; this is referred to incentive sensitization or increased "wanting." Such cues and associations may be difficult to ignore, and motivational *toxicity* can arise where a motivation or drive effectively takes "control" of an individual's goal-directed behavior, relative to the expense of other aspects of their life (e.g., Esch & Stefano, 2004). Motivational "toxicity" occurs when an individual experiences a diminished or loss of behavioral control when presented with stimuli that have come to represent something desired and previously liked (something highly rewarding). Similar to drug addiction, such motivational toxicity is characterized by overvaluing certain stimuli or goals, reduced sensitivity to other potential rewards, and impaired inhibitory controls (sometimes in the context of dispositional impaired inhibitory controls) along the lines of heightened wanting. Such sensitized cue-triggered "wanting" or "overvaluing" a goal (despite the waning of the hedonic component) can persist for years after someone has stopped acting on the "liking" component of motivation and may account for the tendency of persons with dysfunctional motivational goals to relapse after quitting, sometimes even after many years of abstinence (e.g., Robinson & Berridge, 1993). Alternately, per Berridge et al. (2009), it may simply become easier to activate certain motivations and desires because of multiple brain pathways (expanded stimuli) that become responsive to expanded stimuli but harder to generate pleasure. Incentive sensitization produces a bias of attentional processing toward reward-associated stimuli; it also produces pathological motivation for the stimuli itself (compulsive "wanting"). Similar to addiction, based on more simple conditioning or learning, incentive sensitization can come to differ from more cognitive desires and lead to what might be referred to as "irrational" wanting, a "want" for something that is not cognitively or consciously desired (e.g., due to liking) caused by excessive incentive salience. Similar to substance abuse, this type of wanting or "incentive sensitization" may explain some portion of both the persisting and episodic activation and enactment of sexual offending.

Another aspect of motivation relates to individual's conscious perception of the degree to which their behavior is motivated. Relative to addiction, for example, Badger et al. (2007) found that people underestimate the influence of motivational states they are not currently experiencing. Thus, individuals typically cannot appreciate the intensity of impulses, desires, or temptations when they are not currently experiencing it. In addition, an inability to appreciate the subsequence motivational power of particular motivational factors likely contributes to initial decisions to pursue potentially unhealthy desires.

Emotions as affects are both similar to and different from motivation. Like motivation, emotions appear to be largely characterized by hedonic or valenced experience resulting from "events"; they can be responses to other internal experiences but are more often considered to be elicited in response to perceptions with varied degrees of consciousness of external events. Emotions, like motivations, are likely the product of multiple biological and experiential factors as well as personal values and goals. Thus, emotions are subjective

heightened sensations, typically but not always conscious; they are an affective experience that is characterized by physiological changes triggered by attention or pre-attentive processes and then typically "defined" or "filtered" by cognitive process or more enduring cognitive content. Thus, both motivations and emotions appear to be largely affected by cognitive appraisal; often out of immediate awareness, individuals experience sensations, but those interpretations, "labels," and meaning depend on cognitive processing in relation to the perceived environment. In turn, emotions affect both cognitive content and processing; it is widely believed that the brain systems that mediate emotions and cognitions overlap. In contrast to motivation, emotions are more reactive but less specific and less tied to explicit goal associations or directions. To a large degree by situation, emotions may be considered the subjective experience of being motivated. Like motivation, Bradley (2000) characterized emotions as having two primary dimensions: hedonic valences (varying in polarity from positive to negative) and degree of activation, arousal, or intensity. Emotions, as a subjective experience of states of recognized motivation, can and do impel a person to act in some particular way (e.g., to approach or avoid). In addition, emotions can also be thought of dispositions, similar to character traits, where an individual is predisposed to particular affects relative to other persons and thus characterized by predominant affective experiences and manifestations. Emotions and motivation appear to reflect a circularity or interaction; emotions can elicit motivation, and motivation is often associated with emotional experiences. Motivation is considered a state that produces behavior specifically oriented to propel a person toward one or more goals that have hedonic value, while more commonly emotions reflect an individual's status relative to such goals. Nonetheless, emotions and motivational states can act synergistically, creating more potent behavior fueled both by specific wanting and by anticipation of hedonic satisfaction.

"Impulses," "urges," or "desires" may best be viewed as either motivational or emotional manifestations relative to something specific at a particular time due to an interaction between constitutional, cognitive, and situational factors. They involve a push (an impulsion or impetus) or a pull (prompting, elicitation, or provocation) from some desired and/or present stimuli or imagined/perceptual stimuli. "Impulses," "urges," or "desires" typically involve varying degrees of arousal or intensity based on both a person's underlying predispositions and contextual factors and tend to be specifically directed. They tend to be immediate in a temporal and a "spatial" sense (directed toward short-term gratification) and possesses a strong incentive valued based on a hedonic (and wanting) reaction to a "tempting stimulus." Impulses, as a manifestation of motivation or emotion, typically represent a prepotent inclination to perform a certain behavior, typically an urge to approach or act on the underlying state(s). Hofmann et al. (2009a) noted that following impulses "seems to be the simplest and most natural thing in the world," but "most unconstrained impulsive behaviors interfere with the attainment of long-term goals or create conflict with others at some point." Hofmann and Kotabe (2012) make a distinction as well between desires/urges and "temptations," with the latter indicating that someone has a desire to engage in some behavior but also has some awareness that other factors present reasons not to act on the desire. Hofmann and Van Dillen (2012) note that a desire turns into a temptation (and thus enters the realm of self-control) only when or if the behavioral target conflicts with a person's values or self-regulatory goals. However, perhaps more important, they note that as individuals as ruminate about their desires and temptations, "they may generate more supporting cognitions that license and justify indulgence" (p. 319). Thus, cognitive awareness of desire or temptations can lead to an increase in impetus for actions.

Self-Control, Self-Regulation, and Executive Functioning As common definitions of personality include most relatively unique and enduring aspects of an individual's functioning, it is reasonable to consider individual differences in a person's "management" of motivation and emotions subsumed by personality. This overall process of management might most appropriately be labeled as self-control, where goal-directed behavior is "constrained" and modulated for optimal personal gain. Both personality theory and research demonstrate that a key developmental process is that shared social values, personal standards, and progressively longer-term goals typically become increasingly salient for individuals related to their experience of and expression of motivations and emotions. That is, particularly in a social world, many or most immediate manifestations of potentiated motivation and emotion become less acceptable or adaptive in the contexts of social norms and rules and in the individual's pursuit of valued longer-term goals. Several overlapping constructs refer to the elements of personality that represent the mechanisms by which impulses/urges/desires/temptations (stemming from motivational and emotional states) are managed, regulated, or controlled, typically in relation to maintaining some baseline level of functioning or of pursuit of more distal but highly valued alternative "goals." Numerous writers have suggested that self-control is the balance of attention to and consideration of "top-down" (goal driven) and "bottom-up" (stimulus driven) in particular contexts. In most respects, self-control is generally synonymous with "inhibition," defined as the conscious or unconscious restraining, constraint, or suppression of impulse-generated behavior. Thus, self-control exists as the opposite of "disinhibition," when disinhibition is understood as a condition or process in which an individual manifests

absent or reduced capacity to or in intention to manage pressing motivators (e.g., urges, temptations, emotions) in a situation and, as a consequence, acts on a desire or state of arousal in a relatively unmodulated manner. Biologically, self-control appears to be generally distinct from much of what is implied by "impulsivity" (Hofmann et al., 2009a, b; Reynolds, Ortegren, Richards, & Wit, 2006). Self-control represents constraint, relative inhibition or modulation of reactive emotional states and elicited and impelled motivational states (particularly prepotent or heightened dispositional characteristics) as manifested in particular impulses; more specifically, it refers to the effortful control and potential altering of motivations/emotions, thoughts, and behaviors "in the service of" personal and social goals or values. Available research indicates that individuals differ in their dispositional (generally enduring) ability to exert self-control (trait self-control) and also in their current, momentarily available resources for exerting self-control (state self-control); dispositional self-management can be affected by various internal factors such as distress, depletion, or situational demands. In terms of trait self-control, some individuals demonstrate a strong ability to self-regulate consistently from early childhood through adulthood, whereas others are consistently less successful at self-regulating. Generally, self-regulation is viewed as highly adaptive; Metcalfe and Mischel (2004) and Mischel (1999) spoke to the presence of self-regulatory features of persons that exist to manage (or not) less substantive impulses and feelings pressing for release so that less immediate and long-term goals can be obtained. Data clearly supports that self-control is highly adaptive: Tangney, Baumeister, and Boone (2004) found that persons with high scores on self-control were better off than those with low self-control on virtually all indices of effective adult functioning.

Self-regulation is a term often used as synonymous with self-control. However, within the psychological research literature, self-regulation most commonly refers to the more conscious resolution of conflict between immediate goals or desires and more long-term, socially, or personally valued goals. Baumeister (1998) indicated that self-regulation refers to the self-monitoring and managing one's self by altering its own responses or inner "states" (e.g., motivational or emotional) typically to delay gratification of overriding a particular state-based response to or behavior and replacing it with a more desired response related to "higher" or more long-term goals. As such, it is for the most part a more conscious top-down process, requiring awareness of the conflict of an inner state, the potential immediate response, and potential longer-term goals. Self-regulation requires such capacities as self-awareness (self-directed attention), planning (considering, organizing, and selecting among goals and strategies for actions), and the ability to delay gratification of urges, temptations, or surges of affect. Hofman et al. (2012a) suggested that, in a broad sense, successful self-regulation entails *social and personal standards*, sufficient *motivation to resolve discrepancies* between standards and actual states, and *sufficient capacity to achieve these thing*s in light of obstacles and temptations along the way. As standards, recognition of conflicts within the "self" and the capacities to address such conflicts self-control (or self-regulation) is the ability or capacity to "manage" the potentially conflicting experiences or expressions of one's feelings, motivations, and behaviors in order to obtain some more distal "reward" (or desired goals) and to avoid punishment. In various writings (e.g., Baumeister & Heatherton, 1996; Muraven & Baumeister, 2000), Baumeister has suggested that "strength model" or ego depletion models were most appropriate for self-regulation of such impulses. By this, he identified that a person's capacity for self-regulation appears to be a limited, finite constitutional resource, albeit potentially renewable over time and, to some extent, of being capable of being increased or decreased as a function of relative practice. In reviewing the literature on self-regulation, the ego depletion model of self-regulation has achieved wide acceptance, both theoretically and empirically. Baumeister and Heatherton (1996) indicated that given individual differences, some persons will demonstrate broad deficits in self-regulation in managing desires or other states; others will only show self-regulatory failure under specific situations (e.g., under stress, when overwhelmed by many simultaneous demands for self-control) and that self-regulation can be strengthened and facilitated by regular use and practice. However, Baumeister and colleagues argued that self-control "strength" is expended in the process of self-regulation; without replenishment of that strength, select persons may become acutely and chronically deficient in self-regulation and thus even more vulnerable to diminished expectancies of control or enhanced perception of "temptation" or competing motivational factors. However, while both persons high and low in self-control are subject to depletion in self-control, persons high in trait or dispositional self-control remain more capable of extended management than do persons with low trait self-control.

Executive functions (EF) are typically referenced in a neuropsychological context and have been described in a number of ways. Like personality, EF is also considered a "fuzzy," multifaceted construct that typically references a set of higher-order neurocognitive processes (e.g., metacognition: the cognition of conditions involved with monitoring and control of cognition) that allow persons to make choices and to engage in purposeful, goal-directed, and future-oriented behavior; EF is sometimes viewed as encompassing self-regulation (e.g., Barkley, 1997) or as providing the cognitive-affective structures and processes that provide both the bottom-up and top-down basis of self-control (e.g., Hofmann et al., 2012). As a cognitive "meta-process" or metacognition, Friedman et al. (2008) suggested that "inhibition" was the construct most closely related to a common or overall EF

factor, particularly in relation to real-world problems. Barkley (2012a, b) identified EFs as specific types of self-regulation or self-directed actions that people use to manage themselves effectively in order to sustain their actions (and problem-solving) toward their goals and the future. The elements of EF "permeate[s] psychology even when the construct itself is not invoked. In fact, self-regulation, self-control, emotion regulation, delay of gratification, attentional control, self-monitoring and response modulation, to name a few, all rely on some aspects of EF" (Suchy, 2009, p. 11). Similarly, EF has been defined as a collection of varying abilities that involve regulatory control over thought and behavior in the service of goal-directed or intentional activity, problem-solving, and adjustment of behavior to meet situational demands, particularly contextually appropriate behavior, and to inhibit unsuccessful, inappropriate, or impulsive behaviors (e.g., De Brito & Hodgins, 2009b). Barkley (2012b) noted that when experts in EF were asked to generate terms that would be considered, they came up with a total of 33; the greatest agreement was for the following six: (1) self-regulation, (2) sequencing of behavior, (3) flexibility or shifting of behavior, (4) response inhibition, (5) planning or strategy evaluation, and (6) organization of behavior. EF appears particularly important in a person's management of novel, nonroutine, and/or unstructured situations, managing overlearned patterns of experience (thought, feeling, and behavior) and seems essential to avoiding or inhibiting strong responses that are inappropriate to context or other parameters. Per Suchy (2009), EF can be viewed as both an evolutionary and learned adaptation that frees a person

> …from innate, hardwired drives and reflexes, as well as from over-practiced, over-learned and prepotent response…[EF] allows us the latitude of considering options and selecting a specific response to any given stimulus s based on situational contexts, previously acquired knowledge, and long-term goals. (p. 106)

He noted that EF is particularly effortful process that remains "dormant" for much of a person's everyday life and only comes on line when a person perceives a novel and/or complex situation that precludes an automatic, routine response. Further, Eslinger (1996) suggested that EF was most importantly a "social executor" and that social disabilities arising from EF impairment were the most distinctive aspect of EF.[1] There is considerable agreement that EF is best understood as a multidimensional, meta-cognitive process, where the "whole" is greater than the specific components identified in experimental and clinical assessment, many of which appear to overlap and interact with each other.

From a developmental perspective, so-called effortful control is regarded as a primary temperamental dimension and may properly be regarded as a dimension of personality, characterized by individual differences in its elements (e.g., Rothbart, 2007). As an early manifestation of a critical personality disposition, effortful control includes the focusing and shifting of attention, inhibitory control, perceptual sensitivity, and a higher threshold for pleasure. This factor reflects the degree to which a child can focus attention, is not easily distracted, can restrain a dominant response in order to execute a nondominant (as opposed to a prepotent) response, and to employ delay of gratification and planning. Developmentally, Rothbart (2007) has suggested that effortful control is based on and dependent on the particular development of "executive" attention skills in the early years. In turn, such attentional skills allow greater self-monitoring and, thus, the potential for control over reactive tendencies. Bridgett, Oddi, Laake, Murdock, and Bachmann (2013) demonstrated that generally EF and effortful control overlap, particularly with regard to self-monitoring and working memory, but *not* with inhibition (e.g., similar to Reynolds et al., 2006); compromised EF, specifically in combination with deficient inhibition (e.g., disinhibition), was uniquely associated with increased tendency to enact negative affectivity. Conversely, trait negative affect-mediated—undermined—EF and effortful control. Thus, developmentally as well as biologically, the dispositions for self-control and for impulsivity appear to be independent; their relative presence can conflict or potentiate prepotent motivations.

Barkley (2012b) proposed that the six core domains of EF include:

1. Attention and self-awareness (the ability to focus attention on one's self) as the starting point or pinnacle EF.
2. Executive inhibition (or cognitive inhibition) provides the ability to separate external stimuli from a response, inhibit or use self-restraint from immediate reaction, or enact a prepotent or more "automatic" motor response to allow a more "considered" response.
3. *Nonverbal* working memory involves the use of self-related multisensory mental representation (particularly imagery). This capacity allows seeing potential behavior in one's mind. This allows behavioral reenactments or rehearsal in memory related to hindsight and foresight (e.g., over time) and permits imagining a hypothetical future from an experienced past.
4. Verbal working memory refers to the "mind's voice," "self-talk," or private speech as a means of self-guidance. It involves providing self-direction and/or questioning oneself in a novel situation and permits the discussion of conflicts between longer-term self-interests and short-term self-interests.
5. Appraisal of motivation and emotion rooted in self-awareness. This allows for self-control (modulation) of feelings and urges that arise in the context of internal and external stimulation and provides a potential "metric" for

[1] Unfortunately, as Barkley (2012b) has noted, the measurement tasks typically utilized to assess EF (e.g., neuropsychological instruments) lack ecological validity for many issues, creating potential issues for generalization to real-life unstructured, novel situations. Nonetheless, the presence of deficits in EF in controlled evaluation sessions clearly suggests the probability of such deficits in novel, "real-world" settings.

"calculating" costs and benefits of possible courses of action (goals and means of attaining goals).
6. Problem-solving involves analyzing the features of one's environment and one's past behavior to develop plans for goal-directed action, then weighing pros and cons, and then making choices. Manipulate information into novel combinations to overcome obstacles and achieve weighed goals.

Moffitt (1990) effectively likened the day-to-day operations of the frontal lobes as the site and/or mechanisms of EF, stating:

> The normal functions of the frontal lobes of the brain include *sustaining attention and concentration*, abstract reasoning and concept formation, goal formulation, *anticipation and planning*, programming and initiation of purposive sequences of motor behavior, effective
> *self-monitoring of behavior* and self-awareness, and *inhibition of unsuccessful, inappropriate,*
> *or impulsive behaviors*, with adaptive shifting to alternative behaviors. These functions are
> commonly referred to as "executive functions," and they hold consequent implications for
> social judgment, *self-control*, responsiveness to punishment, and ethical behavior. (p. 115; emphasis added)

Thus, per Moffitt and others (e.g., Beaver et al., 2007), both executive functions and self-control are focused on the importance of regulating impulsive tendencies and the ability to control emotions and sustain attention, the salience of mental capabilities and cognitive functioning to anticipate and forecast behavioral consequences, and the ability to modulate tempers and to inhibit inappropriate conduct and are strongly related to aberrant, delinquent, and violent behaviors.

Impulsivity and Disinhibition Relative to Personality Conversationally, self-control is often conceptualized as particularly directed at the management of impulsivity, where impulsivity represents the opposite of self-control. However, increasingly, impulsivity is viewed as a multidimensional construct. First, it clearly involves both trait (dispositional) and state elements but also consists of varied subcomponents depending on context and measurement (e.g., Cross et al., 2011; Derefinko, DeWall, Metz, Walsh, & Lynam, 2011). Generally, impulsivity is viewed as the tendency (force, urge) to act on motivated desire/temptation or emotions with no or diminished consideration of consequences (particularly more distal or negative ones), often leading to inappropriate or even risky behavior that is inappropriate to a situation and/or leads to undesirable consequences. Others view impulsivity more simply as a rapid, unplanned reactions to stimuli without adequate processing of relevant information ("impulsive" decision-making); from a psychiatric perspective, Moeller et al. (2001) defined impulsivity as "…a predisposition toward rapid unplanned reaction to internal or external stimuli without regard to the negative consequences of these reactions to the impulsive individual or other others" (p. 1784).[2] Whiteside and Lynam (2001) used factor analysis of well-identified personality factors and found four distinct personality facets associated with impulsive-like behavior including sensation-seeking, urgency, (lack of) premeditation, and (lack of) perseverance (persistence). These traits were utilized to create the UPPS Impulsive Behavior Scale. Urgency is the tendency to act rashly; negative urgency involves reacting when experiencing negative affect (e.g., when distressed), while positive urgency involves reacting when experiencing positive affect. Sensation-seeking was the tendency to seek out novel and excitement. Lack of planning is the tendency not to think ahead before acting, while lack of persistence is the inability to sustain attention and motivation in pursuit of a more distal goal. Miller, Flory, Lynam, and Leukefeld (2003) validated these four dimensions of impulsivity. Smith et al. (2007) utilized factor analysis and found that lack of planning and lack persistence appeared to be two facets of a larger factor. Miller et al. found that lack of premeditation (deficient ability to consider possible consequences of one's behavior before acting) and sensation-seeking were the most consistent dimensions of impulsivity in predicting externalizing behavior. Leshem and Glicksohn (2007) also found that trait impulsivity was to a large degree related to heightened "venturesomness" or sensation-seeking. Sensation-seeking appeared to relate to the frequency of engaging in such behavior, while urgency as a dispositional element appeared to relate to a range of problem behaviors. Smith et al. indicated that rash action when distressed was distracting from negative affect and might lead to behavior that is pleasurable and leads to an immediate decrease in distress (negative reinforcement). From this perspective, without the experience of immediate punishing consequences, opportunities are missed to learn more effective self-management responses. Tuttle et al. distinguished the *capacity* for self-control from a *desire/interest* to exercise such control, inserting a volitional component (e.g., a motivation or intent to apply self-control); persons differ both in their "self-management skills" and the value they attach to utilizing those skills, perhaps relative to particular motivations and contexts. Impulsivity appears to be characterized by individual differences in a value or goal-related dimension (is it necessary or of importance to an individual

[2] In distinction, compulsivity refers to repetitive behaviors that are performed according to certain rules or in a stereotypical fashion and if resisted lead to negative affect. Impulsivity is more associated with pleasure seeking. Compulsivity is a tendency to repeat the same, seemingly purposeless acts, which are sometimes associated with undesirable consequences. Both impulsivity and compulsivity can be viewed as volitional impairment, with compulsivity more apparently driven by cognitive factors. Sexual behavior can be a product of compulsivity, but sexual offenses are more likely to be impulsive in nature.

to exercise self-regulation of one or more particular impulses?) as well as by the relative strength (dispositional or situational), to enact constraint in the presence of impelled or elicited states. What can be seen in the various definitions of impulsivity is that, for most writers, the construct consists of impulsivity which is composed of two components: motivators or behaviorally activating factors (sensation-seeking, urgency) and deficits in inhibition. Inhibition refers to the process of overriding urgent impulses or desires by the "stopping" or "slowing" of some psychological phenomena (with or without conscious intention) either temporarily, intermittently, or permanently. This second component of so-called impulsivity may be best referred to as disinhibition, reflecting limitations in EF, self-regulation, and other aspects of self-control (a lack of various inhibiting or modulating factors including planning, premeditation, and persistence toward more distal goals).

In short, among the more critical aspect of personality and related behaviors are motivation and self-control (as including both executive functioning and self-regulation). On all levels of understanding (e.g., biological, developmental, and psychological), these are each overlapping, related and interacting constructs. It is clear that dysfunctions in motivation and self-control all likely play key roles in sexual offending, including those instances where nonsexual predisposing factors appear to predominate or function as primary risk factors in sexual offending.

Relevant Perspectives on Personality

Personality as Dimensional

A primary development in the understanding of personality is the growing acceptance of theory based on increasing and relatively consistent research regarding the central or primary dimensions of personality. Dimensional structural models of personality reflect theoretical and empirical efforts to identify the "essential" or "primary" domains of personality on which people differ both in type and degree. Structural-dimensional models of personality are hierarchical with a greater number of personality "facets" subsumed under limited number of superordinate personality factors. A number of dimensional models of personality have been proposed, all of which have a significant amount of overlap (Eysenck, 1967; Leary, 1957; Gray, 1994; Cloninger, 1987, 1979; Zuckerman, Kuhlman, Thornquist, & Kiers; 1991; Tellegen & Waller, 1992; and the Five-Factor Model (FFM) developed by McCrae & Costa, 2003, 2004). In particular, the FFM has become the most generally accepted model of general personality structure and provides a basis for understanding personality disorders (or sets of maladaptive persons laity characteristics) as abnormal variants of normal personality dimensions (see also Markon, Krueger, & Watson, 2005). From the perspective of the FFM, a review of the literature would indicate that a number of personality dimensions have been implicated in criminal, violent, and sexual offending including antagonism and negative emotionality (anger, hostility, distress), sensation-seeking and risk-taking, a lack of premeditation or thoughtfulness (deficient ability to consider possible consequences of one's behavior before acting), low conscientiousness and constraint, and a general (historical) impulsiveness.

Personality and Related Conditions as "Dual Systems"

Motivational and emotional aspects of personality are manifested in the context of self-regulation/self-control; they are the "yin" and "yang" of much human behavior such that this duality is a key aspect to personality (e.g., as a "dual system" of motivational forces in the context of varying degrees of regulation/constraint). However, both motivational and emotional conditions vary as psychological phenomena; some are more "visceral," "incendiary," and "tempting" than others, with the "hotter" incentives eliciting more potent motivation than the "cooler" incentives in individuals. While satiation can occur, as does self-control depletion, most appetitive or consummatory urges increase again over time, particularly to the degree that they have resulted in previous positive reinforcement (either behaviorally or via covert reinforcement through imaginal processes). In certain instances, even "sated" persons may respond with approach behavior toward someone or something that has particularly high incentive value; novel, dispositionally exciting stimuli appear particularly potent. [In contrast, most long-term, distal goals acquire motivational power only over time and through socialization.]

Among others, Metcalfe and Mischel (1999), Hoffman et al. (2009), and Kahneman (2011) have proposed the conceptualization of a dual processing framework, involving "hot" and "cool" dimensions. The "hot system" of processing experiences appears to be a "bottom-up" system developmentally specialized for quick emotional processing and response on the basis of unconditioned or conditional trigger features, a "go" system as in a basic fight or flight process. The hot system provides the basis for dealing with relatively automatic responses to both appetitive and fear-producing stimuli. Thus, rapid automatic triggering, conditioned responding, inflexibility, stereotypic and affective primacy characterize "hot" systems. In contrast, the "cool cognitive system" is a "top-down" one, specialized for more complex, longer-term goals and representation and thought, a "know"

system. The cool system provides the mechanism for a more integrated, personal identity, such that simple to complex knowledge about sensations and emotions, thoughts, actions, and contexts are organized into a personal and "world" narrative that is typically coherent and capable of deferring automatic reactions to appetitive and threat stimuli toward more long-term goals for self or society. Metcalfe and Mischel suggest that when the "hot system" is dominant (when the cool system is inadequately developed, temporarily or chronically dysfunctional, or an individual does not "activate" their available control strategies), the simple exposure of a salient "hot stimulus" will typically elicit the automatic relevant and/or prepotent response. Under such conditions, person's cognitive processing of powerful, visceral motivators is often fast, automatic, largely unconscious, and, depending on context, potentially costly in terms of competing goals.

Barkley (2012b) too noted the importance of essential "adaptive" self-management or self-regulation "in the face of strong temptations and immediate 'hot' situational triggers that elicit impulsive, automatic responses that threaten the individual's pursuit of more important distal goals…" (p. 17). Barkley noted that motivations for pleasure (and for avoiding pain) and the emotions that accompany everyday and stressful experiences serve as the "hot" domain of EF providing the "why" or basis for behavior. [To be contrasted with the "cool" domain of EF (such as working memory, planning, problem-solving, and foresight) which may provide the basis for the "how, when, where" of behavior.] Another dimension to EF is evidence that they may operate differently in different contexts relative to the degree of affective or motivational valence perceived in contexts or situations. A notion of "cool" EFs refers to "to-down" processes that are purely cognitive in nature and elicited in neutral settings; working memory, sustained attention, set-shifting, and certain types of response inhibitions are considered to be cool EFs. For example, the inattentiveness associated with ADHD likely reflects cool EF deficits. In contrast, "hot" EFs are viewed as cognitive processes that have an affective, motivational, or incentive component and involve more affective decision-making such as appraising the significance of a stimulus, a state of heightened arousal (motivational significance) or behavioral choices related to a desired stimulus or elevated arousal. Disinhibition is likely to be a function of deficits in either or both cool or hot EF.

Relative to criminal, violent, and sexual offending, it seems likely that "hot" systems of both motivation and control are relatively potentiated for individual perpetrators; more predisposing conditions for sexual offending are relatively simple, prepotent, and automatic, while "cool" systems are either underdeveloped or ignored generally and/or in specific situations of particular affective valence.

Personality and Related Conditions Have Significant "Unconsciou" (or Out of Awareness) Elements

In psychological science, there is increased awareness of the significance of *unconscious* processing of internal and external stimuli; in fact, it appears that a considerable amount of psychological experience (motivation/affect, thoughts) occurs outside of personal awareness. As Nisbett and Wilson (1977) suggested in their seminal article, most or many persons are neither aware of nor can accurately report on the true causes of their behavior. Cognitive unconsciousness refers to the findings that much of what the mind "does" occurs outside of consciousness, for example, leading to relatively automatic behaviors. A key distinction of personality, particularly relative to motivations as internal states, is that between explicit (conscious) and implicit (unconscious) motivations; as Westen (2006) has noted, a large body of research indicates that motivation falls into both categories and may have different antecedents. Bargh and Morsella (2008) noted, "…the past 25 years have produced a stream of surprising findings regarding complex judgmental and behavioral phenomena that operate outside [personal] awareness" (p. 75). Westen (1999) has pointed to the activation of unconscious beliefs, fantasies, networks of association, and experiences that are unconscious but can substantially influence conscious thought and behavior, remaining relatively inert until activated by internal or external stimuli. He noted that considerable motivational and affective processing, including sexual arousal, occurs outside of personal awareness. Bargh and Morsella (2008) confirmed that unconscious "simulation" of a desired or wanted course of action can be learned without actually performing such actions via observation, modeling, narratives, and so on (and thus without initial risk or other consequences). They also pointed out that such unconscious fantasies and urges may *also* come to be experienced as explicit, conscious ones and that unconscious and conscious fantasies can serve as convergent stimulation for potential, future action. Bargh and Morsella also pointed out that unconscious motivations, like thought processes, become automatized particularly through high reinforcement in particular situations. Schultheiss et al. (2012) noted that implicit motivation is generally biologically based motivation related to the attainment of pleasurable and rewarding goal states and which typically influences behavior "non-consciously;" such implicit motivation directs behavior toward incentives and away from disincentives without requiring conscious awareness. In fact, research suggests that people who are *less perceptive* of their visceral reactions appear to exhibit stronger affective responses to evocative stimuli (e.g., Larsen, 2000).

Persistent and Situationally Expressed Personality and Other Characteristics

Regarding personality, there is a recognition that people respond similarly and somewhat consistently to similar situations or conditions but not the same at every time and/or situation; the intuitive notion is that personality is probabilistic. Thus, personality is most commonly conceptualized as those *relatively stable characteristics* of a person that make their behavior relatively predictable similar across time and situations, the common ways that persons adapt to the situations that they encounter in their lives. Such traits represent relatively enduring dispositions or vulnerabilities that are relatively distal to particular acts (e.g., Ward & Hudson, 1998).

Mischel (1968) was perhaps the first personality theorist to argue emphatically for the position that then personality and related behavior were too cross-situationally variable. He claimed that the view that personality traits as inherently uniform dispositions was unacceptable and that perceived consistency might reside in the consistency of situations that persons were exposed too. He described the "personality paradox," referring to the attempts to reconcile the "invariance and stability of personality with the equally compelling empirical evidence of the variability of the person's behavior across diverse situations…" (p. 1). Over time, via theory and research, a rapprochement or integration has been achieved in terms of reconciling the overall stability of personality dimensions and the manner or degree to which situations elicit sometimes different but relatively consistent responses. Buss (1979) pointed out that while the effect of personality is dependent on situations (and vice versa), biologically based personality predispositions act to create greater consistency in finding certain situations, so that individuals affect their exposure to situations by their "inclinations" to behave similarly across situations. Currently, psychological science recognizes that a significant degree of consistency in personality is best understood as patterns of behavioral response to variation in specific types of situations, with the recognition that individuals may behave "non-prototypically" as a function of distinct or unexpected properties of the environment or situation exerting influence on existing predisposing personality and EF factors. Individual differences in particular dispositions moderate a person's responses in particular situations or classes of situations; proximal situational factors are events that may elicit more transitory "states" that are manifestations of less apparent or unconscious individual predispositions or vulnerabilities and lead to particular behaviors under particular environmental influences.

In recent writings, Mischel and Schoda (1995, 1998, 2004) noted that when aggregating an individual's behavior on a given dimension over many different situations to estimate "true" characteristics of the individual, data shows that specific persons can differ significantly on certain dimensions given the particular characteristics of situations and still show stable overall individual differences. He has argued that individual differences would be expressed less in varied cross-situational behavior and more in distinctive (but still relatively stable) patterns of "if, then situation behavior relations," what he describes as contextualized, psychologically meaningful *personality signatures* (e.g., "he does A when X, but B when Y"). Such *if, then* patterns or *personality signatures* (or behavioral scripts) would be likely to become activated in relation to the perception of specific situations; those scripts would be similar across perceived similarities in particular situations but might vary when situations were perceived as different. Similarly, motivations/emotions and self-regulation/control are also contextual phenomena. Schultheiss et al. (2012) pointed out that goal-directed behavior is a joint product of the individual's internal need (e.g., sexual arousal or control) and situational incentives (sexual- or dominance-related cues) that allow the expression of this need, stating "A specific episode of motivated behavior is set in motion by the interplay of an internal need and the presence of suitable external incentive cues and persists until the individual reaches the desired reward" (p. 651). Internal states, such as deprivation or satiation, will affect the sensitivity to external cues, intensity, duration, and expression of appetitive behavior. The density, novelty, vividness, and other aspects of environmental cues may also affect both drivers and regulators of behavior, both on conscious and unconscious levels.

Similarly, to the contextual basis of other personality characteristics, the role or meaning of EF will vary across individuals and contexts. Individuals with more limited EF or less practiced EF are likely to find themselves in positions of increased stress exposure, to show increased stress reactivity and development of problematic coping strategies that in turn have greater potential to be stress generating. EF influences self-regulation in interpersonal contexts and thus enhances some individuals' vulnerability to interpersonal conflict or degrades social support. A person with well-developed reasoning and problem-solving skills faced with a particular situation may rely on minimal EF "skills," while possible effective adaptation to the same situation may require a person with less developed skills or cognitive limitations to rely more highly on EF "skills" or face adaptive "failure." Thus, the particular person's history and status of EF characteristics affect their reliance on more effortful and extensive use of EF skills. Further, common or routine situations may not typically demand much in the way of EF skills, while a novel or complex situation may identify that EF skills are insufficient and/or poorly practiced and lead to functional impairment or distress; as Suchy (2009) put it, "The better practiced the skills, the less reflective of EF they actually are" (p. 111; emphasis in original).

Personality and Self-Control (Including Self-regulation and EF) Are Significantly Genetically Determined

Over the past 30 years, an abundance of research has accrued demonstrating the heritability of most characteristics of human behavior, including personality. Livesley (Livesley, Jang, Jackson, & Vernon, 1993, 2006; Livesley & Jang, 2008) has noted that behavioral genetic research provides convincing evidence of extensive genetic influences on individual differences in normal and disordered personality. Heritability is typically estimated in the 40–60 % range, and environmental influences are largely confined to non-shared effects (unique experiences of the individual relative to siblings). Per Livesley, "heritability does not differ significantly across traits and heritability estimates are not appreciably influenced by method of measurement" (pp. 42–43). He further showed that there was extremely high congruence between genetic and phenotypic factor structures including the domains of emotional dysregulation, antisocial, and inhibition. Livesley suggested that the research indicated a few general genetic factors account for observed trait covariation, mostly via extensive pleiotropic effects (e.g., a single genetic entity influencing several distinct phenotypes or behavioral expressions). That is, a particular individual may manifest several different mental disorders because of a single genetic contribution, or a small set of shared genetic contributions, thus leading to the common phenomenon of psychiatric comorbidities. Livesley also noted that environmental influences on personality traits, while similar in magnitude to genetic influences, most probably act to consolidate the pleiotropic effects. Thus, genetic factors interact, most typically in an exacerbating or aggravating way, with environmental factors. That is, heritable personality dimensions are not completely independent and are more commonly compounded or exaggerated by varied environmental effects.

Factor analysis of studies of comorbid mental disorders have repeatedly revealed two broad dimensions accounting for systematic covariance among disorders (e.g., Krueger, 1999; Krueger et al., 2001). The first dimension is an internalizing factor (representing fear, anxiety, and mood disorders). The second dimension is an externalizing factor representing traits and characteristics associated with antisocial personality and substance abuse disorders. As a result of these and other behavioral genetic studies, these externalizing psychopathological conditions appear to have strong biological, genetic links to one another; strong evidence exists of a common externalizing liability for a "family" of antisocial and related disorders of dysregulation. Relative to externalizing proneness, two subdomains have been identified as particularly relevant: *disinhibition* (including traits such as impulsivity, sensation-seeking, and unconventionality) and a subtype of *negative affectivity* (anger, suspiciousness, and aggression as distinguished from depression and anxiety). Krueger and colleagues have termed this collection of antisocial personality characteristics and disorders, substance abuse/dependence, and attention-deficit hyperactivity disorder (ADHD) as "externalizing spectrum disorders" (ESD) which later work found was a continuous genetic liability (e.g., Markon & Krueger, 2005). In their review of a number of recent twin studies, Krueger et al. (2002) reported very high heritability (80 %) of externalizing proneness (e.g., disinhibition) as accounting for the shared variance among antisocial and substance abuse disorders; Egan (2011) found similar results. Kendler, Aggen, and Patrick (2012) identified that from a genetic perspective, two dimensions of genetic risk reflecting aggressive disregard and disinhibition influence the dispositions related to antisocial behavior/personality. Similarly, dimensions of Fearless-Dominance and Impulsive-Antisociality showed genetic covariation with externalizing psychopathology (Blonigen, Hicks, Krueger, Patrick, & Iacono, 2005). Other research also demonstrates that impulsivity (disinhibition) appears highly heritable; genetic factors account for between 44 and 56 % of variation in low self-control. Niv et al. (2012) demonstrated the heritability and longitudinal stability of impulsive tendencies across adolescence, with additional genetic and environmental effects also coming into play at later ages. Utilizing a longitudinal study of youth, Beaver, Wright, DeLisi, and Vaughan (2008) identified that genetic factors accounted for between 52 and 64 % of the variance in self-control, that self-control was relatively stable and was determined almost exclusively by genetic factors. Relatedly, Barnes and Boutwell (2012) found that genetic factors accounted for 97 % of the stability in offending behavior over a 13-year span from adolescence to adulthood. In other words, when antisocial conditions are extreme and stable, genes are disproportionately responsible. Boutwell and Beaver (2010) showed that once genetic factors in self-control were statistically controlled, the effects of parental socialization were minimal, with the exception of associative mating. Livesley et al. (1993) found that narcissism (most specifically the vulnerable narcissistic dimension) had a particular high heritability; other dimensions of personality that had heritability coefficients greater than 0.5 were callousness, oppositionality, and social avoidance. Torgersen et al. (2000) determined that the heritability for ASPD, BPD, and NPD were approximately .70 and the effects of shared/familial environmental effect was zero. Similarly, Trull and Durrett (2005) also found that when symptoms of all the personality disorders were factor-analyzed, a unidimensional factor reflecting dissociality/psychopathy emerged. Egan (2011) reported an effect size of .5 for heritability of criminal offending, *independent* of the presence of a personality disorder. Nestor (2002) noted that

commonly SAB are also accompanied by distinct comorbid conditions, specifically Cluster B disorders (particularly ASPD), in part due to shared genetic liability. Hodgins (2007) noted several studies indicating that callous-unemotional traits in youth as well as psychopathic traits in adults showed high heritability. Multiple studies have also found a very strong heritable component to EF (e.g., Rothbart, 2007; Bell & Deater-Deckard, 2007; Coolidge, DenBoer, & Segal, 2004; Friedman et al., 2008). Per Friedman et al. (2008), central executive functions are correlated because they are influenced by a *highly* heritable (99 %) common factor that goes beyond general intelligence or perceptual speed; Young et al. (2009) reported similar findings. This combination of general and specific genetic influences places executive functions among the most heritable psychological traits. Similarly, low self-control has been demonstrated to have a significant genetic or heritability effect; Bezdjian et al. (2011) referenced studies showing that even after controlling for multiple demographic and environmental factors, heritability accounted for over 50 % of the variance in self-control. Conversely, Young et al. (2009) reported behavioral disinhibition (e.g., deficits in self-control) as having a highly heritable genetic liability of .82 and concluding that collective results provide compelling evidence that the etiology of behavioral disinhibition is primarily genetic and that the primary mechanisms of action were deficits in cognitive response inhibition.

In addition to a pure strong genetic diathesis, developmental and situational contexts determine the degree to which such a genetic liability is expressed. Particular genetic influences (e.g., impulsivity, hyperactivity, lower intelligence) increase the odds of exposure to particular (non-shared) environments or situations and lead to aggravation (and sometimes mitigation) of a particular dimension of personality. Thus, children high in impulsivity and disinhibition are often born to a parent with similar difficulties or who for other reasons are not effective at encouraging the development of self-control or prosocial attitudes; there is "goodness of fit" for preservation and exacerbation of those characteristics but poor fit for effective modification of them (e.g., Lykken, 1995). At the same time, Buker (2011) reviewed research indicating that most parenting measures showed small effects once measures of EF were covaried and that psychopathological personality features captured a significant amount of variance in self-control. Krueger et al. (2002) pointed to the likely development and expression of a self-reinforcing cycle, where impulsivity and antisocial behavior (substance use) leads to increases in disinhibition/novelty-seeking and continued antisocial behavior and substance use. Further, genetic or evolutionary perspectives suggest that persons who are "competitively disadvantaged" in terms of obtaining resources through socially acceptable means (e.g., agreeableness and higher intelligence) and are characterized by high degree of impulsivity and sensation-seeking may be more likely to engage in antisocial behavior as a means of obtaining those resources. While heritability is a prominent factor in personality and related conditions, it is important to appreciate that a key aspect of the power of such biological determinants bias may be understood to lie primarily in their ability to limit or restrain the acquisition of alternative personality dimensions rather than to simply determine a particular one.

In summary, there are several key aspects of personality, self-control, and EF that are important to consider in understanding their nature and expression. First, all three domains are dimensional in nature, and persons vary in the degree to which a particular characteristics is generally present. Second, personality and related conditions apparently function in line with a "dual system." There are aspects of motivation and emotions that are particular "hot," visceral, and prepotent and lend themselves to more rapid, automatic, and largely subconscious processing. In addition, expression toward proximal goals occurs or does not in the relative absence or presence of "cool," largely cognitive processes involving attention-demanding, analysis, and conscious effort relative to the pursuit of less immediate goals. Third, much of motivation, emotion, cognitive content, and processing (including self-regulation and EF) occurs largely out of individual awareness/attention or is "unconscious." Fourth, the expression of personality and related conditions is contextual; specific aspects of those conditions will only be apparent in particular contexts and at particular times; thus, particular behaviors (e.g., select sexual behaviors) will only occur with the juxtaposition of a set of circumstances involving stimuli of various specificity, unique personal states, and relatively permissive environments. Fifth and finally, personality and related conditions have clearly been demonstrated to be largely genetic and heritable in their etiology and self-enhancing in their effects on varied environments. Thus, there may be relatively little malleability for much of what personality and related conditions contribute to sexual offending.

Personality and Related "Disorders"

Even with the acknowledged influence of situational context, personality traits are still commonly viewed as enduring patterns of perceiving, relating to, and thinking about oneself and one's environment across a range of social and personal contexts. There is increasing scientific consensus that the structure and elements of normal and "abnormal" personality are essentially the same; thus, there is a bipolarity of maladaptive-adaptive personality characteristics. Pathological or abnormal personality dimensions are understood as typically more extreme (e.g., more intense, more frequent, longer duration, and typically negatively valenced) and functionally maladaptive (e.g., resulting in one or more areas of impairment) variations on continuums of a "primary" personality dimensions.

Thus, a "personality disorder" has come to be viewed as a collection of a multiple intense, persistent, or pervasive personality dimensions (or traits) that lead to personal distress and/or functional impairment in major life domains (including harm to others). Since 1980, per DSM-III, the DSM-IVs, and the current version of the DSM-5, a personality disorder has been defined as an enduring pattern of inner experience and behaviors that deviates markedly from the cultural norms or expectations, is pervasive and inflexible, has an early onset (e.g., in adolescence or early adulthood), is stable over time, and leads to impairment. The enduring pattern of inner experience and behaviors must be manifest in two or more of the following areas: cognition (ways of perceiving and interpreting self, other people, and events), affectivity (range, intensity lability, and appropriateness of emotional response), interpersonal functioning, and impulse control. Individuals with personality disorders are typically unable to respond flexibly or adaptively to the changes in the hands of life. Rather they create and exacerbate stress by provoking aversive reactions in others; by failing to make optimal social, occupational, or other life decisions; and by creating situations that are problematic and pathogenic. Of great significance, per DSM-5, "the characteristics that define a personality disorder may not be considered problematic by the individual (i.e., the traits are ego-syntonic)."

The DSM-IVs (and the recent DSM-5) enumerated 10 specific personality disorder categories. Various issues have been raised about the particular categories of personality disorder associated with the DSM-IV, recent DSM-5, and ICD. As Trull (2005) noted: "Most would agree that ten official personality disorders presented in the DSM-IV-TR do not represent all forms of personality pathology that the clinician is likely to encounter and to treat…" (p. 172). Widiger and Trull (2005) pointed out that the current and proposed criteria sets for DSM personality disorders were overly restrictive. Widiger and Simonsen (2005) identified a number of additional issues regarding the current categorical system of classification of personality disorders: excessive comorbidity (many patients meet diagnostic criteria for more than one personality disorder), inadequate coverage of personality pathology (as many as 60 % of patients seeking treatment manifest maladaptive personality presentations that do not fit well under current DSM personality disorder categories), and limited scientific basis exists for the specific boundaries or trait thresholds for specific personality disorder diagnostic categories. In a meta-analysis, Verheul and Widiger (2004) found that the relative prevalence of PD NOS ranged from 21 to 49 %, and in nonstructured interview studies, it was the most commonly used personality disorder diagnosis. Similarly, the National Epidemiological Survey on Alcohol and Related Conditions (NESARC) initially examined the co-occurrence of most the ten DSM-IV-TR personality disorders in the US population, using face-to-face interviews covering this set of seven disorders in 2001–2002 ($N = 43{,}093$; e.g.,Grant et al., 2004). The initial analysis of the NESARC study found that all of these personality disorders were related or overlapped with one another (Grant, Stinson, Dawson, Chou, & Ruan, 2005); in particular, personality disorders within DSM-IV personality disorder clusters (groupings of personality that were believed to have descriptive similarities) were particularly correlated or comorbid within three clusters. Not surprisingly, personality disorder not otherwise specified (PDNOS) was the most commonly assigned personality disorder diagnosis.

Of particular importance, the DSM-5 (APA, 2013) recognized the various problems related to a categorical system of classification of mental disorder and, in particular, personality disorders. They noted that a categorical approach did not capture the significant clinical reality of overlapping or shared symptoms across more narrow diagnostic categories and the heterogeneity of conditions captured within specified categories. As a result of this recognition, while maintaining a categorical approach to classifying personality disorders, the DSM-5 also provided an alternative DSM-5 model for personality disorders where personality disorders are characterized by two primary dimensions: (1) impairments in personality function (self and/or interpersonal) and (2) one or more pathological personality traits. While recognizing the validity and the significance of a dimensional approach to organizing and classifying mental disorders, including personality disorders, the DSM-5 elected to maintain a categorical classification of personality disorders as a "bridge" from past to updated diagnostic practices. Select professionals continue to advocate for the categorical model of DSM personality disorders (e.g., Zimmerman, 2011). Further, in a more recent and methodologically more sophisticated study of NESARC data, Harford et al. (2013) indicated that the DSM-IV diagnostic criteria provided a good fit for an underlying latent dimension for each personality disorder.

In addition to the disorders in the DSMs, psychopathy (PP) has come to be viewed as a particular personality construct [historically evaluated with the Psychopathy Checklist-Revised (PCL-R; Hare, 1991; 2003a)] that both dimensionally and categorically has demonstrated strong relationships with criminal and violent behavior (e.g., Hemphill et al., 1981a, 1981b). Psychopathy or psychopathic traits appear to reflect a blend of egocentrism or narcissism, sensation-seeking, and callousness leading to irresponsible, antisocial behavior; it represents a blend of so-called Cluster B personality disorders (the "erratic, unstable" cluster), and it identifies a particular subgroup of persons with increased proneness to criminal, violent, and sexual offending. Much of the current understanding of psychopathy, as collections of maladaptive traits and, more extremely, as a personality disorder, has been based on research utilizing the PCL-R. Hare's research (1991, 2003b) found that the measured construct of psychopathy was composed of two primary "factors." Factor 1 One (F1) reflected a more narcissistic or "callous aggressive" variant of personality,

consisting of traits such as self-centeredness, egocentric, callous, and/or the remorseless use of others. Factor 2 Two (F2) was shown to be related to a social deviance or chronically and unstable and antisocial lifestyle, including early onset of antisocial behavior, more diverse criminal behavior, and a low tolerance for frustration. In 2003 (a), Hare identified that each factor was compromised of two facets: interpersonal and affective facets comprised the interpersonal/affective factor, while impulsive lifestyle and antisocial behavior comprised the social deviance factor. Dimensionally, Hare and Neumann (2008) reviewed the results of various analyses of approximately 7,000 varied offenders and forensic patients, while Neumann and Hare (2008) replicated the four-factor structure in a randomly selected community sample as well as identified a "superordinate" factor of psychopathy. Neumann, Hare, and Newman (2007) also demonstrated that the four dimensions/facets of psychopathy are so significantly interrelated that when structural equation modeling was applied across diverse samples of over 7000 individuals, results showed that the four first-order facets could be explained by a single superordinate cohesive "super factor."

Other research efforts have also attempted to identify the critical elements of psychopath or a psychopathic personality. Alternately, Cooke and Michie (2001) argued for a three-factor model, based on the notion that an antisocial or criminal factor is a concomitant or consequential to "true" psychopathic traits and not a core factor of the theorized construct of psychopathy. The three factors that they identified were *arrogant and deceitful interpersonal style*, *deficient affective experience*, and *impulsive and irresponsible behavioral style*. Hall, Benning, and Patrick (2004) and then Patrick, Fowles, and Krueger (2009) found similar three-factor models; Patrick et al. identified a triarchic model emphasizing three-dimensional constructs: *meanness*, *boldness*, and *disinhibition*. Sellbom and Phillips (2013) showed that these three dimensions captured a substantial amount of variance in self-report measures of psychopathy.

Lilienfeld has examined self-reported psychopathic characteristics in predominantly community samples. His research (e.g., Lilienfeld & Fowler, 2006) has identified eight replicable factors associated with these perspectives on psychopathy (fearlessness, cold-heartedness, Machiavellian egocentricity, social potency, impulsive nonconformity, carefree non-planfulness, stress immunity, and blame externalization). Utilizing self-report instruments, other investigators have reported the identification of two common primary dimensions of self-reported psychopathic traits: fearless dominance and impulsive antisociality (e.g., Benning, Patrick, Hicks, Blonigen, & Krueger, 2003; Witt, Donnellan, Blonigen, Krueger, & Conger, 2009). As Hare and Neumann (2007) pointed out, the interpersonal/affective and the social deviance factors of the PCL-R appear to match the "fearless dominance and "impulsive antisociality" factors identified via personality self-report.

Given the available theory and science, it seems clear that the nature of psychopathy is complex and multifaceted. The best evidence is that psychopathic conditions are heterogeneous as Lykken (1995) and others have suggested and that subtypes of psychopathic individuals exist defined by relative emphasis on different dimensions identified by different investigations and investigators. In reviewing this available work, it seems clear that there is a significant degree of overlap and consistency across the different research efforts and models for subtypes of psychopathy. Skeem et al. (2003, 2007) has advocated that it makes considerable sense to conceptualize that there are variants of psychopathy or psychopathic personalities. More specifically, Skeem et al. (2007) have suggested that relative to primary psychopaths, secondary psychopaths had greater trait anxiety, fewer psychopathic traits, and comparable levels of antisocial behavior. Of note, Ross, Benning, and Adams (2007) showed that symptoms of deficient EF were "endemic" to secondary psychopathy but not primary psychopathy. Hicks, Markon, Patrick, Krueger, and Newman (2004) identified two subtypes of psychopathic individuals: *Emotionally stable* psychopaths were marked by low trait anxiety, positive emotionality, and more goal-directed behavior (e.g., primary psychopaths), whereas *aggressive* psychopaths were marked by high negative emotionality, high disinhibition, and social affiliation (e.g., secondary psychopaths); Poythress et al. (2010) found similar groups. Across validation variables, secondary psychopaths manifested more borderline personality features, poorer interpersonal functioning (e.g., irritability, withdrawal, poor assertiveness), more symptoms of major mental disorder, and significantly poorer clinical functioning than primary psychopaths. In contrast, lower anxiety and greater assertiveness/dominance characterized the primary psychopaths. These results were similar to those of Blackburn (2009), who found four profile classes: *primary psychopaths* (impulsive, aggressive, hostile, extraverted, self-confident, low to average anxiety), *secondary psychopaths* (hostile, impulsive, aggressive, socially anxious, introverted, moody, lower self-esteem), *controlled psychopaths* (defensive, controlled, sociable, very low anxiety, and high self-esteem), and inhibited *psychopaths* (shy, withdrawn, controlled, moderately anxious, low self-esteem); these last two classes are considered more "well-socialized" psychopathic individuals. More recently, Eaton et al. (2011) showed that BPD was effectively an externalizing disorder with an additional component of distress; thus, some persons with BPD appear likely to be best understood as secondary psychopaths (e.g., emotionally reactive and dysregulated).

Paulhus and Williams (2002) initially identified a "dark triad" of psychopathy, narcissism (dominance, grandiosity, and superiority), and Machiavellianism (interpersonal strategies that advocate self-interest, deception, and manipulation); they identified each element of the dark triad as associated with antisocial behavior. From the five-factor model, persons

are disagreeable, extraverted, open, and have high self-esteem along with low levels of neuroticism and conscientiousness score high on the dark triad; they extract what they want from their environment via an exploitive approach (e.g., Jonason et al. 2010). In another study, Jonason and Trost (2010) found that both psychopathy and Machiavellianism were correlated with low self-control, a tendency to discount future consequences, and high rates of attention-deficit disorder. They stated: "These systems are likely to leave the person with a fast life strategy to feel as though they just cannot control themselves, although it is unlikely they want to" (p. 614). Persons possessing elevated levels of the characteristics that make up the dark triad are likely to be selfish, possess a grandiose sense of importance, and feel an increased sense of entitlement. Further, these individuals are often preoccupied with dominance and power and will use aggressive tactics such as manipulation and exploitation to get whatever it is that they feel that they deserve. Johnson and Tost (2010) provided evidence that "the short-term exploitive strategy that characterize the dark triad is supported by a system of limited self-control, a tendency to discount future consequences, and attention deficit symptoms" (p. 614). "They noted that these systems "are likely to leave a person feeling as though they just cannot control themselves, although it is unlikely they want to" (p. 614). Thus, those individuals with significant elements of the dark triad are particularly prone to antisocial behavior. More recently, Buckels et al. (2013) suggested adding sadism to compose a Dark Tetrad of personality. They discussed "everyday sadism" as a callous tendency to enjoy the suffering of others, which is associated with antisocial outcomes. They found "Only sadists increased the intensity of their attack once they realized that the innocent person would not fight back. Sadists were also the only dark personalities willing to work (i.e., expend time and energy) to hurt an innocent person. Together, these results suggest that sadists possess an intrinsic appetitive motivation to inflict suffering on innocent others—a motivation that is absent in other dark personalities. Inflicting suffering on the weak is so rewarding for sadists that they will aggress even at a personal cost" (p. 9).

Personality-Related Conditions: Criminal, Violent, and Sexual Offending

Personality Traits and Disorders

The role of disorders of maladaptive personality traits and related conditions has long been recognized as prominent factors in criminal behavior (e.g., law-violating acts) and violence toward self and others. In particular, personality and related factors appear important given the delimited group of individuals who persist or repeat violent behavior. First, most "antisocial individuals" do not become involved in the criminal justice system; only 50 % of individuals in the USA diagnosed with antisocial personality disorder (ASPD) have an official record (history) of some criminal offending (e.g., Robins & Regier, 1991). In contrast, essentially, it is only a relatively small group of individuals who engage in repeated criminal behavior and an even smaller group who engage in repeated violent behavior over time. In prominent studies, typically 5–6 % of criminal offenders were found to be responsible for 50 % of recorded crimes (e.g., Farrington, Ohlin, & Wilson, 1986). Approximately only 23 % (Coid, Yang, Roberts et al., 2006) to 33 % (De Brito & Hodgins, 2009a) of persons with ASPD are characterized by repeated acts of violence. Black (2011) found that while only 35 % of recently incarcerated inmates met the criteria for ASPD in a US sample, those with ASPD showed a greater frequency of three or more criminal convictions and prior mental health treatment. It is notable that approximately 70 % of persons with ASPD who were violent had engaged in instrumental—as opposed to reactive—aggression; that is, their aggression had some degree of premeditation as opposed to being a result of simply a situational provocation (DeBrito & Hodgins, 2009a).

Related to the finding that it is a relatively small group of persons who perpetrate the majority of any violent behavior, the extant empirical literature clearly supports a finding that there is a subgroup of *persistent* antisocial offenders. Moffit's (1993) life-course-persistent antisocial behavior group were persons who engaged in repeated or episodic antisocial behaviors after adolescence and constituted a unique group of persons; they persisted in and fail to desist from violence and crime. Generally, it appears that those who show earlier onset of antisocial behavior commit the majority of crimes and are more likely to continue to do so throughout their lives. As a group, they appeared to be one with a strong genetic diathesis toward antisocial behavior. Cross-sectional studies suggest the prevalence of antisocial behavior as expressed in the community peaks between 35 and 40, suggesting the possibility of remission for some antisocial individuals. However, the few longitudinal studies available indicate substantial variation in the persistence of antisocial behavior, particularly violent behavior. In a 30-year follow-up of antisocial personality disordered individuals, Guze (1976) found that 72 % of incarcerated male felons were still classified as meeting the criteria for ASPD by interview at follow-up. Robins et al. (1966) found that while 12 % had remitted, 27 % had improved but not remitted and fully 60 % of persons previously diagnosed with ASPD were unimproved. Black, Baumgard, and Bell (1995) in a long-term follow-up of males with ASPD showed while antisocial men had reduced their impulsive behavior and to some extent their criminality, they continued to have antisocial and/or impulsive issues leading to significant interpersonal and other problems throughout their lives. Several smaller studies have showed that while a minority of persons with ASPD were either

"remitted" or "improved," a significant proportion of persons remained criminally active throughout follow-up periods (e.g., Black et al., 1995). McLean and Beak (2012) identified several factors associated with a persistent violent offending career: an offending career that begins before the age of 14 (early onset) and previous violent crimes. A longer criminal career was also associated with a greater frequency of violent offending. DeLisi and Vaughan (2007) demonstrated that "career" criminals had significantly lower levels of self-control. They found that those who scored just one standard deviation above the mean on a measure of self-control had five times the odds of manifesting career criminality and that low self-control distinguished career criminals with ROCs between 74 and 87 %. It is notable that Moffit (1993) identified persistent offenders as most likely to be individuals with significant inherited cognitive and emotional difficulties that later interacted with varied criminogenic situations; thus, persistent antisocial behavior appears to have a considerably stronger degree of heritability than that which is time-delimited and typically has a much earlier age of onset. In summary, a relatively small portion of persons with ASPD are detected by the criminal justice system, violent behavior distinguishes a select group of persons with ASPD, and only a more select group of offenders persist in violent criminal behavior over time.

Eysenck (1977) theorized that low arousal capability and low boredom (leading to a need for excitement) in the relative absence of conditioning for rule adherence by parents and schools were critical in the causation of crime. In A General Theory of Crime, Gottfredson and Hirschi (1990) argued that the central underlying criminal propensity is low self-control or difficulty delaying short-term gain, reward, or pleasure at the expense of longer-term interests. Persons with deficient self-control or a greater degree of disinhibition tend to forego consideration of the long-term costs associated with engaging in antisocial and/or deviant acts, provided an opportunity to offend is present. Per Gottfredson and Hirschi, "people who lack self-control will tend to be impulsive, physical (as opposed to be mental) risk-taking, short-sighted, and nonverbal, and they will tend therefore to engage in criminal and analogous acts" (p. 90). Per Buker's (2011) summary of Gottfredson and Hirschi's theory, crimes (a) are stimulating, dangerous, or thrilling; (b) require little skill or planning; (c) result in pain to or discomfort of a victim; (d) provide immediate, easy, and simple satisfaction of desires; and (3) supply few or insufficient long-term benefits. Persons with low self-control were predisposed to criminal activity due to their impulsivity, risk-seeking, "bad" temper, and preference for goals/tasks that do not require persistence, low cognitive and academic skills, self-centered nature, low empathy and short time horizons. In a modification to his earlier self-control theory, Hirschi (2004) suggested that the *prevalence* and *salience* of varying social bonds are likely to be considered as "costs" of offending at the time of offending and that both short- and long-term implications for social bonds may exert an effect on the degree of self-control. Given difficulties in delaying gratification, offending behaviors took place in the relative absence of concern over possible future negative consequences. Pratt and Cullen (2000) conducted a meta-analysis of self-control theory using 21 studies and found effect sizes from of .47–.58, indicating a moderate consistent effect of self-control and general criminal behavior. Specifically, they showed that approximately 73 % of offenders were characterized by low self-control relative to 50 % of non-offenders, indicating self-control deficit. DeLisi and Vaughan (2007) showed that persons scoring just one standard deviation below the mean on a self-control measure were well identified as career criminals; low self-control was by far the best predictor of chronic criminality.

Alternately, following Zukerman (1994), Burt and Simons (2013) suggested that thrill-seeking or risk-taking represents an independent personality predisposition that is equally prominent relative to self-control in criminal behavior; individual differences exist relative to the degree of "pleasure" or reward that (versus "pain") they anticipate receiving from risky acts (e.g., Lykken, 1995). Such preference for risk is viewed as a distinctive motivating factor unrelated to the ability or intent to consider the consequences of one's behavior; the intense reward effects of risk acts can outweigh the consideration of potential negative consequences for persons high on thrill-seeking. Thus, risky or thrilling behavior can involve a substantial amount of planning and fantasy (as opposed to being simply impulsive or a result of low self-control). A related issue is that persons may be characterized by individual differences in their threshold for and breadth of thrill-seeking stimuli, with some manifesting broader and others more narrow pleasure preferences. Particular personality disorders, as specified categories of particular combinations of personality traits, have been implicated in general criminal offending.

Krueger et al. (1994) showed that specific personality dimensions or traits were linked to criminal behavior. Specifically, they found that negative emotionality (e.g., higher stress reactivity, anger, grievance, adversarial interactions) and low constraint (impulsive, danger seeking, rejecting of conventional values) were related to antisocial behavior, as well as social alienation, lack of social closeness, and risk-taking. They also found that particularly antisocial individuals (e.g., those who engaged in a wide variety of criminal acts) exhibited personality profiles that were characterized by particularly strong rejection of rational values, thrill-seeking, impulsivity, aggressive behavior, lack of sociability, and feelings of alienation. Tackett and Krueger (2011) identified several factors related to the ESD; two included impulsive irresponsibility and callous aggression. Krueger (2006) pointed out that negative emotionality paired with high levels

of disinhibition lead to more general externalizing behavior, while substance use and antisocial behavior problems were both related to an unconstrained, impulsive personality style. In a later study of the self-report approximately 1800 adult (including both correctional and community samples), Krueger et al. (2007a) created a hierarchical, quantitative model of the externalizing spectrum disorders (ESD), including ASPD. The following are among the 23 facets identified: aggression (relational aggression, physical aggression, and destructive aggression); excitement-seeking and boredom proneness; problematic impulsivity, impatient urgency, and planful control; rebelliousness (rule violations/disobedience); irresponsibility and dependability; honesty; fraud; criminal theft; empathy; blame externalization; alienation (from others); and various substance use dimensions (alcohol use, alcohol problem, marijuana use, marijuana problem, drug use, drug problems). In a more recent research, Carragher et al. (2013) demonstrated that attention-deficit hyperactivity disorder (ADHD) was a component of the larger continuous and dimensional liability to externalizing disorders in adulthood including ASPD and alcohol/substance use disorders. In addition, Eaton et al. (2011) showed that BPD was related to ESD liability as well as a particular sensitivity to an aspect of internalizing disorders, namely, distress.

Violence (the use of physical force to harm or injure someone) or aggression (violent behavior motivated by negative affect such as anger), which includes many sexual offenses, is a particular set of criminal acts. Most persons who commit criminal acts do not engage in violent behavior. Violent behavior is typically dichotomized as instrumental violence (goal-directed and/or at least somewhat anticipated or planned violence that occurs in an attempt to obtain a goal or goals, including simply "harming" another) and reactive violence (violence that occurs in response to provocation and arousal of hostility, which is often expressive violence ventilating anger or similar affective states) (e.g., Cornell et al., 1996). In addition, there are mixed forms of violence, for example, when an instrumental act encounters resistance experiences as provocation.[3] Megargee (e.g., 1976, 2011) offered a framework for conceptualizing "the algebra of aggression" or violence toward others; it suggests factors that determine whether or not a person performs a given aggressive act against a specific target at a particular point in time.

> …In this often unconscious bargaining process or 'response competition', the behavior that offers the most satisfactions at the least cost will … [occur]. The 'reaction potential, or net strength of an aggressive response, is determined by balancing the factors promoting each response against those deterring it. (p. 5)

[3]Cornell et al. (1996) developed a coding scheme that included planning, goal-directedness, provocation, arousal, severity of violence, relationship to victim, intoxication, and psychosis.

Megargee identified three primary factors related to "fostering" aggressive behavior. *Intrinsic instigation to aggression* is the conscious or unconscious drive to attack, injure, or harm someone or to damage something (such factors were seen as anger, hostility, rage, or hatred: angry aggression). *Extrinsic instigation leads to instrumental aggression* in which aggression is used as means of achieving ends other than simply injuring the target; extrinsic goals include dominance power, self-esteem, and acquisition or the accomplishment of personal objectives. Finally, the third personal factor that increases the relative potential of aggressive responses is *habit strength*, the extent to which aggressive acts have been reinforced in the past via pleasure or satisfaction. For Megargee, the stronger the habit strength for particular aggressive acts, the more likely that similar acts will be enacted again in the future. In addition, Megargee noted that both additional personal and situational factors, particularly "internal inhibitions" and "pragmatic concerns," could deter aggression. Conversely, a lack of such inhibitions (e.g., a lack of empathy, objectification, and so on) and/or an insensitivity or indifference to pragmatic concerns (such as negative consequences or low probability of achieving the goals of violent behavior) can further facilitate or foster aggressive or violent responses. Megargee emphasizes that the potential for violence is multifactorial and complex, that violent offenders are likely to be heterogeneous, and that violent acts will occur variably or episodically as function of relative variability in factors "fostering" or "inhibiting" aggression, habit strength, and situational factors.

Litwack and Schlesinger (1987) noted that repetitive violence was "more likely to stem from relatively enduring personality traits" (p. 211) than from momentary crises and other events, thus indicating the relative significance of maladaptive personality and likely personality disorders. Nestor (2002) examined the relationship between personality dimensions and violent behavior and identified four as fundamental to that relationship: impulse control, affect regulation, threatened egotism or narcissism, and paranoid cognitive personality style. In a systematic review, Yu, Geddes, and Fazel (2012) reported that there was a substantially increased probability of a violent outcome for persons characterized by any personality disorder in the general population as well as for the subset of known offenders. Meta-regression indicated that the risk of offending was increased among persons with antisocial personality disorder (odds ratio of 12.8), particularly for such persons who were already identified as offenders (e.g., had a history of antisocial and violent behavior). Of such persons, 666 % were criminal recidivists. [Of note, Yu et al. found that young age was not a risk factor for violence among samples of individuals with personality disorders.] Widiger and Trull (1994) noted that violent behavior is a "defining feature" for both antisocial personality disorder and borderline personality disorder

(while noting that antagonistic, hostile traits are evidence in eight of the ten DSM personality disorders). Generally, ASPD increased the relative risk of being convicted of a violent crime by a factor of 7 for males; inmates with ASPD generally showed significantly higher scores for violent offenses than those without antisocial personality disorder (DeBrito & Hodgins, 2009a). Maladaptive Personality disorders identified as early as in adolescence (including narcissistic, paranoid, and passive-aggressive traits) were independently associated with risk for violent acts both during adolescence and eagerly adulthood (Johnson et al., 2000). Widiger and Trull suggested that a diagnosis of either antisocial personality disorder (ASPD) or borderline personality disorder (BPD) is a significant risk factor for violent, aggressive behavior, particularly in persons with a prior history of such behavior. Similarly, Blackburn and Coid (1999) have also noted that the more "psychopathic" subgroup of persons with ASPD were responsible for a disproportionate amount of both detected and undetected violence. In addition to ASPD, various studies have shown that borderline personality disorder (BPD) is associated with violent behavior (e.g., Black, Gunter, Allen et al., 2007; Newhill, Eack, & Mulvey, 2009). Howard (2009) showed that persons who met criteria for either (or both) ASPD or BPD were characterized by high levels of impulsive sensation-seeking and aggression hostility, indicating a tendency to act out when in a state of heightened affect (including both positive and negative emotional/motivational states). That is, in addition to anger, experiencing increased positive affect leads to a strong desire to maximize a state of excitement or thrill-seeking anger (affectively positive affect) via acting out; the process of acting out on such motivation (e.g., via violent behavior) is reinforcing itself, in addition to the outcome. Narcissistic personality disorder (NPD) is also strongly related to criminality in general and violence in particular (e.g., Johnson et al., 2000; Esbec and Echeburua, 2010). Esbec and Echeburua identified: "Narcissism is a frequent trait in all types of violence subjects, especially antisocials and psychopaths, who usually give preference to their desires over the needs and rights of the others…" (p. 256). Thus, most existing research identifies dual dimensions as related to violent behavior, one a sensation-/thrill-/risk-seeking dimension that presses for action against others and the other reflecting deficiencies in self-regulation, involving a lack of consideration of consequences for self/other and related deficits in the management of impulses or urges for action.

Per meta-analyses of the PCL-R and its relationship to criminal recidivism, results have demonstrated that the PCL-R was consistently among the best predictors of recidivism, whether utilized as a continuous or categorical measure (Hemphill, Hare, & Wong, 1998; Hemphill, Templeman, Wong, & Hare, 1998). In fact, surprisingly, *survival analyses for "medium" and "high" PCL-R groups were not clearly differentiated from one another; both of these groups showed similar recidivism rates and patterns*. More recently, Leistico et al. (2008) conducted a meta-analysis involving 95 studies involving almost 16,0000 institutionalized or incarcerated persons. They found that higher PCL total, Factor 1 and Factor 2 were each moderately associated with increased antisocial behavior. Rice and Harris (1997) showed that sexual recidivism rates for sex offenders were substantially higher among identified psychopaths. They found that violent recidivism rates for five years after release were 85 % for persons classified as psychopaths by record review (e.g., cutoff score of 25) based upon survival analysis; this rate was approximately 50 % above that of non-psychopaths. The PCL-R score was typically the strongest (or one of the strongest predictors) of violent and sexual recidivism (e.g., Hare, 2003b; Hanson & Morton-Bourgon, 2004).

In addition, it is important to emphasize that while a large number of persons commit an act of violence and other criminal acts, essentially, only a relatively small group of individuals engage in repeated criminal behavior and an even smaller group engage in repeated violent behavior over time. In prominent studies, typically 5–6 % of criminal offenders were found to be responsible for 50 % of recorded crimes (e.g., Farrington et al., 1986). Utilizing a national representative sample, Vaughan et al. (2011) found that while 66 % of NESARC sample showed little involvement in criminal behavior, there was a low substance use/high antisocial behavior group (21 %) and a high substance use/moderate antisocial behavior group (8 %). As previous researchers had shown, only 5.3 % of the sample was identified as a "severe" group, characterized by pathological involvement in more varied and/or more intensive forms of antisocial/externalizing behaviors and extensive psychiatric disturbance. O'Driscoll et al. (2012) showed that released prisoners with a personality disorder (the majority "mixed" or meeting criteria for more than one personality disorder) showed a 26 % increase in the risk of criminal reoffending over a 5-year follow-up; Grann, Danesh, and Fazel (2008) reported similar findings. More specifically, only 20 % (Coid et al., 2006) to 33 % (DeBrito & Hodgins, 2009a) of persons with antisocial personality disorder are characterized by repeated acts of violence. Approximately just 50 % of individuals diagnosed with ASPD have an official record (history) of some criminal offending (e.g., Robins et al., 1991); most persons with ASPD are not detected for criminal or violent offending. Black (2010) found that while only 35 % of recently incarcerated inmates met criteria for ASPD in a US sample, those with ASPD showed a greater frequency of three or more criminal convictions and prior mental health treatment. Similarly, it is notable that approximately 70 % of persons with ASPD had engaged in instrumental—as opposed to reactive—aggression; that is, their aggression had some

degree of premeditation as opposed to being a result of a situational provocation (De Brito & Hodgins, 2009a).

Related to the finding that it is a relatively small group of persons who perpetrate the majority of violent behavior, the extant empirical literature clearly supports a finding that there is a subgroup of *persistent* antisocial offenders. Moffit's (1993) life-course-persistent antisocial behavior group appeared to be one with a strong genetic diathesis toward antisocial behavior. That group of persons who engage in repeated or episodic antisocial behaviors after adolescence constituted a unique group of persons with a history of such behaviors; they persist and fail to desist. Generally, it appears that those who show earlier onset of antisocial behavior commit the majority of crimes and are more likely to continue to do so throughout their lives. Cross-sectional studies suggest the prevalence of antisocial behavior as expressed in the community peaks between 35 and 40, suggesting the possibility of remission. However, the few longitudinal studies available indicate substantial stability in the persistence of antisocial behavior, particularly violent behavior. Vaske, Ward, Boisvert, and Wright (2012) examined the stability of risk-seeking from adolescence to emerging adulthood and found that individuals who scored medium and high on risk-taking displayed absolute stability across time; this suggests that high levels of personality deficits are problematic across important segments of the life course. In a 30-year follow-up of antisocial personality disordered individuals, Guze (1976) found that 72 % of incarcerated male felons were still classified as "antisocial" by interview at follow-up. Robins et al. (1966) found that while 12 % had remitted, 27 % had improved but not remitted and fully 60 % of persons previously diagnosed with ASPD were unimproved. Black et al. (1995) in a long-term follow-up of males with ASPD showed that while antisocial men had reduced their impulsive behavior and to some extent their criminality, they continued to have antisocial and/or impulsive issues leading to significant interpersonal and other problems throughout their lives; while a minority of psychopaths and persons with ASPD were either "remitted" or "improved," a significant proportion of persons remained criminally active throughout follow-up periods (Black et al., 1995). Hare (2003a) noted that only cross-sectional data existed and that dimensional scores of psychopathic traits were only weakly related to age (albeit somewhat differently for ratings based on interview + file versus just file review). Hare also pointed out that older psychopaths spent significantly less time in the community than did non-psychopaths of similar: "Clearly, older psychopaths had far less opportunity to offend (less time at risk) than did nonpsychopaths…the criminal (and violent) propensities of the aging psychopath may have been greatly underestimated" (p. 62). Moffit (1993) identified persistent offenders as particularly early-onset offenders, with most likely to be individuals with significant inherited cognitive and emotional difficulties that later interacted with varied criminogenic situations; thus, persistent antisocial behavior appears to have a considerably stronger degree of heritability (and which leads to criminogenic environments and experiences) than that which is time-delimited. DeLisi and Vaughan (2007) showed that lower levels of self-control were uniquely related to career criminals. In summary, violent behavior distinguishes a select group of persons with ASPD, and only a more select group persists in violent criminal behavior over time.

Executive Functioning

Deficits in EF have been implicated in criminal, violent, and sexual offending. De Brito and Hodgins (2009b) provided a review of executive functioning in persistently violent offenders and noted a strong relationship to increased violence as a result of interactions between deficits in EF and impulsivity. Theoretically, the role of EF is a key element to particular theories of sexual offending, particularly the self-regulation theory.

Banich (2009) stated:

> The very nature of executive function makes it difficult to measure in the clinic or the laboratory; it involves an individual guiding his or her behavior, especially in novel, unstructured, and non routine situations that require some degree of judgment. (p. 89)

Consequently, clinical and experimental measures of EF likely provide relatively general proxies for EF deficits in actual life situations. Morgan and Lilienfeld (2000) conducted a meta-analysis of ASPD and performance on six reasonably well-validated measures of EF. Thirty-nine studies yielding a total of 4,589 participants were included in the analysis. Overall, antisocial groups performed .62 standard deviations worse on EF tests than comparison groups; this effect size is in the medium to large range. They noted that significant variation within this effect size estimate was found, some of which was accounted for by differences in the operationalization of antisocial conditions and measures of EF. Morgan and Lilienfeld concluded that evidence for the *specificity* of EF deficits relative to deficits on other neuropsychological tasks was inconsistent. Ogilvie, Stewart, Chan, and Schum (2011) found results similar to those of Morgan and Lilienfeld's (2000) original meta-analysis; their updated meta-analytic results confirmed that there is a robust and statistically significant association between ASB and EF impairments. An average weighted grand mean effect size of 0.47 standard deviations difference between antisocial and comparison groups was found across the studies. This effect size was in the medium range, compared to the medium to large 0.62 average weighted mean effect size produced by Morgan and Lilienfeld. This difference in grand mean effect size magnitude is likely a reflection of the heterogeneity of effect sizes observed in the current and earlier meta-analysis.

Larger differences in EF performance were observed in studies involving participants from correctional settings and with comorbid ADHD. Effect sizes for EF impairment were moderated by ASB categorization. Effect sizes for EF measures were found to be largest for the operationalization of physical aggression ($d=0.67$), criminality ($d=0.56$), and psychopathy ($d=0.49$). Measures of "hot" components of EF (those involved in affective decision-making and delay of gratification) were found to have a moderate-large effect size (relative to "cool" components of EF, which showed smaller EFs). De Brito, Viding, Kumari, Blackwood, and Hodgins (2013) showed that violent offenders with and without psychopathy showed similar impairments in verbal work memory and adaptive decision-making: "They failed to learn from punishment cues, to change their behaviour in the face of changing contingencies, and made poorer quality decisions despite longer periods of deliberation." The performance of both groups of offenders did not differ on what were deemed measures of "cool" and "hot" EF. In their review, Paschall and Fishbone (2002) concluded that a large body research from diverse files suggest that impaired EF plays an important role in aggression and violent behavior. However, they also make an extremely important point, namely, that "subclinical impairment" in EF (while less observable or diagnosable) is likely associated with a significant amount of such violence.

Rather than regard ASB as specific to EF impairments, a more accurate view may be that ASB is associated with a broader syndrome of more generalized neurocognitive impairments that include EF impairment as well as other deficits in self-control. Deficits in the initial stage of EF—attention—have been implicated as a key factor in psychopathy. Newman in various publications (e.g., Vitale & Newman, 2009, 2013; Baskin-Sommers, Wallace, MacCoon, Curtin, & Newman, 2010; Zeier & Newman, 2013) has studied and delineated the relationship of attentional deficits as the critical component for response modulation as a key component of psychopathy. Their response modulation hypothesis holds that abnormalities in selective attention undermine the ability of psychopathic individuals to consider contextual information that modulates prosocial and/or more distal goal-directed behavior. Newman and his colleagues have focused on the role of attentional deployment as the critical pathway associated with psychopathic traits. Attentional deployment involves directing one's attention toward or away from an emotional or otherwise arousing situation. Per Newman's work, psychopathic individuals are not affected by peripheral or contextual information that is incongruent with their primary focus of attention. Rather, they are characterized by an attentional "bottleneck" that interferes with simultaneous processing of multiple channels of information so they are not able to rely on previous experience or other concurrent experiences to influence goal-directed behavior in the face of a prepotent goal. Consequently, they appear oblivious to internal and external stimuli that cause less psychopathic individuals to cognitively "stop" to evaluate their behavior. Such impaired response modulation results in better "task performance" relative to enactment of prepotent motivational or affective states for psychopathic individuals (they cannot or do not pay attention to distracters), but create problems when such information is central for effective self-regulation toward longer-term goals. A related more general finding per Gable and Harmon-Jones (2008) is that high-intensity approach motivation reduces global attentional focus (relative to low-approach-motivated positive affect). Reward incentives are also known to promote greater goal persistence. Thus, attentional deficits which lead to impulsive, immediate, and self-gratifying behavior relative to "hot" stimulation are key components relative to disinhibited and unconstrained behavior such as sexual offending. Compared to non-offenders, De Brito et al. (2013) found that violent offenders with ASPD (both with and without psychopathy) showed similar impairments in verbal working memory and adaptive decision-making. They failed to learn from punishment cues, to change their behavior in the fact of changing contingencies, and made poorer quality decisions despite longer periods of deliberation. Of note, both of the offender groups were comparable on measures of "cool" and "hot" executive function.

Equivalent findings regarding EF have been found for sexual offenders as well. Joyal et al. (2014) examined 23 neuropsychological studies reporting data on 1,756 sexual offenders via meta-analysis. As expected, a highly significant, broad, and heterogeneous overall effect size was found; sexual offenders generally differed across tasks to assess EF. However, taking subgroups of participants and specific cognitive measures into account significantly improved homogeneity. Sex offenders against children tended to obtain lower scores than did sex offenders against adults on higher-order executive functions, whereas sex offenders against adults tended to obtain results similar to those of nonsex offenders, with lower scores in verbal fluency and inhibition. Similarly, Langevin and Curnoe (2007) suggested that various conditions related to EF as measured by neuropsychological tests are common among sexual offenders. Fabian (2010) concluded that the research was unclear and inconsistent regarding the prevalence of neuropathology among sexual offenders relative to sexual violence; his review identified many potential neuropathological domains which might be related to problems in self-control among sexual offenders. Reid et al. (2010) found a correlation of .37 between global indices of executive functioning and hypersexuality, suggesting a moderate relationship between those two domains. While Hare and Neumann (2008) reported that a large literature demonstrates that there is, at most, only a weak association between psychopathy

and intellectual ability, Egan (2011) reported a robust and unambiguous relationship between lower intellectual functioning and criminal behavior, with little difference between those offenders detected and those not detected. He pointed to an association between lower intelligence, decreased economic independence and resources, and a greater sensitivity to "small personal losses, whether material or personal," that lead to higher frequency of humiliation, anger, and hostility. An interesting distinction arises regarding EF and "hot" and "cool" internal experiences. On the one hand, for select individuals, it seems clear that to the degree that an individual possess EF, those processes can be undermined and overwhelmed by "hot" processes, leading to significant disinhibition. On the other hand, for select sexual offenders, the "cool" processes of EF appear to be employed (e.g., focused, sustained attention, problem-solving, and organization/coordination of actions) in enacting sexual offenses in such a manner as to minimize the likelihood of detection.

Generally, problem-focused coping (PS) reflects EF-related strategies in the face of provocation and arousal, particularly in the identification of problems and appropriate skills to manage the source of those reactions. Both coping and PS involved perceiving, defining, and appraising problematic acute or recurring situations or "a life episode" (e.g., cognitive reappraisal) in ways that they can be confronted and managed; they also involve various specific strategies or tactics to both address one's experience and situation. A common notion of issues in problem-solving involves (a) deficits in problem recognition, (b) a lack of consequential (means-end) thinking (e.g., failing to think through potential consequences of actions, particularly longer-term results), and (c) difficulties generating a range of reasonable options. McMurran (2009) has identified PS as significant factor in violent behavior generally, while Serran and Marshall (2006) suggested that dysfunctional coping is associated with sexual offending. Similarly, Slab and Guerra (1988) found that criminal offenders, including sexual offenders, showed a variety of deficiencies in problem-solving, including (a) problem definition and failure to seek relevant information, (b) enacting hostile goals, and (c) generating relatively few alternative coping or PS solutions. Hanson et al. (2007) found that deficient problem-solving, including sexual coping, showed a significant linear relationship to sexual offender recidivism. Nezu, Nezu, Dudek, Peacock, and Stoll (2005) found that social problem-solving deficits were associated with sexual aggression and sexual deviance in a sample of child molesters.

Given the strong evidence found in studies of genetic liability to externalizing disorders, including substance use disorders and ADHD, it should not be surprising that such conditions have also been demonstrated to have some particular association with criminal, violent, and sexual offending.

Alcohol/Substance Use Disorders

Substance abuse disorders (SAD) also show strong associations with criminal and violent behavior, including sexual offenses. At least one-half of all violent crimes involve alcohol consumption by the perpetrator, the victim, or both (Collins & Messerschmidt, 1993). Per DOJ review by Cannon and Carmon (2006), studies overwhelmingly indicate a strong link between the consumption of alcohol and violent acts. Between 27 and 47 % of all homicides and acts of purposeful injury have been found to involve the use of alcohol by the perpetrator. Alcohol consumption is not only linked to acts of violence but to the escalation of violence and the resulting severity of injuries. US crime reports indicate that approximately six in ten incidents of alcohol-related violence resulted in injury to the victim. Alcohol use increased the frequency with which threats of violence escalated to actual assaults, with a higher percentage of assailants who had been drinking committing a physical attack resulting in injury than did the nondrinkers. Per DOJ review by Cannon and Carmon (2006), almost one in four victims of violent crime report that the perpetrator had been drinking prior to committing the violence. O'Driscoll et al. (2012) showed that released prisoners with substance use disorders showed a 33 % increase in the risk of criminal reoffending over a 5-year follow-up.

As noted, Krueger et al. (2007a) have demonstrated that alcohol and drug use/dependence are part of a genetically linked spectrum of externalizing disorders along with ASPD; thus, there is strong biologically mediated comorbidity between those conditions. From a personality perspective, Hopwood et al. (2011) noted negative affect and disinhibition represent risk factors for increased substance abuse; further, alcohol use is associated with increased impulsivity and disinhibition, while other substance abuse is associated with greater disinhibition. Dick et al. (2010) reported that alcohol consumption increases impulsive acts, particularly via increases in perceived urgency and sensation-seeking. Other researchers have found that the dimension of sensation-seeking was associated with increased impulsive behaviors among alcoholics (Lejoyeux et al., 1998). Godlaski and Giancola (2009) found that irritability successfully mediated the relation between EF and intoxicated aggression for males. Nonspecific or nonsexual affective (e.g., anger, fear) or motivational arousal can "transfer" to and heighten sexual arousal given a sexualized context; thus anger, particularly when accompanied by alcohol intoxication or disinhibition, can relatively easily become additionally experienced as sexual arousal in the presence of sexualized cues or context.

In addition, substance abuse also affects EF and self-regulation. In his early review, Giancola (2000) stated, "In summary, the framework postulates that when executive

functioning is impaired, there is a resultant lack of cognitive control (i.e., inhibition) over behavior as a result of an inability to pay attention to and appraise situational cues, take another's perspective, consider the consequences of one's behavior, and defuse a hostile situation. Given this reduction in behavioral inhibition, hostile cognitions and negative affective states are more likely to manifest as overt violence" (p. 589). Giancola concluded that executive functioning mediates the alcohol-aggression relation in that acute alcohol intoxication disrupts executive functioning, which then heightens the probability of aggression. In addition, he found that executive functioning moderates the alcohol-aggression relation in that acute alcohol consumption is more likely to facilitate aggressive behavior in persons low, rather than high, in executive functioning. In line with the notion that EF is best viewed as a meta-cognitive or overriding construct, Giancola, Godlaski, and Roth (2012) found that the best predictor of intoxicated aggression was a "Behavioral Regulation Index," comprising component processes such as self-monitoring, inhibition, emotional control, and flexible thinking. Hofmann and Frieze (2008) found that implicit attitudes affected alcohol consumption and increased the behavioral impact of impulsivity by disrupting cognitive restraint standards. In fact, Wolfe and Higgins (2008) showed that actual low self-control has a separate additive effect on (low) perceived behavioral control relative to alcohol consumption; lower levels of inhibitive factors and less belief those factors affect control of behavior each can lead to increased that alcohol use. Further, alcohol consumption may begin under some degree of self-awareness and self-control, over time additional consumption may act to further decrease both perceived and actual self-control. As Abbey (2011) summarized, alcohol consumption biologically impacts a number of cognitive functions including basic reasoning, planning, and judgment while impeding response inhibition relative to the suppression of a compelling predominant response (e.g., a strong motivation). When intoxicated, persons focus on salient, superficial cues, including motivations and affects, rather than distal or subtle cues. Consequently, feelings of anger, sexual arousal, entitlement, frustration, etc. may be considerably more salient or potentiated than "morality," empathy for a potential victim, or anxiety or concern for future consequences. As noted by Giancola (2004), meta-analytic studies indicate that alcohol has a medium effect size on aggression, but he suggested that key moderating factors are at work. He found that dispositional low EF was related to increased aggression in males after alcohol consumption and that alcohol also exerts its effect by disrupting EF. In addition, alcohol consumption likely leads to a decrease in perceived or experienced anxiety or fear of negative consequences. Psychologically, learned alcohol-related expectancies can also play a role in increased social violence. Walters (2002) found that reactive criminal behavior was more strongly associated with substance abuse, with criminal thinking mediating the relationship between such abuse and criminal behavior. He suggested that substance abuse might affect EF and magnify the impulsive and irresponsible features (e.g., cognitive indolence or critical reasoning about potential consequences of behavior) that underlie more reactive criminal behavior.

Anecdotally, the use of alcohol or alcohol or drug abuse/dependence is frequently implicated as a factor in sexual offending. Meta-analytic research has failed to identify such a psychiatric condition of the perpetrator as a predictor of sexual offense recidivism (e.g., Hanson & Bussière, 1996, 1998, Hanson & Bussiere, 1998); however, this finding was likely affected by various forms of dissimulation. A considerable research literature has accumulated which strongly links substance use, particularly alcohol use, to sexual offending. Looman and Abracen (2011) reported that incarcerated sexual offenders reported significantly high histories of alcohol abuse; they also reported that such a history added incrementally to the prediction of risk for future sexual offenses, as did Långström et al. (2004). In a recent review, Kraanen and Emmelkamp (2011) concluded "about half of the sexual offenders had a history of substance abuse, that about a quarter to half of the sexual offenders had a history alcohol misuse or alcohol-related disorders, and that about one fifth to a quarter of the sexual offender s had a history of drug misuse or drug related disorder" (p. 486). Of note, they found more sexual offenders than nonsexual violent offenders abused alcohol.

As with other types of criminal and violent offending, reports of substance abuse among sexual offenders appears common. Felson, Burchfield, and Teasdale (2007) reported that in 36 % of incidents of sexual assault, the perpetrator had been using alcohol. Similarly, Cannon and Carmon (2006) found that over one-third of victims of rapes or sexual assaults report that the offender was drinking at the time of the act. Kraanen and Emmelkamp, in their review, concluded that sexual offenders are often intoxicated when committing sexual offenses, most commonly by alcohol. Alcohol and drug use appears to function primarily as an aggravating predisposing factor to sexual offending. Seto and Barbaree (1995) proposed that alcohol abuse was related to increased likelihood of sexual offense by way of increasing or magnifying disinhibition. However, in addition, such use, primarily in excess (e.g., intoxication), can also serve as a primary mechanism of sexual assault. Alcohol and drug use, as noted previously, share the externalizing spectrum with antisocial behavior in adulthood.

Perpetrators of sexual assault typically have strong beliefs about alcohol's effects on their sex drive and a female's sexual interest. Abbey, McAuslan, Zawacki, Clinton, and Buck (2001) identified that men who believe they are drinking

alcohol experience more sexual arousal than do men who do not believe they are drinking (regardless of whether they actually consumed alcohol). In addition, they noted that alcohol enhanced expectancies of generally disinhibited, aggressive, and sexual behavior. Alcohol use appears to also influence an offender's perception of situations, such that their view of circumstances seems more permissible for a sexual assault. More specifically, Abbey (2011) found that alcohol use supports the perception of cues that a female is interested in being sexual and the ignoring of disconfirming cues; further, to the extent that sexual overtures by a male who has consumed alcohol are perceived as rejection is also supported as a basis for sexual assault. Given the alcohol-related expectancies, Abbey also noted that some offenders might use alcohol use to provide justification for initiating a sexual assault. More generally, consuming alcohol can provide expectancies for lowered concern re "normal rules," the interpretation of "ambiguous" behavior on a target or companion, as well as misperceptions about the behavior or intent of others. Most specifically, Parkhill, Abbey, and Jacques-Tiura (2009) found that:

Heavy drinking men may be so focused on their own sexual arousal and feelings of entitlement that they:

> miss or ignore messages intended to convey the woman's lack of interest…Alcohol administration studies demonstrate that intoxicated men are more aggressive than sober men, particularly when they feel provoked… Intoxicated perpetrators may view any form of consensual sexual activity as permission to engage in intercourse, thus feeling wronged and provoked when a woman stops their sexual advances. (p. 4)

Relative to sexual offending, Prentky and Knight (1991) interpreted their multivariate research results as showing that alcohol as a factor in sexual offending served primarily as a disinhibitor of "lifestyle impulsivity," consistent with other studies that have found that premorbid personality traits were more important in predicting aggressive, violent behavior during altered states than the substance itself. Similarly, Abbey (2011) noted that more intoxicated perpetrators are less likely to report planning an assault in advance. A positive linear relationship exists between the amount of alcohol consumption and the greater degree of aggression in a sexual assault. (Since a large consumption of alcohol is also likely to interfere with the erectile or ejaculatory response of a male, the inability to maintain an erection or to ejaculate may further contribute to the experience of frustration and the degree of violence expressed in a sexual assault.) However, at very high levels of blood alcohol consumption, assault severity appears to decline due to more significant physical and even cognitive impairment.

Abbey (2011) points to studies that show key interactions between alcohol use and personality predisposition: persons high on measures of irritability, low on empathy, and who have more general antisocial personality characteristics are particularly aggressive when intoxicated. She found that both perpetrators who acknowledged coercion or who used a victim's impairment were both characterized by more endorsed greater acceptance of casual sex and lower empathy and reported a more extensive history of antisocial behaviors. Thus, the cumulative literature indicates an interactive, synergistic relationship between alcohol and drug abuse/dependence and sexual violence. Thus, alcohol and/or substance abuse/dependence may be most likely to function in a facilitative role for sexual offending, interacting with a variety of other personality and related conditions. Anger may accentuate entitlement, exacerbate generalized hostility or anger toward women, lessen inhibitions toward sexual behavior with persons for whom an individual has a dispositional low level of sexual interest in, and/or affect expectancies. Persons elevated on varied predisposing personality and related factors linked to sexual violence are more likely to abuse alcohol and other drugs, which, in turn, amplifies their likelihood of sexual violence; (like pornography) alcohol's effects are greatest for persons characterized by other predisposing characteristics toward aggression and sexual assault.

Like other personality-related conditions, it is key to recognize that alcohol and other substance use is strongly influenced by implicit, automatic or "out of awareness" aspects of psychological processes. Implicit attitudes, attentional bias, implicit arousal and memory associations have all been directly implicated as key factors in alcohol and substance use. Rooke et al. (2008), in a meta-analysis of approximately 20,000 participants, found a medium effect size for implicit psychological factors indicating a reliable association between such factors and substance use.

However, alcohol and/or substance abuse/dependence may also be viewed as a primary condition predisposing individuals toward sexual offending as well, particularly given the perception of an opportunity for victimization and/or permissive circumstances. That is, persons with some minimal number or accumulation of other predisposing conditions appear to commit sexual offenses as a result of episodes of intoxication or "elevated" states secondary to drug use; it seems possible that some persons may experience repeated episodes of substance abuse which lead to repeated acts of sexual assault. Per Felson and Staff (2010) sexual offenders are more likely to be intoxicated while committing their offenses than other criminal offenders; studies suggest that approximately 2/3 of sexual offenders were intoxicated when they committed their crimes (with a higher rate among those who targeted adults compared to those who battered children) (e.g., Peugh & Belenko, 2001). In addition, when sexual offenders were intoxicated, evidence indicates that the particular sexual offense was more likely to include physical injury, sexual penetration, and threats to harm or kill the victim (e.g., Parkhill et al., 2009).

Attention-Deficit Hyperactivity Disorder

In most incidents of sexual offending, attention-deficit hyperactivity disorder (ADHD) is likely to be an insufficient condition to provide a primary or exclusive basis for sexual offending. However, given the information described above, it seems clear that ADHD (via its component elements) is likely a powerful facilitating or aggravating condition related to sexual offending. ADHD is a particularly prevalent condition, with a pronounced effect on EF and thus undercuts both self-regulation and more global self-control (e.g., Buker, 2011). Barkley (2012a) identified the six dimensions of EF as the fundamental deficits that accompany and effectively define presentations of ADHD. Thus, he elaborated on the maladaptive aspects of ADHD-related deficits in EF: impairment in self-monitoring; lack of inhibition or restraint in behavior and inability to subordinate immediate interests or urges; deficiency in hindsight and foresight; disrupted self-talk and self-guidance; overdependence on external, immediate consequences related to motivation and affect; and lack or diminished capacity for problem-solving. Others have identified issues in boredom susceptibility, failure to attend to consequences and rules, and varied forms of impulsivity as central components of this condition; those specific components have been identified as personality-related motivators and dishinibitors, respectively. Egan reported that ADHD also interacted with lower IQ to increase the relationship with antisocial behavior. Third, by interfering with sustained attention, ADHD in select individuals appears to potentiate urgency, a lack of early response inhibition, and subsequently compromise the ability to premeditate and persist in appropriate problem-solving strategies. Chamorro et al. (2012) found impulsivity to be strongly associated with ADHD in the general population. Willcutt, Doyle, Nigg, Faraone, and Pennington (2005) conducted a meta-analysis of 63 studies involving EF assessment in over 3700 persons with ADHD. They found that persons with ADHD exhibited significant impairment on all EF tasks, with strongest effects on measures of response inhibition, vigilance, working memory, and planning. Such differences were not explained by differences in intelligence, academic achievement, or symptoms of other disorders. They concluded that ADHD is associated with significant weaknesses in several key EF domains, laying the foundation for compromised self-control and self-regulation. ADHD has been demonstrated to be related to specific personality dimensions, specifically low conscientiousness and low agreeableness (e.g., Nigg et al., 2002). Retz and Rosler (2009) noted a strong association between the condition and reactive aggression both during childhood and into adulthood. Certainly, impairing symptoms of ADHD may persist into adulthood in as many as 65 % of cases (Faraone et al., 2006). In fact, Dalsgarrd et al. (2013) showed that approximately 50 % (47 %) of children with ADHD with conduct problems and 26 % of those without conduct problems had criminal convictions in adulthood; they were 12 times more likely than peers to have violent convictions as adults.

Numerous studies have demonstrated that ADHD appears to be comorbid and predisposing conditions for personality disorders associated to sexual offending. Miller, Nigg, and Faraone (2007) showed that the presence of ADHD in adults (particularly those subtypes of ADHD that involved hyperactive/impulsivity or combined subtype, most especially the latter) was associated with increased rates of personality disorders, including Cluster B personality disorders and avoidant personality disorder. In addition, the joint presence of ADHD was an incremental predictor of increased impairment when present with a personality disorder. In a prospective follow-up study, Miller et al. (2008) found that persons diagnosed with childhood ADHD were at increased risk for personality disorders in late adolescence, specifically borderline (OR = 13.2), antisocial (OR = 3.0), avoidant (OR = 9.8), and narcissistic (OR = 8.7) personality disorders. Those with persistent ADHD were at higher risk for antisocial (OR = 5.3) and paranoid (OR = 8.5) personality disorders when compared to those in whom ADHD remitted, but not the other personality disorders. Cumyn et al. (2009) showed that males with combined ADHD type were more likely to be characterized by ASPD, BPD, and NPD as adults, as well as other comorbid psychiatric conditions. Similarly, as per Bernardi et al. (2012), ADHD was associated independently of the effects of other psychiatric comorbidity with increased risk of narcissistic, histrionic, borderline, antisocial, and schizotypal personality disorders. They also showed that a lifetime history of ADHD was also associated with increased risk of engaging in behaviors reflecting lack of planning and deficient inhibitory control (as well as with high rates of adverse events, lower perceived social support, and higher perceived stress). Again, ADHD is associated with the development of high rates of ASPD in adulthood, including in persons who did not receive a diagnosis of conduct disorder prior to maturity (Retz & Rosler, 2009). Langevin and Curnoe (2011) found that ADHD was a particularly good predictor of criminal recidivism and showed a strong association with psychopathy scores; the primacy of heightened impulsivity appeared particularly important. [Of noted, several studies have found that of persons with diagnosed paraphilic disorders, as many as half may have a history of ADHD (e.g., Kafka and Hennen, 2002; Kafka & Prentky, 1998).] Buker (2011) identified several studies that ADHD acts a significant factor affecting an individual's level of self-control (e.g., disinhibition) independent of other social factors. Thus, on its own and by its strong association with personality disorders, ADHD is associated with strong motivators and elements of disinhibition.

Hypersexuality

Hypersexuality should also be considered as an additional personality-related condition potentially related to increased sexual offending as a particular form of interpersonal violence. Hypersexuality is increasingly used in reference to a putative mental disorder; thus, ICID-10 included both a category for excessive sexual drive (e.g., satyriasis for males) and one for excessive masturbation. However, more generally, hypersexuality refers to the individual differences in the relatively elevated experience of sexual thoughts, fantasies, urges, and/or activities (sexual preoccupation and/or high sex drive). Laumann, Gagnon, Michael, and Michaels (1994) reported that approximately 54 % of men think about sex every day or several times a day and 43 % do so a few times per month or a few times per week. Prior to the increased access to sexualized material via the Internet, that study also showed less than 2 % of males ages 18–59 masturbated daily and just more than 1 % masturbated more than once per day. More recently, Kafka (1997) suggested that excessive sexual preoccupation might be viewed as persons who spend over one hour per day involved in sexual thoughts, fantasies, urges, planning, or other sexual-related behavior. While specific causes are unclear, hypersexuality is found in neurodegenerative conditions and more acute neurological conditions. Thus, there can be significant individual differences in solitary sexual behavior, indicating the likelihood of differing predispositions to sexualized experience. Such individual differences could include lower thresholds for sexualized stimulation, a broader set of stimuli for sexualized stimulation, greater excitation (response) for sexualized stimulation, and decreased latency for decreased sexual arousal (e.g., remaining in a state of such arousal for more lengthy periods). Hypersexuality is implicated in various theoretical models for sexual offending and in multiple research studies as risk factors and/or as dynamic or criminogenic needs for sexual reoffending (often identified as sexual preoccupation and/or sex as coping). Hypersexuality provides for specific elevations in or enhanced propensity for generalized sexual arousal and behavior that acts as an additional prepotent motivator towards an increased probability of sexual offending.

In addition, cognitive factors such as attribution also appear to play a role in the experience of hypersexuality. Thus, several studies have demonstrated that social context and personal beliefs can affect more generalized arousal (e.g., from fear or anxiety) so that misattribution leads to the experience of sexualized arousal (e.g., Dutton & Aron, 1974; Loftis & Ross, 1974). Arousal has also been identified as a key factor in attention and memory so that persons in a state of heightened sexual arousal attend more to their set of sexual "cues" and demonstrate facilitated retrieval of sexualized memories. In addition, heightened sexual arousal can affect the effectiveness of various forms of self-regulation when such arousal is "nonoptimal" and compromises cognitive and behavioral performance of self-control mechanisms. Moreover, Malamuth, Check, and Briere (1986) demonstrated that aggression per se was particularly sexually arousing for a subgroup of males, specifically for those whom aggression itself was especially arousing (while for most males, exposure to aggression had an inhibiting effect on sexual arousal). Ross (2012) demonstrated that self-control moderated the association between sexual desire and various high-risk sexual behaviors; the relationship between sexual desire and high-risk sexual behaviors was stronger when self-control was low than when self-control was high. Reid et al. (2010) found a correlation of .37 between global indices of executive functioning and hypersexuality, suggesting a moderate relationship between those two domains. In short, individual differences in hypersexuality appear to function both as a nonspecific amplifier of motivation and emotion and/or as specific amplifier of generalized motivational and emotional arousal in a sexualized direction. Baughman, Jonason, Veselka, and Vernon (2014) showed that psychopathic traits were most correlated with overall sex drive (as well as with a wider range of sexual fantasies themes) relative to other dimensions of the dark triad. Similarly, Williams, Cooper, Howell, Yuille, and Paulhus (2009) showed that the greater the degree of self-reported psychopathic traits, the more likely the persons were to report acting out deviant sexual fantasies in behavior (including pornography use).

Collectively, the available scientific information regarding personality and related risk factors and/or predisposing conditions for sexual offending is quite convergent and largely supports earlier and current theoretical models of sexual offending against both children and adults. Further, it should be noted that most of this information is based on self-report of identified sexual offenders. Thus, it is likely to be colored by the ego-syntonic nature of problematic personality characteristics and related dimensions such as EF, the common "self-enhancing" aspect to personal evaluation, the degree of lack of awareness of maladaptive intrapsychic/interpersonal characteristics and related dimensions, and the conscious denial or minimization of recognized negative personality and interpersonal characteristics and related dimensions. Similarly, Suchy (2009) pointed out that many traditional neuropsychological measures of EF rely on practiced skills and practiced abilities (which vary across individuals) and artificial tasks lacking in personal meaning and other dimensions for subjects. Consequently, such measures lack ecological validity in that they do not present novel, complex situations to individuals related to real-life situations involving "hot" or personal issues. Thus, the currently available empirical literature regarding nonsexual risk factors for sexual offending probably represents a limited set of the factors actually related to such offending and potentially distorting the identification and degree of the dimensions of those factors (e.g., intensity, frequency, generalization, duration) as well.

Personality and Related Conditions and Sexual Offending: Implications from Theory and Research

Sexual offending is typically an antisocial and/or criminal behavior as it involves violating the rights of others. Further, most criminal sexual offenses are violent offenses or acts of violence, involving contact or the threat of contact with other persons. Violent offending is often dichotomized as reactive or instrumental; in the former, such offending is viewed as provoked, mediated by negative affect and enacted impulsively, while in the latter, the offending is viewed as planned/premeditated and implemented in a more detached, less emotional fashion (albeit still mediated by arousal/temptation motivational factors). In considering victim-focused sexual offending, while some such offending also appears to fall within each category, a large body of sexual offending also seems to be of a more hybrid form of violent offending. That is, much sexual offending begins with some form of erotic, even romanticized fantasizing (a crude form of planning and/or premeditating) that may be generalized (e.g., from unspecified memories, images, stories, or pictures of children or females) or specific to one or more particular potential victims. Further, while some sexual offending is particularly "opportunistic" and reactive to either the opportunity and/or particulars of an available victim (in the context of distal and/or proximal motivational factors), other incidents of sexual offending involve more focused grooming or planning to secure the opportunity to sexually offend against relatively specific victims (e.g., a particular victim or one of a set of victims likely to be available at a time and place). When an appropriate victim (relative to motivational factors and personal history) and a perceived permissive situation or setting occur or present itself, an act of sexual offending can be enacted. In such ways, these sexual offenses seem to be characterized by both elements of some degree of conscious or unconscious premeditation and reactivity (impulsivity). Alternately, a sexual offense could begin with an encounter with an appropriate (e.g., emotionally appealing or sexually arousing victim) and a perceived permissive situation or setting, provoking or eliciting a positive emotional or motivational response, which interacts with state variables (e.g., intoxication, pre-existing emotional and/or sexual arousal), leading to a sexual offense (which may serve as the basis for erotic/romanticized fantasizing and reinforcement via subsequent sexual arousal and/or orgasm).

Theoretically Based Factors in Sexual Offending

While atypical or deviant sexual interests and individual differences in sexual arousal and preoccupation have always been accorded a prominent place in the etiology of sexual offending, nonsexual factors have also long been identified as playing a significant role in sexual offenses. Groth (1979) and Finkelhor (1984) both proposed that underlying motivations for sexual offending were not necessarily exclusively sexual in nature but rather may reflect *nonsexual* "needs" and unresolved life issues. In the evolution of theoretical models of sexual offending, there are strong commonalities among them as to the relevant dimensions of those theories (e.g., Finkelhor, 1984; Marshall & Barbaree, 1990; Hall & Hirschman, 1992; Ward & Hudson, 1998; Ward & Siegert, 2002; Beech & Ward, 2004). In addition to a primary sexual factor [deviant sexual arousal/fantasies and sexual preoccupation (dysregulated and misdirected sexuality)], the following three "nonsexual" areas have consistently been identified as particularly significant in the etiology and maintenance of sexual offending:

- Self-regulation, including issues related to self-interest/entitlement and negative affect
- Distorted attitudes permissive of sexual offending specifically and antisocial acts in general
- Deficits in social intimacy and social competence (social conflict/isolation)

Each of these models validated a perspective that sexual and/or personality dimensions impelling certain urges and/or behaviors that conflicted with and overcame potential internal inhibitions related to self-regulation in the context of situational factors (e.g., "permissive" circumstances for sexual offending, acute dysregulation, strategies for overcoming victim resistance). In addition, these models also highlighted the cumulative effect of multiple sexual and nonsexual factors; that is, some number and degree of sexual factors can interact with some number and degree of nonsexual factors and those various combinations would lead to sexual offending.

Ward and Beech (Ward & Beech, 2003; Beech & Ward, 2004) offered a unique perspective on notion of static/dynamic distinctions of etiological factors but one that paralleled the evolving view of personality and related conditions. They suggested that states (dynamic variables) and traits (static variables) were each aspects of the same underlying construct; for any temporarily manifest state, there would be a corresponding underlying trait or predisposing condition. Per their view, so-called "static" risk factors are significant because they serve as markers of the expression of dynamic risk factors. For example, what has atypically been labeled as a "static" risk factor (e.g., history of criminal behavior) can be an indicator of underlying antisocial or psychopathic predisposing characteristics as psychologically meaningful causal factors. Similarly, deviant sexual preferences (a trait factor) lead to sexual arousal (a state factor) in particular situations. Thus, per Beech and Ward, so-called dynamic risk factors are best understood as ongoing or current expressions (states) of more long-term or enduring underlying predispositions. Beech and Ward argue that every sexual offense involves

some degree of each of the four domains noted above but that different sexual offenses will have at their center a particular set of primary dysfunctional factors, which may vary across specific sexual offenses. Beyond sexual self-regulation, each of the other domains or vulnerabilities to sexual offending involve particular personality dispositions such as motivations/emotions and/or self-control/executive functions that compromise emotional and behavioral expression, attitudes toward types of persons, and social interactions/relationships. In addition to a smaller group of offenders characterized by avoidance and general distress, Ward et al. also pointed to much larger subgroups of "approach" sexual offenders whose sexual offending is associated with positive affect and motivation as well as premeditation.

Specific Research into Risk Factors/ Criminogenic Factors in Sexual Reoffending

A sizeable body of research has been conducted in attempts to identify specific risk factors or predisposing conditions empirically related to sexual offending in general. Most of this work has been organized and presented in the form of a series of meta-analyses by Hanson and various colleagues (e.g., Hanson & Bussière, 1996, 1998, Hanson & Bussiere, 1998; Hanson & Morton-Bourgon, 2004, 2005; Mann et al., 2010). One significant set of variables included various dimensions of sexual *deviance and preoccupation:* any deviant sexual interest, sexual interest in children, multiple paraphilias, sexual preference for rape, sexual preoccupation, prior sex offenses, and early onset of sexual offending. Another primary set of variables identified as predisposing to sexual reoffending fell under the category of antisocial orientation. This cluster of risk factors/predisposing conditions included a measure of psychopathy; antisocial personality disorder; any personality disorder; general criminal and violent history, including such behavior during youth; hostility toward women; "Machiavellianism"; callous/lack of concern for others; self-regulation issues (including impulsivity/recklessness); deficits in problem-solving; offense-supportive attitudes; grievance/hostility; noncompliance with conditional release; and substance abuse. Further, another set of risk factors/predisposing conditions concerned social relations including failure to establish or maintain intimate relationships or conflict in such relationships and negative social influences (criminal families and associates). Of note, Eher et al. (2003) found that personality disorders were common among paraphilic sexual offenders; they were even more common among apparently non-paraphilic sexual offenders. In particular, so-called non-paraphilic sexual offenders were more likely to be characterized by Cluster B and avoidant personality disorders, although narcissistic personality disorder was found commonly among sexualized rapists. In addition, various cognitive factors largely related to self-regulation and goal achievement also influenced rates of sexual offending. Cantor et al. (2004) found lower IQ scores among sexual offenders relative to other criminal offenders, particularly for offenders against young children and for child molesters with hands-on offenses. Langevin and Curnoe (2007) found that, like other criminal and violent offenders, sexual offenders showed significantly lower education attainment, greater failed grades, more frequent placement in special education classes, and higher incidences of school dropouts than community controls.

Several investigators have attempted to delineate the multivariate pathways to sexual offending against both children and adults. Again, notably, these efforts have consistently identified nonsexual factors as playing central roles. In their most recent typology of child molesters, Daversa and Knight (2007) found that aspects child molesters as a group exceeded non-offenders in terms of their psychopathic traits/externalizing behavior, indicating that some portion of child molesters are characterized by a significant amount of externalizing behavior. Additional pathways included dimensions of inadequacy, negative affect, and low social competence. Relative to rapists, Knight (1999) suggested that in addition to sexual *deviance/promiscuity*, the other primary pathway involved *negative (hyper)masculinity* (including hostility toward women, gratification from dominance, and hypersensitive and generally hostile orientation). In his most current model of sexual offending, Knight (2010) postulated several key dimensions related to sexual offending: *hypersexuality*, *impulsivity* (opportunity), and *callous-unemotional/violent* (expressive aggression). In addition, other studies have also identified that generalized hypersexuality should be noted to be a non-paraphilic sexual dimension related to sexual offending as well. Malamuth (e.g., Malamuth, Linz, Heavey, Barnes, & Acker, 1995; Malamuth, 2003) has postulated the confluence model of sexual aggression against adult females. In addition to a sexual group of risk factors (e.g., *sexual promiscuity/impersonal sex, both related to notions of hypersexuality*) which in part reflected that status and self-esteem are achieved by sexual "conquest." *Hostile masculinity* was the second constellation of risk factors for sexual offending including callous, manipulative attitudes toward women; grandiose, narcissistic personality characteristics; hostility toward women; and dominance as a motive for sex (e.g., increasing sexual arousal). The hostile masculinity path was found to be rooted in a proneness to *general* hostility (a combination of impulsiveness and irritability) which leads to *attitudes accepting of violence against women* and, in turn, narcissism, (specific) hostility to women, and (sexual) dominance (particularly in the personality context of low empathy and nurturance). Further, hostile masculinity was also viewed as containing other interrelated components related to a propensity for sexual offending: an insecure, defensive, hypersensitive, suspicious, and hostile orientation (particularly toward women) leading to social isolation as well as related

gratification from controlling or dominating women. Disinhibition occurs primarily as a result of the confluence of such hostility dimensions overriding whatever existing levels of empathic responses and other inhibitory mechanisms. Malamuth has described the confluence model as an integrative and interactional one, in that sexual assaults result only when there is a "confluence" or co-occurrence of major constellations of personal attributes (which each include various subcomponents of motivational/affective and attitudinal predispositions). There is clearly substantial convergence between Knight's and Malamuth's models of sexual violence; each model emphasizes several similar nonsexual personality dimensions: dispositional anger/general hostility, negative attitudes toward women, narcissistic personality characteristics including entitlement, callousness/low empathy, impulsivity, and dominance.

Another consideration related to risk factors and/or predisposing conditions for sexual offending is an earlier belief that a strong or distinctive presence of one of several conditions might be sufficient to explain sexual offending. However, both empirically and theoretically, it seems clear that any meaningful theory or empirical description of sexual offending would most likely involve cumulative probability of multiple interacting primary and secondary (or specific and general) risk factors or conditions converging in particular situations or contexts. Thus, risk of sexual offending likely increases: (1) simply as the number of risk domains or predisposing conditions increases and/or (2) certain risk domains interact (e.g., act synergistically so that their combination is actually greater than a simple additive impact). Such is the case for the presence of deviant sexual interests and relative dimensions of psychopathy (e.g., Hawes et al., 2013) and in the research on the confluence model by Malamuth and his colleagues.

A Dimensional Perspective on Personality and Related Conditions Related to Sexual Offending

Given the previous discussion, it seems clear that personality and related predisposing characteristics should clearly be viewed as playing a role in sexual offending. Following various models of self-control and self-regulation, a primary personality element is a general awareness or what could be termed psychological mindedness, even to a crude degree, referencing an individual's awareness of their past disposition and present internal states. Thus, a critical, initial issue in the self-control process is the individual's self-monitoring of their "experiences" (e.g., Carver & Scheier, 1981). People also differ in the degree to which perception of relevant internal and external stimuli is conscious or unconscious; they are more or less attentive or aware of their own visceral reactions or events/features of their environments that cue or trigger personal responding. Individual differences also exist in person's perception of and sensitivity to internal experiences (including thoughts/fantasies/plans) so that their conscious thresholds are different and they "feel" such experiences with differing degrees of intensity or urgency. Desire or temptation varies for individuals in strength, duration, and frequency. It is notable that in everyday life, sexual arousal and the desire for sexual behavior is typically experienced particularly intensely, much more so than desire for tobacco or alcohol despite their stereotype as "addictions" (e.g., Hofman et al., 2012b). Persons also differ in their ability and need to cognitively appraise those experiences in an accurate manner, whether it is recognizing arousal as sexual or nonsexual (e.g., anger).

Individuals differ in their ability to organize their capacities and experiences to direct their behavior toward desired goals (rewards, reinforcements) and away from threatening circumstances. From a self-regulatory perspective, most persons are characterized by various values, standards, and principles that are associated with short- and long-term goals. In addition, a conscious or unconscious conflict can arise between urges or desire for approach behavior that can create a conflict between what an individual wants to do and what one believes they should do (realized or experience to different degrees). The experience of such conflicts typically triggers more active self-control attempts. Relative to their awareness of motivational and emotional states, some persons will feel impelled to gauge those particular states against personal/social standards or general life goals. Others will feel no or less intense conflict regarding the balance of motivators relative to consequences or long-term goals. Individual differences exist in the degree to which individuals experience such conflict as well as to the nature (variety and significance) of and commitment to those personal standards, values, and life goals. Clearly, some persons lack prosocial goals or values or they "discount" the potential for the degree of consequences of behavioral enactment or overvalue a more immediate gratification over other perceived (e.g., negative and/or long-term consequences).

For some people, self-regulation entails a preventive element; utilizing foresight and awareness of past motivated behavior, they can and do anticipate the problematic consequences of acting on motivators and engage in preventive self-control to minimize the potential elicitation and/or intensity of particular motivations or emotions. Alternatively, an individual's appraisal of the relative consequences or risk in the attempt to enact some motivation may be relatively deficient, compromised, or absent. Avoidance motivation can also play a role; to the degree that an individual experiences anxiety relative to particular consequences, motivated inhibition can also occur. To the degree that there is recognized

conflict between the impetus of motivations or emotions, there may be attempts to reconcile those; attempts may be made to manage the press/pull of motivations/emotions to delay or prevent their expression because of a potential cost in terms of other, more significant consequences. This is sometimes referred to as resistance to temptations; of note, resistance to desire for sexual behavior is among the highest of such urges. Hofmann and Kotabe (2012) identify the significance of a potential formation of an "intent" (or motivation) to resist a particular desire rather than simply enacting it; person's trait and state self-control repertoires may or may not include the conscious identification or expression of an intent not to act on a desire or may entertain ambivalence about possible enactment.

Persons are characterized by individual differences in their incentive or capacity (intent, energy, and/or skills) to manage such conflicts between motivators/emotions and values/consequences: they differ in their intent to adhere to values and standards and awareness/knowledge of varied strategies, and they differ in their ability or "energy" to enact strategies and/or to problem-solve when selected strategies appear to be initially unsuccessful, raising the "question" of alternative strategies. Ultimately, self-regulation comes down to suppression or prevention of behavioral enactment. However, as noted, self-regulation appears to function as a "strength" or "(moral) muscle" model and consumes limited psychological resources and becomes diminished from relative exertion. When a person's self-regulation capacity is limited or becomes further depleted, the individual will become less effective at other self-regulatory tasks. Thus, persons repeatedly challenged with sexual and nonsexual motivators, as well as other self-control situations, will episodically or chronically exist in a state of depleted self-regulation. However, with regular "practice," the capacity for self-regulation (like a muscle) increases in strength. Thus, those who fail to implement self-regulation fail to develop increased capacity for such self-control. At the same time, a consequence of some repeated attempts self-regulation (e.g., attempts at cognitive suppression of a representation or desire) can ultimately lead to diminished self-regulation and, subsequently, to the ultimate "appearance" or experience of such mental/emotional representations or desires.

Obviously, this is a dynamic process that occurs "in real time." It is influenced by differing phenomena. Motivators vary in intensity over time and situations. Self-control clearly has various state aspects as well, and motivation can affect relative depletion in self-regulation. DeYoung (2010) notes that even when persons consider a desired behavior over time, a combination of affective and environment cues can affect enactment and the reaction to either performing or not performing the behavior. As noted, self-regulation is "energy" and resource dependent, and recent efforts at self-regulation deplete available self-control capacities. Additional state conditions, particularly negative affect or mood-altering substances, affect self-regulation and EF; it impacts on the perceived significance of reconciling conflicts between values and "experienced needs". Most particularly, Inzlicht, Schmeichel, and Macrae (2014) argued that depletion leads most people to shift from "have to" goals to "want to" goals; depletion in existing capacities for self-regulation potentiates motivation for personally rewarding hedonistic activities (and the accompanying positive emotions). As they note, "Depletion however, is not simply less motivation overall. Rather, it is produced by lower motivation to engage in 'have-to' tasks and higher motivation to engage in 'want-to' tasks. Depletion stokes desire" (p. 131).

Situational factors can also impinge on self-regulation and problem-solving; both strong negative affect and alcohol can potentiate the behavioral impact of impulsive determinants on eating behavior while disrupting the behavioral impact of reflective determinants. Hofmann and Kotabe (2012) state, "Arguably the two most powerful preventive self-controls strategies can be found in situational and stimulus control, the avoidance of tempting situations or the removal of tempting stimuli from one' immediate environment" (p. 716). They note that research indicates that persons high in dispositional or trait self-control make more use of such preventive self-control in attempting to address their desires. However, regarding sexual offending, crudely, self-control can fail either because the impulses, desires, or temptations related to one or more motivators (individually or collectively) are too "strong" or "intense" or too many to restrain/inhibit/constrain or because capacities for self-control are too limited or too weak. In addition, from a more dynamic perspective, lower self-control (trait or dispositional) likely provides for the experience of increased strength of sexual and nonsexual impulses. Low self-control has been shown to be associated with poor dispositional and episodic sexual restraint in everyday life. Research by and review by Gailliot and Baumeister (2007) showed that individuals with low self-control were more likely to fail at stifling motivational (including sexual) thoughts, inhibiting their expressed willingness to engage in inappropriate sexual behavior. In addition, they obtained some evidence that the effects of diminished self-control were strongest among those with the strongest sexual desires.

How best to categorize the various predisposing nonsexual conditions that are most strongly related to sexual offending? The DSMs would suggest that maladaptive personality characteristics can be grouped into four categories: cognition (ways of perceiving and interpreting self, other people, and events), affectivity (motivation, range, intensity lability, and appropriateness of emotional response), interpersonal functioning, and impulse control. However, these domains clearly overlap and appear largely interrelated: cognitions influence affect, affect and cognition influence impulse control; and

interpersonal relations impact affect, cognitions, and impulse control. Similarly, from a more conceptual perspective, the constructs of motivation, executive functioning, and self-control/self-regulation also implicitly or explicitly overlap and/or interact with the construct of personality. Given such categorical and theoretical overlap, identified predisposing factors cannot be neatly separated into precise categories of cognition, affect, and interpersonal and/or impulse control. In addition, maladaptive behavior is larger than just that with implications for interpersonal functioning but relates to problematic functioning in other areas of life such as work (e.g., irresponsibility) and self-care (e.g., suicidal behavior). Consequently, while one can attempt to sort personality dispositions into the four categories of the DSM, the outcome of that endeavor would be quite artificial. In considering nonsexual predisposing conditions, it appears clear that those nonsexual dispositions likely involve varied and interacting combinations of conditions of personality, motivation, executive functioning, and self-regulation/self-control or as overlapping/interacting cognitions, affect, impulsivity, and interpersonal relations. Further, given the nature of "behavioral signatures," it is of value to acknowledge "facilitating" and specific situational or state factors that may relate to sexual offending.

Nonetheless, it makes sense to attempt to specify the central varied personality and related dimensions that appear to be theoretically and/or empirically linked to increased predisposition to sexual offending. An empirical basis for such personality and related dimensions exists: analyses of FFM dimensions related to antisocial behavior, analyses of externalizing spectrum behaviors, and the meta-analyses of risk factors for sexual offense recidivism of personality-based dimensions all inform what the nature of nonsexual personality and related dimensions might be. A simplistic framework for understanding human behavior would suggest that human activity could be reduced to a balance of desire or urges for rewarding experiences and/or fears of danger to self or punishment. Ultimately, all sexual offenses involve approach motivation of some sort in the presence of some deficient or lack of self-control or self-regulating elements, even for those sexual offenders characterized by ambivalence or "avoidance" pathways. Thus, there are nonsexual "motivators" that impel or urge a person to act in a particular manner and other nonsexual factors that represent deficiencies or failure to constrain or inhibit such behavior ("elements of disinhibition"). While some nonsexual personal predisposing factors might be strong enough to determine a sexual offense on their own, it seems more likely that various sets of such factors act in an additive/cumulative and even synergistic fashion, combining and augmenting one another in different ways across different situations to also converge in a resulting sexual offense. What seems most useful is to simply identify and consider particular personal dimensions (each of which could be considered aspects of motivation, executive functioning, and/or self-regulation/self-control) as motivators or elements of disinhibition and consider their potential and/or likely relationship to personality constellations in relation to incidents of and persisting sexual offending. It should be noted that this is not intended to be a comprehensive or exhaustive list but rather a suggestion of factors for which there is significant theoretical, explanatory, and/or empirical support. Finally, following (Mischel and Shoda 1995, 1998; Mischel, 2004) and related theories, situational, contextual, or triggering factors clearly exist which elicit and amplify to varying degrees personality "motivators" and/or augment or intensify personal dispositions (or both) and provide opportunities for the more pronounced manifestation of both sets of factors. Thus, following the notion of a behavioral signature, the identification of particular predispositions for particular action without specification of context obviously limits the explanatory value of the identified characteristics.

Several things are useful to consider relative to nonsexual factors related to sexual offending. First, the enactment of sexual behavior is clearly not an "automatic" phenomenon; the frequency of sexual dysfunction is so common that it has been identified as a significant public health problem (e.g., Lauman, Paik, & Rosen, 1999; Derogatis & Burnett, 2008). There is a high prevalence of sexual dysfunctions among men who indicate an interest in and desire for sexual behavior; various things commonly interfere with both sexual interest and sexual performance. In general, from both a biological perspective and an experiential one, numerous "threats" exist to "normative" sexual arousal or functioning. For sexual behavior to be enacted, both varying degrees of excitation/arousal t and relatively low levels of inhibitory mechanisms must be present. Obviously, the frequency of commercial advertisements for products related to increasing sexual interest and capacity (performance) provides some metric of the difficulty of initiating and enacting sexual behavior among the general population of males. Thus, the enactment of sexual behavior, including sexual assault, must overcome a variety of factors that commonly and/or frequently impede sexual desire and impair sexual functioning. Second, in light of potential nonsexual predispositions for sexual offending, one must consider why persons experiencing or manifesting such predispositions elect to "express" or "manifest" those issues (individually or collectively) end up enacting a sexual as opposed to some other violent behavior. Can nonsexual personal factors lead to a sexual offense in the absence of *any* specific or general sexual interest or motivation? That is, what type or degree of nonsexual personal dispositions leads someone who has no or little sexual interest in children or in adults in general to enact sexual offenses involving such victims, particularly ones involving force, distress from the victims, and likely leading to negative consequences for a perpetrator? Little information, theoretical or empirical, exists to explain why nonsexual-specific

motivators and elements of disinhibition on their own, given particular contexts, result in uniquely sexual forms of violent offending.

Currently, the available research would direct that nonsexual personality and related conditions do act as significant predisposing factors for sexual offending (either on their own or certainly in combination with sexual predisposing factors). As Meston and Buss (2007) pointed out, the primary reasons persons engage in sexual behavior involve physical, goal attainment, insecurity, and emotional factors. Similar to Malamuth's confluence model, the general literature suggests that violent behavior generally and sexual offending specifically is characterized by a multidimensional and cumulative nature. There are personal and related conditions which are potentially more specific to sexual offending which are subsumed to some degree by more general domains that are related to antisocial and violent behavior generally. Marshall and Barbaree (1990) emphasized that sexual offenders frequently met a number of psychological needs via sexual offending, theorizing "…the task for human males is to *acquire inhibitory control* over a biologically endowed *propensity for self-interest associated with a tendency to fuse sex and aggression*" (p.257, emphasis added). Hall and Hirschman (1992) proposed that the probability of sexual offending was crudely a function of the perceived benefits of sexual aggression (e.g., sexual gratification or pleasure) outweighing estimated threats to the perpetrator or to a victim; this was termed the threshold gradient.

Clearly, there appear to be two key dimensions, which can exist to varying degrees, with differing frequency and across greater or fewer situations for specific individuals. First, there appear to be primary motivational states and needs (experiential, affective, and attitudinal conditions) that, when activated, function as "pushes" or elicited "pulls" and thus serve as predisposing psychologically meaningful risk factors for sexual offending. Secondly and conversely, the presence of degrees of "disinhibition," some set of varied deficits in "constraint"—absence or degrees of lack of capacity or affinity for self-control, self-regulation, or inhibition (inhibitory deficits)—appears sufficient to allow sexual offending to occur even under conditions of minimal primary sexual and nonsexual motivational dispositions or states. In addition, there appear to be an additional set of contexts or facilitating conditions that might be unlikely to lead to sexual offending on their own but can greatly enhance the likelihood of one or both primary motivational factors leading to a sexual offense (e.g., alcohol/substance use, ADHD, lack of environmental restraints). Given the interrelationship of motivation and emotions, cognitions, interpersonal elements, and self-control of impulses (via, in part, executive functioning and/or self-regulation), it is somewhat artificial to "divide" or identify specific characteristics as if they were divorced from other, related dimensions. That is, most nonsexual predisposing conditions to sexual violence involve admixtures of multiple personality elements (Fig. 1).

Primary Motivational Dispositions, Affective and Attitudinal Conditions ("Motivators")

Motivation is a key aspect of human personality and functioning. Appetitive motivation represents urges that drive individuals toward desired and/or pleasurable events (or, rooted in anger, to relieve unpleasurable or distressing experiences); such motivation catches and directs attention, determining the direction, preoccupation, and persistence of behavior in the world. [Sexual arousal and gratification per se would appear to be the primary exemplar of that.] As noted, appeti-

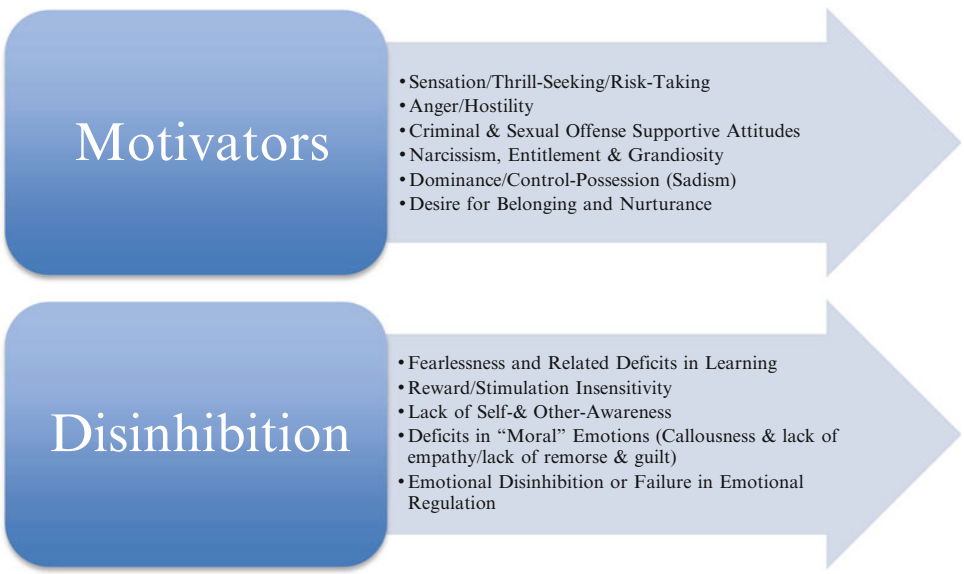

Fig. 1 Motivators and dimensions of disinhibition

tive motivations involve two dimensions. *Wanting* or desire refers to the motivational or incentive salience that makes the reward desirable; wanting transforms a reinforcer from a sensory representation into a desired reward capable of capturing attention, motivating behavior but which can eventually become unlinked from the hedonic element of liking. Somewhat in contrast, *liking* refers to the pleasurable, hedonic feelings experienced when a desired reward has been procured via behavior or imagination (Zhang et al., 2009). Significant individual differences exist relative to motivational conditions in terms of both wanting and liking. Persons are characterized by the variety of motivations that they experience as well as differences in the number of triggers/eliciting elements and degree of sensitivity (and responsivity) to internal and external cues (thresholds) leading to the initial intensity and duration of the motivational force; they also differ in the degree to which a gratification or satisfaction of motivation is rewarding and, subsequently, changes their expectancy for similar experiences in the future.

Motivation is typically perceived and "interpreted" when it has a conscious impact to cause a person to initiate approach behavior and is appraised or interpreted after enactment. Walters (2009) has argued for the primacy of "criminal thinking" in the enactment of criminal behavior; per his definition, such thinking is cognition designed to initiate and/or maintain the habitual violation of rules and laws. In particular, his model and data suggest that various "thinking styles" either potentiate or facilitate positive reinforcement before and after motivated antisocial behavior occurs. Criminal thinking has this affect by virtue of its influence on thinking styles, (criminal) values, attributions, self-efficacy for crime, outcome expectancies for crime, and criminal goals. An important distinction to keep in mind is that motivation is not always about what is perceived as "positive" affect per se; approach motivation also occurs when persons act on anger to inflict pain or harm on some, offending others, and/or in an effort to remove a violation of what "ought to be" (e.g., Carver & Harmon-Jones, 2009). In this vein, anger functions as motivation to restore some desired state. In a similar vein, attitudes about the nature of the world as it is and as it "should be" can also serve as approach motivations.

As indicated, among other dimensions, a sexual offense can result from a motivational impetus (a push/pull for reward or pleasure) or a motivational avoidance of some unpleasant, aversive state, attitudes related to privileging one's own desires or urges or defined by negative affectivity (particularly directed toward others). Such factors necessarily have to be ones that strongly impel or push a person to interact with another person via sexual behavior but in the service of a nonsexual motivation. Hofman et al. (2012a) reported that more enduring, high desire strength of appetitive motivators should increase the probability of behavior enactment, as should novel or dispositionally "exciting" stimuli. A number of factors [some of which might be likely to occur in individuals with particular life histories (e.g., of adversity)] would appear to possess sufficient "power," provide such a "push" or "urge," or be susceptible to a "pull" from relevant environmental stimuli. In addition to the individual differences noted above, the experience of one or more motivations is experienced contextually relative to the degree of presence and "strength" of one or more elements of disinhibition. Therefore, the relative lack of or deficiencies of inhibitors can further potentiate the more immediate or persistent pursuit of rewarding and/or pleasurable motivations and undermine the potential for delays in seeking gratification relative to longer-term goals.

In the context of Meston and Buss's (2007) research, factors that appear to possess a sufficient degree of motivational for persons to engage in sexual behavior include pleasure, stress reduction, experience-seeking, revenge, social status, utilitarian, self-esteem "boost" (under insecurity), and expressive communication (under emotional). An attempt to integrate the general psychological concepts and findings with the theoretical and empirical perspectives on sexual offending suggests that a number of motivators can be identified which singly or in combination appear sufficient to provide the basis for specific acts or episodes of sexual offending.

Sensation-Seeking/Thrill-Seeking/Risk-Taking

Again it is useful to note that numerous researchers have argued for a distinction between this condition and general impulsiveness (e.g., Cross et al., 2011; Derefinko et al., 2011; Burt & Simons, 2013). Zuckerman (1979) defined sensation-seeking as the need for varied, novel sensations and experiences and the willingness to take physical and social risk to obtain such experiences. A disposition for hedonistic sensation- or thrill-seeking (sometimes referred to as affective impulsivity) provides a personality-based motivation for risky, stimulating, and exciting behavior, which could include sexual behavior and particularly sexual behavior that would be regarded as novel, illegal, or immoral. Particular individuals experience the process of taking risks as highly pleasurable or rewarding, whether planned or not; a related dimension would be a lower threshold for the rewarding aspects of sensation-seeking and excitement. In addition, criminal behavior, including violent and sexual offending, provides an opportunity both for risk and potential immediate, albeit short-term reward; thus, such risky behaviors are more rewarding and motivating to high "thrill-seekers." From the perspective of the FFM and the UPPS, Miller et al. (2003) showed that sensation-seeking was one of the two most consistent of the four dimensions of "impulsivity" in predicting crime and violence. Joliffe and

Farrington (2009) showed that historical "high daring and risk-taking" were shown to be more related to later violence relative to other dimensions related to impulsiveness. Relative to self-reported impulsivity, Kirby and Finch (2010) identified thrill- and risk-seeking, impatiently pleasure seeking, and "happy-go-lucky" as key dispositional dimensions. As noted, Miller et al. (2003) found sensation-seeking was one of the most consistent dimensions in predicting externalizing behavior in general. Quay (1995) spoke a "need" to create excitement, adventure, and thrill-seeking behavior; Blackburn (2006) noted that evidence favoring an association between heightened stimulation-seeking and psychopathy has been consistent. Krueger et al. (2007a) identified excitement-seeking as a key facet of the ESD, sensation-seeking is strongly associated with externalizing behavior (e.g., Miller et al., 2003), and boldness was identified as a key dimension of psychopathy by Patrick et al. (2009). In addition, the intensity of high-approach-motivated positive affect reduces attentional focus and degrades EF. In addition as Burt and Simons (2013) point out, thrill or sensation-seeking likely is associated with some degree of offending versatility, such that repetition breeds habituation, while novel stimulation or situations may lead to new victims and/or types of offending behavior.

Hoyle, Fejfar, and Miller (2000) conducted a meta-analysis of personality and sexual behavior that determined that sensation-seeking was the strongest trait-level predictor of risky sexual behavior. Birthrong and Latzman (2014) found that positive urgency was uniquely associated with risk sexual behaviors. Porter et al. (2001; 2010) characterized a subset of sexual offenders whose primary motivation for sexual offending was thrill-seeking (particularly in the context of heightened boredom or low autonomic arousal and a select/generalized lack of empathy); that is, they have a propensity for exciting and risk situations that involve novelty and excitement, including the arousal that can precede and accompany violent behavior.

Anger/Hostility

A common emotional response to frustration, hurt, disappointment, and real or imagined threats is anger and its more generalized form, hostility. As a negative emotion, anger has both episodic and dispositional elements; certain types of situations commonly elicit displeasure ranging from irritation to rage, and individual differences exist in the frequency, pervasiveness, and intensity of angry feelings. Anger appears to be elicited by perceptions of threat or damage, including threats or "damage" to self-esteem; it is a common response to frustration, when some desired or potentially rewarding goal is thwarted, for example, by another person. Per Carver and Harmon-Jones (2004), "Anger often promotes an effort to remove the violation of what 'ought' to be, an effort to change the behavior of other" (p. 184). As a reactive response to internal or external stimulation, anger has been identified as falling into the category of approach motivation toward a – specific or generalized "offending" other, others, or life situation (e.g., Carver & Hampton-Jones, 2009). Anger and hostility are activating experiences such that angry/hostile persons are motivated to behave toward a perceived or displaced source relative to elicitation of their negative emotional experience; anger provides a "confidence" to act against a "perceived" threat. Hostility, as generalized anger, represents a heightened baseline in which provocation may be more minimal in terms of elicited reactive behavior; there appears to be a paranoid, suspicious, or distrusting basis to hostility. The experience of anger appears to be disinhibiting by increasing generalized arousal (transferable to sexual arousal) as well as by providing increased permission to act and by desensitizing an individual to both the immediate situation and future-like situations; it also primes cognitive schema or "scripts" related to anger-based aggression. That is, angry states lead to a tendency to appraise subsequent events in a manner consistent with earlier threat appraisals; thus, more frequent anger (e.g., from frustration) may lead to more pervasive and dispositional (intentional) anger and/or hostility. By facilitating attention to future-provoking events, the salience of such events may evolve. The relative intensity of anger/hostility can lead to increased self-absorption, narrowing the angry persons' cognitive processing and heightening the salience of more immediate (angry) goals. In addition, the generalized physiological arousal associated with anger states, like other arousals, can easily be displaced onto other targets or activities. Finally, intense anger, like other intense affective states, can act to compromise attentional focus to other aspects of EF.

Walters (1995) found that "willful hostility" was one of the two key dimensions of criminal thinking, while Miller et al. (2004) showed that the FFM dimension antagonism was associated with risky sexual behaviors. As noted, Knight and Prentky (1990) theorized that both generalized anger and more vindictive (retributory) anger were associated with rape. Hanson and Harris (2001) showed that negative affect, particularly anger, increased prior to sexual reoffending. In addition, Yates et al. (1983) found that anger induction led to greater disinhibition of sexual arousal to rape depictions; other research supports the notion that any form of generalized arousal can "inflame" or infuse sexual arousal and motivation.

Hostility can be viewed as the dispositional or "trait" form of anger. It is sometimes distinguished from anger as involving a persisting negative cognitive perception/evaluation of other persons or situations (a hostile attributional bias); intense or repeated anger can lead to more enduring attributions of blame or responsibility for real or imagined frustrations or "injury."

This can be viewed as "grievance thinking" per Thornton (2010), where persons feel easily wronged, suspicious of others, tend to ruminate angrily when feels wronged, and has difficulty accepting another's point of view. From the FFM perspective, hostility is viewed as persistent or frequent anger or irritability (often in response to perceived slights by others) or as mean or vengeful behavior. Persistent and enduring generalized hostility can lead to motivation to "punish" others based on the perception that "the world" or some specific subset of persons (e.g., females) have done them wrong or that children are "available" as potential vulnerable, attainable victims.

Significant levels of distrust and suspicions of others (e.g., a generalized paranoia) often characterize criminal and violent offenders. A common cognitive distortion is the fundamental attribution error, which involves blaming others for one's failures or misfortunes. However, as De Brito and Hodgins (2009b) point out, given the frequent early experiences of being raised in antisocial and/or abusive, neglectful homes, the subjective experience of persons with personality disorders (particularly ASPD) that the world is unfriendly and dangerous may not be "wholly irrational" (145). This characteristic reflects a dispositional orientation that affects perspective-taking (misperceiving the actions and motivations of others) and expectancies of negative experiences with other people. The two most recent meta-analyses have identified "grievance thinking" as risk factor, where an individual perceives that others are responsible for their problems.

Criminal and Sexual Offense-Supportive Attitudes

Attitudes are typically understood as persisting personal beliefs or evaluations of people, things, or events with value (positive-negative, conflicted) attached to them; they are a sense of how things should be and are potentially motivational in that regard. Attitudes are thus understood as admixtures of thoughts and feelings that operate both explicitly (consciously) and implicitly (out of awareness). Critically, attitudes provide significant filters on perception and other aspects of information processing. Antisocial attitudes have been found to be among the most potent of criminogenic needs among criminal offenders generally (e.g., Andrews & Bonta, 2006). Walters (2009) has argued for the primacy of "criminal thinking" in the enactment of criminal behavior; per his definition, such thinking is cognition designed to initiate and/or maintain the habitual violation of rules and laws.

Attitudes about one's self and nature of the world as well as specifically about females and children would provide motivation toward engaging in sexual behavior with such individuals. Regarding persons who sexually offend against children, Ward and Keenan (1999) identified several implicit theories or cognitive distortions that supported such offending: that children are sexual objects, that sexual activity with children does not cause harm (and may be beneficial), that children benefit from sexual contact and are compliant in sexual offending, and that in a dangerous world (e.g., rejecting), children are more likely to accept an offender and provide him acceptance and affection would all provide specific predisposing factors toward sexual offending. In addition, Ward and Keenan identified that entitlement and that sexual behavior is uncontrollable are related to sexual offending against children; these appear to be more general attitudes that could apply to such offending. In terms of persons who sexually offend against adolescents and older persons, Mann and Hollin (2007) identified five potential schemas related to rapists of adolescents and older persons. Four appear to be more general violent-supportive attitudes: need for control over others, entitlement, grievance (leading to retaliation), and the view of self as victim. In contrast, one proposed schema seems specifically related to sexual assault of females, namely, disrespect for (certain) women. This last cognition is one of the "bundle" of beliefs and attitudes subsumed by the Malamuth (confluence) factor of hostile masculinity as a primary factor in sexual assaults of female victims; other studies have also found a relationship between a hostile or mistrusting attitude toward women (e.g., viewing women as both malicious and untrustworthy in their relationships with males) and sexual recidivism. Polaschek and Ward (2002) proposed and tested five implicit theories relative to rapists. Several appear to be specific to sexual assaults against females: women are sex objects (constantly sexually receptive), women are dangerous (out to harm men), and male sex drive is uncontrollable. Two of the five appear to be more general but were related to rape behavior: entitlement (meeting one's needs on demand, specifically the right to have sex whether a victim was consenting or not) and dangerous world (in general, people are viewed as dangerous, a more generally paranoid view of others). There is obvious convergence of the rape-supportive attitudes found by the different investigators as well as in relation to sexual offending against children; both sets of attitudes include a primacy on egocentrism, a view of the world as negative/hostile, and views of both women and children as sexualized or sex objects.

In contrast to attitudes that motivate specific sexual offending behaviors, additionally, a number of writers have written regarding that distorted attitudes supportive of sexual offending may be invoked to serve as justification and reinforcement for sexual offending subsequent to an offense: minimizing the nature (e.g., force) and consequences of the offense (e.g., harm to the victim), blaming others and situations

for an assault, and/or making attributions that they themselves lack the capacity to control their motivations. Leeuven et al. (2013) showed that several models of self-serving cognitions [(primary: self-centered) and secondary (minimizing, blaming others, and assuming the worst)] are related to antisocial behavior (albeit via callous-emotional traits).

Recently, Helmus, Hanson, Babchishin, and Mann (2012) conducted a meta-analysis of attitudes supportive of sexual offending. They noted that many of the attitudes that potentially contribute to sexual offending are present in the general population, including rape attitudes and the sexualization of children, suggesting some general sociocultural "support." Their results demonstrated a consistent relationship of such beliefs to sexual reoffending, particularly when particular attitudes were matched to the type of offender (e.g., generally, specific beliefs were associated with sexual offending against youth or against adults); it was noted that measured attitudes were better predictors of sexual offense recidivism for child molesters than for rapists. Helmus et al. also pointed out that attitudes supportive of sexual offending were also related to other constructs and/or factors previously related to sexual offending (e.g., they overlap and/or co-occur).

Narcissism, Entitlement, and Grandiosity

Narcissism has unfortunately been misunderstood in the construction of the related personality disorder in the DSMs (e.g., Miller, Widiger, & Campbell, 2010). Conceptually, healthy narcissism relates to generally realistic self-awareness, self-appraisal, and regulated affect relative to self-evaluation; self-esteem is largely accurate and proportional to one's achievements in important life areas. In contrast, pathological narcissism (abnormal narcissism) is understood as expressed or manifest excessive self-regard in response to perceived or experienced deficits regarding one's self. Pathological narcissism is compensatory and defensive, thus, the terms "threatened egotism" and "narcissistic injury," when an individual's veil of manifested grandiosity is threatened or exposed by life events. Typically, the narcissistic individual's exaggerated sense of self (relative to his/her life circumstances) is rooted in self-devaluation, inadequacy, and shame. Such pathological narcissism is associated with a sense of invulnerability, such that social norms/rules do not apply to him, impaired capacity for empathy, and genuine commitment to others.[4] Such persons may engage in "grandiose" fantasies about others that prop up or reassure their fragile or low self-esteem but are indifferent to or unaware of the experience of others who may be the object of desire. As Logan noted, narcissism is typically accompanied by other core dimensions such as hypersensitivity, low frustration tolerance, strong aggression, entitlement, and problems with regulation of negative emotions; in addition, manipulation, deception, and control of others "serve" narcissism or grandiosity in those who feel essentially inadequate and lacking. Meloy (2003) noted that a psychopathic individual's apparent grandiosity is a function of the disparity between his view of himself and the facts of his life and then is further maintained (reinforced) through violence and the control and behavioral devaluation of others. Vaughan, DeLisi, Beaver, Wright, and Howard (2007) showed narcissism demonstrated significant overlap with measures of self-control, concluding that "…self-control is likely subsumed by narcissism" (p. 816).

Numerous authorities have linked narcissism to entitlement (e.g., APA, 2013; Walters, 2009; Patrick et al., 2009) and to aggression and violence. Miller et al. (2010), having reviewed the available literature on narcissism, found a strong association between greater narcissism and various forms of aggression, in both provoked and non-provoked circumstances; they also found that narcissism was associated with a callous lack of concern for the feelings and needs of others. For these and related reasons, narcissism has a particularly negative impact on interpersonal relationships over time. Campbell, Bonacci, Shelton, Exline, and Bushman (2004) showed that psychological entitlement had a pervasive impact on social behavior (including aggression and exploitative relationships) and was stable over time. Narcissism is associated with a wide range of externalizing spectrum behaviors including alcohol abuse and antisocial behavior via enhanced appetitive and/or reward-seeking disposition (e.g., Miller et al., 2010). Baumeister et al. (1996) also suggested that "higher" self-esteem and/or grandiosity/narcissism had a "dark side" that served to potentiate violence potential. Specifically, they identified that a considerable degree of violence is a result of "threatened egotism," where relatively favorable views of oneself (albeit not necessarily "true" ones) are disputed or devalued by persons or circumstances. Such "threatened egotism" relative to a fragile or threatened self-concept leads to an externalization of hurt/anger toward another as a means for compensating for the psychological threat. Thus, violence was viewed as often not in proportion to actual abilities or qualities that encounter an "ego threat." Baumeister et al. stated:

> Preliminary evidence portrays rapists as having firm beliefs in male superiority and often elaborate beliefs in their own individual superiority, all of which is contrary to the low self-esteem view. Some observations support the view that ego threats figure prominently in the events leading up to rape. In many cases, however, the victim was not the source of the ego threat. (p. 18)

In addition, evidence suggested that perceived higher self-regard was a correlate of aggression so that the experience and expression of anger among narcissistic individuals

[4] Some writers have distinguished between the truly grandiose narcissist and the "vulnerable" narcissists.

increased as their self-reported self-esteem increased. Later, Baumeister et al. (2002) found that narcissism might be a key factor in attitudes and behavior related to the deprivation of sexual options (e.g., rejection, indifference); such circumstances might be moderated by narcissism to lead to sexual offending, and they identified this phenomenon as rape as a form of narcissistic reactance. However, other research has shown that narcissistic characteristics are related to proactive aggression in the absence of ego threat. A common link has been observed between entitlement and a sexually supportive attitude such that persons feel that sexual arousal "entitles" a person to act to gratify that arousal. In turn, this links entitlement to exploitation of an "available" victim for motivated gratification. Miller et al. (2004) showed that the FFM dimension low agreeableness (egocentric) was associated with risky sexual behaviors. Utilizing a domain-specific measure of sexual narcissism, Widman and McNulty (2010) showed that higher scores on the measure were associated with specific types of sexual aggression and the likelihood of future sexual aggression. Eher, Rettenberger, Matthes, and Schilling (2010) found that narcissistic personality traits offered incremental predictive power above static risk factors for sexual reoffending. As noted, Esbec and Echeburua (2010) and Dunsieth et al. (2004) identified that narcissism/entitlement as a trait or a disorder is associated with violence and sexual offending.

Entitlement refers to the characteristic belief that a person should receive special treatment or that others will/should automatically comply with his or her expectations. Walters (2009) identified entitlement as a key facet of criminal thinking, the belief that for personal gain/reward, one is entitled to violate the rights of other and the rules of society. Such deficits in learning from experience or consequential learning, allow individuals to act on immediate urges or motivation for pleasure without evaluating or considering the implications of their actions for themselves or for others. Entitlement often accompanies narcissism but also exists independently, often as a result of experiences of deprivation or devaluation. Other persons are typically objectified and viewed as means to gratify oneself. Such egocentrism often involves self-gratification through the emotional and physical use of others. According to Meloy (2003):

> For some offenders, this is a function of narcissism or grandiosity while for other it is a more hostile entitlement in the sense that they believe that because of their own life history they are 'owed' what they want from select others… .(p. 2)

Thus, such individuals believe that they are entitled to obtain sexual gratification from others due to their own past experiences of mistreatment. Hanson et al. (1994) found that sexual offenders were characterized by specific sexual entitlement whereby an individual believes or acts as if he is permitted to or it is his right to engage in sexual behavior with whomever he wants. Relatedly, they may believe that they should have sex whenever they "need" it and/or that others should oblige a man's sexual needs. Typically, they view other persons as objects for sexual gratification and, for a variety of reasons, experience themselves as "entitled" to use those victims for their own sexual gratification.

Blame externalization can be understood as a manifestation of a narcissistic or entitled orientation toward the world as well as a violence-supportive attitude or a manifestation of chronic anger/hostility; "good events" are attributed to oneself, while "bad events" are attributed to others and used to justify past or further violent offending.

Dominance/Control Possession (Sadism)

A press or need (motivation) for dominance (control/possession or esteem) via sexual offending may be rooted in frustration/anger or anxiety about anticipated or real rejections of potential sexual partners or even more general circumstances. Often related to a narcissistic orientation toward the world, persons must control others to feel as if the world is predictable. Hedonic dominance involves obtaining pleasure to influence or control others and a rearward in use of seduction or charm to achieve one's ends. Affectively, dispositional fearlessness (e.g., boldness or fearless dominance) is related to persistence in maladaptive behavior, including behavior that is harmful to others and that was or is rewarding even when potential consequences for "punishment" increase or become more probable. In addition, dominance motivation may be triggered or heightened by experiences of external "rule imposition" or social consequences, leading to a motivation to violate such rules or potential sanctions. Grieger, Hosser, and Schmidt (2012) found dominance (forceful, striving for goals) was associated with violent recidivism. Fearless dominance was strongly associated with sensation-seeking. Krueger et al. (2007a) identified rebelliousness as a key facet of ES. Walters (2009) identified power orientation as a key facet of criminal thinking, referring to a desire for personal power and control over others. Tracy and Robins (2003) suggested that individuals protect themselves against feelings of inferiority and shame by externalizing blame for their failures, which leads to feelings of hostility and anger toward other people. Donellan et al. (2005) found a robust relation between low self-esteem and externalizing problems across methods, nationalities, and age groups. In addition, they showed that the effect of self-esteem on aggression was independent of narcissism. It has been hypothesized that persons with low self-esteem turn to aggression as an alternative source of potential esteem or, similarly, that individuals with low self-esteem actively dominate or aggress on others in an attempt to raise their self-esteem.

Dominance via sexual behavior of adults or children can more generally provide a sense of esteem, control, or retaliation that can be rewarding, particularly for individuals who feel inadequate. Groth (1979) in describing the power rapist

suggested, "Sexuality becomes a means of compensating for underlying feelings of inadequacy and serves to express issues mastery, strength, control, authority, identify and capability. His aim is to capture and control his victim" (p. 25). He also suggested that coerced sexuality could be a means of affirming masculinity or more generally personhood. "Fearless dominance" has been identified as a key trait in studies of self-reported psychopathy and related to narcissism and low behavioral inhibition (such as low fear or distress; Witt et al., 2009).

A related dimension to be considered along with the motivation for dominance and control is sadism; in addition, sadism also appears to have roots in motivating aspects of anger and hostility. Generally, sadism goes beyond the mere expression of just dominance/control and anger or hostility to the experience of pleasure from both "seizing" control and associated gratification from imposed humiliation or the callous feeling of "power" over another to the pleasure derived from observing or inflicting pain, discomfort, or devaluation on another. While some sadistic individuals obtain pleasure in the actual enactment of pain and suffering upon others, sadism does not always involve the use of physical aggression or violence; sadistic individuals also express angry or hostile behaviors not just for a perceived sense of retaliation but to experience the pleasure of humiliating others and achieving a sense of power and control over them. Kirsch and Becker (2007) also suggested that deficits in emotion recognition and emotional experience are characteristic of both persons elevated in psychopathy and sadism. In addition, Buckels et al. (2013) identified that "everyday" or subclinical sadistic persons were particularly inclined to "work for" the opportunity to hurt an innocent person. Mokros, Osterheider, Hucker, and Nitschke (2011) showed that affective deficits in combination with behavioral disinhibition (associated with psychopathy) were precursors for sexually sadistic conduct. Similarly, Woodworth et al. (2013) found that sexual offenders who were high in psychopathy were significantly more likely to be characterized by a sadistic paraphilia. Thus, sadism appears to be multifactorial but "intercorrelated" with other personality dimensions, involving, for example, differing degrees of approach motivation for dominance/control and anger/hostility.

Desire for Belonging and Nurturance

Aspects of belonging and social relatedness (e.g., emotional loneliness, fears of intimacy) have been identified by several authors as presumably related to sexual offending (e.g., Bumby & Hansen, 1997; Marshall, 1989). This has been based on observations that sexual offenders appear to have difficulty developing and maintaining "intimate" relationships with age-appropriate adults. In turn, this "difficulty" has been focused on theorized distal attachment deficits and proximal limitations in social competence. However, as Ward et al. (2006) pointed out, a "theoretically persuasive" explanation of the relationship between such interpersonal deficits and sexual offending has been lacking. Yet it seems clear that both primary and secondary predisposing conditions related to sexual offending exist. Krueger et al. (2007a) identified alienation as a key facet of ES. Empirically, various measures of lacking emotional intimate or conflicted relationships with adults have been identified as a risk factor for sexual offending (e.g., Hanson & Bussiere, 1998; Hanson & Morton-Bourgon, 2004; Mann et al., 2010).

Murray (1938) identified the human "need" for affiliation, to be close and loyal to another person, pleasing them, and winning their friendship and attention; Maslow (1954) too identified belonging as a key in the hierarchy of human psychogenic needs. From a somewhat different perspective, Bowlby (1969) spoke of the power of early attachments to form templates for relationship patterns. From these early perspectives, it was posited that most individuals are powerfully motivated for acceptance, approval and a sense of belonging to one or more people. Cloninger (1987, Cloninger, Svrakic, & Przybeck, 1993) discussed "reward dependence" as a key dimension of personality, where, in part, persons who were high on this biological/temperamental dimension were often particularly high in their need for social approval and were socially dependent. In the absence of genuine approval and acceptance, he suggested that persons high in reward dependence would substitute other potentially hedonic experiences, including sexual behavior and substance use. More recently, Baumeister and Leary (1995) identified the need to belong as a fundamental human motivation; they defined this need for belonging as a need for frequent, non-aversive interactions (free from conflict and low in negative affect accompanied by a perception that the interpersonal relationship or bond has some stability and a positive affective component) within an ongoing relational bond. They viewed persons as driven or motivated to establish and sustain a sense of belonging, with some level of intimacy and shared experiences. Baumeister and Leary noted that social attachments can vary greatly in their depth, so that even minimal contact can create a sense or perception of attachment and belonging as well as the perception or feeling of being cared for or comforted by the notion that one is "accepted," "approved," and "connected" to another. Consequently, obtaining or perceiving that one belongs to another/others is reinforcing. Belongingness typically generates positive affect; the absence or end of belongingness is associated with negative affect, including both depression and anxiety. Thus, individuals who lack the personality characteristics that typically lead to affiliation and belonging (e.g., social anxiety, rejection sensitivity) may experience heightened loneliness; their motivations to affiliate are fueled by both the secondary pain of being isolated and disconnected and the primary motivation to experience a sense of belonging.

Further, the motivation for belonging can become conflicted and, over time, ebbs and flows of expectancies for positive experiences and perceptions of negative experiences leading to expectancies and experiences of interpersonal instability (e.g., idealization and devaluation). In addition, as actual and imagined experiences of social rejection, alienation, and detachment occur, the motivation to belong may also change over time, sometimes being ignored and at other times being potentiated and activated. In short, various aspects related to the motivation for belongingness can serve as a predisposing dimension to sexual offending, particularly when that impetus or desire has been frustrated acutely or chronically. For persons who have experience or perceived chronic social rejection or even a lack of acceptance, they may experience extended periods of alienation and/or adopt a manner of social detachment or isolation. However, like other motivational factors, the desire or urge to belong likely persists.

It appears that select sexual offenders seek out interactions with adults, adolescents, and children out of a desire to belong. Unable or limited for various reasons to develop or maintain satisfying relationships with age-appropriate peers, they seek to find a sense of belonging with age-inappropriate persons or through a variety of inappropriate means. To the extent, an individual perceives or desires to belong to an inappropriate or disinterested partner, and they may engage in sexual or sexualized behavior as a means of experiencing a "positive" interaction (from the perspective of the offender) that they believe may have or will have relative stability. In the case of certain sexual assaults, sexual behavior can be viewed as a crude attempt to establish a connection and potential relationship with another person (a victim albeit) or as a means of shared experience or acceptance.

Even a cursory review of the identified set of likely motivators would suggest that there will be a high degree to likely overlap among persons who are prone to violence and sexual offending specifically. Theoretically, all involve admixtures of cognitions, motivation (arousal to goal-directed behavior), and accompanying affects, and as such, combinations of those psychological elements would likely be juxtaposed and additive in leading to behavioral enactments. As noted previously and per other available research, there appears to be significant validation of the varying degrees of intercorrelation among such dimensions.

Primary Deficits in Self-Control Related to Sexual Offending: "Disinhibition"

With varying degrees of consciousness, virtually all persons are motivated to pursue appetitive motivations, both everyday temptations (e.g., a particular food, nicotine, caffeine, etc.) and those urges with potentially more significant, longer-term implications (achievement, risk-taking, retaliation). It also seems clear that dispositionally, developmentally, and/or by situations, individual differences exist among persons in the intent and capacity to delay an immediate approach for gratification of motivation/emotion via self-regulation or self-control. Per Baumeister (1998), under-regulation as a failure of self-management occurs when "willpower" or self-control is inadequate (in terms of the range and "strength" of self-regulation mechanisms) to override unwanted thoughts, emotions, or motivations (impulses). However, self-regulation failure is not an unusual event; it is a core feature of many significant "everyday" personal problems: overeating, nicotine or alcohol use, and/or the expression of anger. Certain conditions and issues appear to readily undermine such self-control by way of failures to transcend temptation/urges, negative moods, and resource/skill deficits. In daily life, as Heatherton and Wagner (2011) noted, the most common circumstances under which self-regulation appears to fail in everyday life are when people experience temptations or urges as relatively overwhelming or when controls are impaired or deficient. Desires and urges of some strength are part of everyday life; per Hofman et al. (2012b), people feel some desire about half the time they are awake, and half of these desires were viewed as conflicting with other goals, values, or motivations. Unresisted urges lead to behavioral enactment; just less than half of these urges were "resisted." However, notably, personal resistance or self-management dramatically lowered enactment of urges. The strongest urges were more difficult to resist and more likely to be enacted than the weaker ones but with resistance/management, "indicating that not only did people often resist so-called inevitable desires, but they were surprisingly successful when they did" (p. 1330). Thus, regarding more significant issues, involving high potency gratifications of liking and/or wanting, many people appear capable of managing both frequently and repeatedly to transcend or resolve conflicts between potent motivators and potential consequences of acting upon those motivators. Thus, most people do not commit criminal behaviors in terms of seeking gratifications from the possessions or bodies of others or in seeking harm of others. Plainly, in everyday life, despite the potency of potential sexual gratification or personal satisfaction from enacting sexual behavior, generally, an overwhelming number of persons are relatively successful at resisting sexual urges that might cause a variety of problematic consequences. Thus, for most people, the potential nature of resistance or conflict about acting on sexual desires is quite well managed, regulated, and controlled. Yet clearly, like other criminal and violent behavior, some persons are either more responsive to both sexual and nonsexual motivators or experience significant and sometimes repeated deficits in managing those experiences of impulse and desire. These represent far more serious failures of self-control, both in terms of the

consequences to victims and the potential implications for the perpetrators.

Consequently, in addition to the potency and interaction of motivators, a variety of issues related to the absence of or relative deficiencies in EF, personality, and self-control could be understood as factors of *disinhibition*. Relative to antisocial behavior, including violent and sexual behavior, it represents the degree and factors by which prosocial behavior is less likely to arise. Disinhibition appears to reflect the relative absence of constraining and/or prosocial elements of EF, personality, and self-regulation (e.g., absent or diminished inhibitions); they represent primary deficits in cognitive (information processing) and personality dimensions (deficits and dysfunctions in emotional experiencing) that underlie and interact to create problems in EF and self-control related to aspects of social attachment. The occurrence of disinhibition should be understood as a potential function of multiple cognitive and affective factors both sequentially and simultaneously that lead to enactment of behaviors that have undesirable consequences for an individual and/or others. Conceptually and empirically, these factors seem likely to be correlated and interrelated so that it is likely that they occur more commonly together than in isolation. Research would suggest that increased sensitivity to and reactivity to novelty and intensity (or "degree of arousal") to internal or external stimuli would create particular predisposition for disinhibition. A combination of and/or even just some increase in factors of disinhibition would appear sufficient to allow sexual offending to occur even under conditions of relatively minimal primary sexual and nonsexual motivational dispositions or states, particularly in select situational contexts. Yet without some press of motivators (either sexual or nonsexual), dimensions of disinhibition would probably not be sufficient on its own to lead to violence or sexual offending. However, when motivators are activated and impelling behavior, disinhibition represents a relative lack of modulation of the push of primary motivators.

Disinhibition is related to but different from impulsivity per se. Impulsivity per available research reflects the juxtaposition or interaction of motivators and deficits in inhibition. Burt and Simons (2013) demonstrated that thrill-seeking was distinct from self-control as a factor in risky and criminal behavior. A consistent finding identifies that particular individuals are characterized by a heightened "general" and "behavioral" of "lifestyle" impulsivity and show marked relatively persistent and/or pervasive immediate action in the face of prepotent or dominant motivators that appear to offer immediate rewards or emotional gratification. As the UPPS model suggests, general impulsivity consists of both motivating elements [urgency (positive and negative), sensation-seeking] and disinhibition, namely, the absence of inhibiting influences (premeditation and perseverance/persistence). Persons high on individual difference in impulsivity are predisposed to act on the spur of the moment in response to relatively strong or immediate potentially rewarding situations (or affective experiences) without consideration for potential outcomes. Generalized impulsivity is associated with a lack of concern for or perseverance in self-management, lack of long-term goals, and irresponsibility; such persons are characterized by acting upon immediate needs and feelings. As a result, generally impulsive individual fails to follow through on (1) existing commitments to provide for others or to honor normative obligations (social roles or responsibilities) or (2) anticipated obligations to one's own best longer-term interest (rules/social expectations). So-called lifestyle impulsivity also has the effect of increasing access to situations involving other similar individuals and, as a result, access to vulnerable potential victims, both adults and children. In particular, generalized impulsivity leads to failing to avoid situations that entail greater opportunities and potential for enacting sexual gratification and offending. Persons high in generalized impulsivity generally and repeatedly fail to engage in "preventative" interventions relative to the implications of desired motivators.

Joliffe and Farrington (2009) showed that approximately 75 % of violent offenders were characterized by "historical" impulsiveness, significantly more than nonviolent offenders. As noted previously, Whiteside and Lynam (2001) identified that "impulsivity" (per the FFM dimensions) had three subscales in addition to sensation-seeking: urgency, a lack of premeditation, and a lack of perseverance (effortful control); Miller et al. (2003) showed that simple urgency and a lack of premeditation (deficient ability to consider possible consequences of one's behavior before acting) were the strongest predictors of aggression. Relative to self-reported impulsivity, lack of preparation, carelessness, and impetuousness were identified as key dimensions (Kirby & Finch, 2010). Walters (1995) found that one of the two key dimensions of criminal thinking was simply a lack of thoughtfulness (e.g., a lack of attention to one's experience/psychological mindedness). Generalized impulsivity is often accompanied by a clear lack of planning and greater intoxication (Reidy, Shelly-Tremblay, & Lilienfeld, 2011). In addition, other research has demonstrated that persons experiencing strong "positive" emotions (e.g., increased sexual arousal) are also characterized by increased impulsivity, particularly the dimension of urgency (e.g., Muhatdie et al., 2013). Johnson et al. (2013) also showed increased emotional-reactive impulsivity was associated with both externalizing and internalizing symptoms and that non-emotion-relevant impulsivity was associated with alcohol problems. In a large representative sample, Chamorro et al. (2012) found a simple measure of impulsivity was associated with a set of behaviors that could be dangerous to others. Individuals higher in impulsivity were more likely to engage in behaviors reflecting behavior disinhibition, attentional deficits, and lack of planning including starting fights, perpetrating domestic violence, and trying to hurt others. Notably, the

most common behavior associated with impulsivity was "engaging in quick sexual relationship without thinking about the consequences" (p. 6) which was three times greater in impulsive versus non-impulsive persons. Similarly, Hoyle et al. (2000) conducted a meta-analysis of personality and sexual behavior that determined that impulsivity was the second strongest trait-level predictor of risky sexual behavior. Cyders and Coskunpinar (2011) showed that urgency is a significant predictor of risky behavior, independent of frequency/intensity of emotions; in addition, urgency predicted above and beyond the additive and interactive effects of lack of premeditation and frequency/intensity of emotions. DeLisi and Vaughan (2007) found that career criminals have significantly lower levels of self-control. Derefinko et al. (2012) showed that (in addition to sensation-seeking) a lack of premeditation was particularly important in predicting general violence. Grieger et al. (2012) found that overall deficits in self-control were more strongly associated with violence as opposed to criminal recidivism; sexual offenders were distinguished from other criminal offenders by low scores on all forms of self-control and in particular effortful control. Love (2006) reported that their analyses found "illicit sexual behaviors are positively correlated with criminal behaviors providing support for Self-Control Theory. Furthermore, the analyses of this data support that low self-control is a predictor of illicit sexual behaviors and crime" (p. 505).

No comprehensive or coherent model of disinhibition appears to exist, but varied lines of research provide frameworks for obtaining an increased appreciation of the numerous factors or dimensions that likely contribute to varying degrees of disinhibition or failure to desist in undesirable behavior. Factors of "disinhibitions" are one or more structural psychological elements and/or dispositional processes or states that result in an individual having absent or, more typically, reduced capability to recognize and manage urges, desires, temptations, and impulses (or diminished application of those capabilities). As motivators and emotions occur on both conscious and unconscious levels, so can such deficits of self-regulation/self-control (via environmental or physiological elicitation).

Bottom-Up and Top-Down Processes in Disinhibition: Deficits in Executive Functioning and Self-Control Related to Sexual Offending

Currently, there are two primary perspectives that provide a partial theoretical framework for considering key elements of disinhibition. Barkley's (2012a) proposed core domains of EF provide the "scaffolding" of the largely cognitive elements that create the potential for self-control and, in their relative or complete absence, degrees of disinhibition. Some degree of self-consciousness or awareness of and attention to one's self-experience is the starting point of EF; this would range from virtually no self-consciousness of one's "person" or "experience" to higher degrees of psychological mindedness. Only with such awareness or attentional capacity (e.g., of urges related to motivators or emotions) can there be some degree of cognitive or "executive" inhibition that allows an individual to "pause" a reflexive, automatic, or immediate, often prepotent, reaction to internal and external stimulation; such acute inhibition of an immediate response creates the opportunity for some consideration of responding. Nonverbal working memory (WM #1) allows recollection of past (learned) experiences as multisensory mental representations (particularly visual imagery) for hindsight; it also creates the capacity to "view" potential behavior in one's mind for foresight in imagining the hypothetical future based on an experienced past. Per Barkley, EF via self-awareness and nonverbal working memory also includes the opportunity for "appraisal" of motivations and emotions and potential conflict among them; such a process allows for modulation of arousal and related experiences. Motivational and affective appraisal can serve as a "metric" for considering costs and benefits of possible courses of action relative to several potential goals (e.g., distal for proximal). Problem-solving involves analyzing one's experiences and features of one's environment in the context of one's past behavior and current goals to develop plans for a particular goal-directed action, by weighing pros and cons, anticipating potential obstacles and then making choices regarding weighed goals and behavioral enactments. Generally, problem-focused coping (PS) reflect EF-related strategies in the face of provocation and arousal, particularly in the identification of problems and appropriate skills to manage the source of those reactions. PS involves perceiving, defining, and appraising problematic, acute, or recurring situations or "a life episode" (e.g., cognitive reappraisal) in ways that they can be confronted and managed; they also involve decision-making regarding the various specific strategies or tactics to both address one's arousal experience as well as the situation. Identified issues in problem-solving involves (a) deficits in problem recognition, (b) a lack of consequential (means-end) thinking (e.g., failing to think through potential consequences of actions, particularly longer-term results), and (c) difficulties generating a range of reasonable options. Finally, to the extent that it is present, verbal working memory (WM #2) as "self-talk" or private speech can serve as a means to question oneself in an unfamiliar or challenging situation, "mental discussion" of conflicts between short- and long-term interests, and of self-guidance through behavioral enactment. Of note, the execution of working memory, arousal appraisal, and problem-solving each requires the ability to focus and sustain attention of multiple psychological elements.

Clearly, Barkley's model provides a largely cognitive, information-processing approach to EF. However, it provides a

means of highlight potential deficits that will affect the experience and potential control of motivators. Persons who lack self-awareness are persons who would be dramatically influenced by automatic, prepotent motivations and emotions and would act relatively immediately to gratify such urges and impulses; there would be no pause or possibility of premeditation; they would lack "executive attention." Individuals with deficits in nonverbal working memory, while perhaps capable of being aware of motivations and emotions, would manifest difficulty in recognizing and interpreting (making sense) of arousal experiences; effectively they would not benefit from past experiences, they would have difficulty picturing the future after a behavior (and potential consequences), and they may not be particularly capable of learning from such experiences (relative to storing them in longer-term memory). Verbal working memory deficits would limit both premeditation of conflicts between arousal experiences and differing aspects of self-guidance that might slow behavioral enactment of urges and impulses. Deficits in nonverbal and verbal memory would also limit one's capacity to "process" arousal experiences and limit or prevent any "cost-benefit" analysis of conflicting interests and motivators, let alone to modulate the initial experience and related arousal created by conflicting interests and motivators. A lack of or compromised ability to modulate arousal experiences would also allow impulses and urges to manifest in behavioral enactment in a relatively "pure" form with no dampening of intensity or duration.

Disinhibition From a Self-Regulation Perspective

From a "self-regulation" perspective, Hofmann and Kotabe (2012) proposed what can be referred to as preventive-interventive model of self-regulation (PIMSR) which identifies several basic conceptual components to be considered; the interventive elements relate to steps that lead up to the successful or unsuccessful use of "willpower" in the "heat of the moment," while the preventive elements relate to the use of "anticipatory strategies" to enhance self-control. From their perspective, Hofmann and Kotabe suggest that self-control can only occur when a given "desire" or motivator turns into a *temptation*, defined as degree to which the behavior impelled by the desire would be "at odds" with a person's value system and (self-regulatory) goal standards; thus, self-control is only initiated by some experienced conflict between a desire for or to do something and potential consequences of related actions. Hofmann and Kotabe invoke constructs of motivational control and "volition;" (they consider that the former relates to the formation of some intention to resist a desire via self-control and the latter refers to the capacity to control and persistence of efforts to control. In addition, Hofmann and Kotabe also identify "opportunity constraints" as external factors outside of a person's immediate control which "substantially constrain the range of available options for action" at a given time, including resource, physical, and social barriers—even in the presence of strong internal desires—situational conditions must be available for desire enactment (if those conditions are not present, it leads to "fortuitous" self-control). Weak or nonexistent opportunity constraints will allow for behavioral enactment of desires and temptations, while strong opportunity constrains will prevent such enactments.

According to the PIMSC, some individuals will temporarily (in the presence of a singular or multiple "hot" states) or consistently (dispositionally) lack awareness of a conflict between a desire and their own or social values and simply enact the desire, opportunity permitting. In other cases, they note that persons may lack "some of the standards a given culture deems essential and binding for everyone." Since there is no internal conflict, they suggest that persons are characterized by some significant lack of values and there can be no motivated or intentional self-control.

Thus, per Hofmann and Kotabe, self-regulation is about resolving the conflict between desire and one's internal standards, and they identify two primary possibilities of interventive self-regulation as to why self-management may fail. First, motivational self-regulation failure concerns when a person is tempted (e.g., experiences both a desire and conflict about enacting the desire) but then fails to translate such a conflict into a concrete intention to resist a problematic desire; they give up before the "battle" even starts. Second, volitional self-regulation failure occurs when a person is tempted and forms a concrete intention to resist that desire and struggles to exert the "effortful willpower" and skills to self-regulate their conflicted state. [In addition to interventive self-regulation, Hofmann and Kotabe also discuss what can be termed preventive self-regulation, regarding tactics that people employ in anticipation of temptation to improve the probability of adhering to their goals and values.]

Both Barkley's model and PIMSC offer useful perspectives, respectively, on the structural psychological elements of effective processing one's own experience in environments of stimulation and the selection and the struggle between value- and standard-based struggles to balance desires with other goals, presumably those more distal and socially validated. Issues related to each of these models clearly have significant bearing on potentiating elements of disinhibition. The presence of elements of EF would appear largely necessary elements for self-control. However, Barkley's model provides insufficient detail to explain why individuals who experience one or more motivators that impel them toward violence generally and sexual offending more specifically behaviorally enact those motivators; there is a lack of specification as to how the elements of EF occur to lead to disinhibition. Similarly, PIMSC provides a useful heuristic for considering

those persons who possess select "higher" psychological characteristics that would lead to "temptation"—the experienced conflict between immediate desires and other personal goals—and the capacity and intent to muster "willpower" to manage those conflicts. However, it is suggested that many sexual offenders, particularly those who are repeat sexual offenders, do not experience significant cognitive-affective conflict (or self-regulatory "temptation") about acting on their sexual or nonsexual motivators when opportunity constraints are absent. That is, it is suggested that sexual offending for most perpetrators rarely results from a "reasoned" process where there is any extended consideration or "weighing" of the potential consequences of sexual acting out as opposed to restraining one's sexual or nonsexual motivators. Consequently, neither set of constructs is sufficient for comprehensively understanding the nature of disinhibition. What follows is an attempt to offer additional perspectives on select dimensions of disinhibition that would appear to play a prominent role in deficits in constraining sexual offending behavior.

In reviewing the extensive available literature regarding EF, personality, and self-regulation/self-control and the much smaller literature specifically concerning disinhibition, it seems clear that multiple, somewhat overlapping, and likely interacting factors are related to the phenomena of disinhibition. If self-control refers to a person's ability or motivation to delay typically more immediate gratification by modulating internal states and behavioral responding, then disinhibition as deficits in inhibition must involve a lack of ability or motivation to recognize the need to delay such gratification or to regulate internal states and behavioral responding. Key elements of disinhibition relating to response inhibition appear to include deficits in attention (initial focus sustained attention) and working memory leading to cognitive impulsivity, self-monitoring, self-focused attention, and/or degrees of self-awareness; deficits in fearfulness and/or social anxiety that create deficits in learning from experience (represented in working and long-term memory); deficits in emotional regulation and coping with arousal experiences; deficits in moral emotions; deficits in recognizing and appreciating values and standards regarding others; deficits in planful or effortful control or "premeditation"; deficits in "willpower" for self-regulation in balancing short- and long-term goals; and a lack of preventative interventions.

Dimensions of Disinhibition: Other Cognitive, Affective, and Social Factors Related to Sexual Offending

Fearlessness and Related Deficits in Learning

Herpertz and Sass (2000) reviewed various studies of the affective domain associated with psychopathy and antisocial behavior and concluded that various emotional "deficiencies" may predispose individuals to violence. Socialization is commonly and simplistically conceptualized as a process through which regular rewards and punishments (aversive conditioning) lead a person to learn rules and values of his family and of the society at large which are internalized as memories. From this perspective, personal values or "conscience" is a conditioned reflex (e.g., Eysenck, 1964), where anxiety induced by punishment for a behavior becomes associated with that behavior. In particular, psychosocial maturation is often construed as a process of learning the value of delaying an immediate reward or gratification for a more substantive reward after some time delay. To the degree an individual possess such information, it may become rewarding and self-motivating to fulfill those rules and values. Some individuals may not be so socialized; others appear to have deficits in "response modulation," specifically an inability to learn from experience and to modify behavior in response to some aversive or punishing consequence.

Fearlessness refers to the absence of normative feeling of distress, apprehension, or alarm caused by potential threat (fear) such as punishment and, as a result, leads to behaviors that have the potential to have negative consequences for the individual which in others would normatively lead to fear. The idea that psychopaths are low in trait fear (persistent and pervasive experience of state fear across situations) or are fearless (e.g., impoverished in condition ability) was first suggested by a study in which Lykken (1957) used the concepts of low fear arousal and conditioned fear to account for the poor performance of psychopaths in classical conditioning and in passive avoidance learning paradigms. In short, poor or absent conditioning results in a failure to appreciate and learn harmful or undesirable consequences of one's behavior and thus results in deficient avoidance behavior and increased approach behavior. An absence of normative fear, particularly related to likely aversive consequences, is associated with engagement in risky behaviors. As noted previously, the apparent fearlessness of some antisocial individuals is, in fact, related to an inability or lack of capacity to process emotion-related cues, particularly punishment, once they have established an initial attentional focus on a particular goal or "reward." As Newman, Curtin, Bertsch, and Baskin-Sommers (2010) suggest, in such cases, an "attentional bottleneck" occurs that prevents potentially salient-inhibiting emotions to enter awareness. Newman et al. (2013) demonstrated that low trait anxiety and trait fearlessness were comprehensively accounted for by the existing PCL-R items and related to all four facets of the PCL-R as well as a superordinate PCL-R factor. A lack of fearlessness or other deficits related to response modulation may commonly lead to a perseverative pattern of seeking more frequently rewarding experiences that provide more immediate gratification. Alternately, the deficit in response modulation may be related to a cognitive impairment (e.g., working memory) that minimizes or negates the memory of the negative effects or consequences of previous—even punished—maladaptive behavior (e.g., Campbell, 2003).

Reward/Stimulation Insensitivity

A related construct refers to the degree to which individual differences potentiate stimulating and rewarding experiences. Herpertz and Sass (2000) identified "emotional deficiency" as closely related with a general underarousal and viewed this attenuated level of autonomic reactivity as linked to pathological fearlessness and a lack of "harm avoidance." Persons with low physiological arousal are viewed as potentiated for seeking stimulation, either through increased motivation via novelty, exciting ("sensational") experiences, or more strongly motivating experiences. Thus, per Cloninger's personality model (e.g., Cloninger, 1987; Cloninger et al., 1993), persons low in reward dependence may find conventional social-sanctioned sources of reward unfulfilling relative to satisfaction and pleasure. In addition, such individuals may also be characterized by hypoarousal, relatively indifferent to negative consequences (e.g., potential punishment, stressors) and less able to experience strong feelings evoked by consequences; they are thus less likely to be conscientious or to learn constraint, self-regulation, or self-control. Shirtcliff et al. (2009) noted that callousness, particularly a related to hypoarousal, was a "two-edged sword," where such persons may be less responsive to social distress and be less responsive to the warmth and other rewards of social interaction and affiliation.

Lack of Self- and Other-Awareness

Self-awareness is the process and state of a motivation and/or ability to understand one's own experience of psychological states (affects, beliefs, motivators, intents, desires, knowledge, and so on). Self-awareness and self-monitoring function as integrated, iterative processes. From the perspective of intellectual functioning, Demetriou and Kazi (2006) state, "These processes enable the person to capitalize on his or her thinking activity by forming increasingly more accurate maps of mental activity and problem-solving processes so as to be able to direct decision-making regarding problem solving as efficiently as possible…Self-awareness is an integral part of DEF [directive-executive function], because the very process of setting mental goals, planning their attainment, monitoring action vis-a-vis both the goals and the plans, and regulating real or mental action requires a system that can remember and review and therefore know itself. Therefore, conscious awareness and all ensuing functions, such as a self-concept (that is, awareness of one's own mental characteristics, functions, and mental states) and a theory of mind (that is, awareness of others' mental functions and states) are part of the very construction of the system" (p. 314). Demetriou and Kazi showed that self-awareness is, in fact, a central element of general intellectual development and functioning, on par with working memory and processing speed. Further, as they point out, self-awareness provides the foundation for theory of mind (TOM) as the ability to understand that others experience psychological states that may be similar and different from one's own. Similarly, Cacioppo et al. (1996) demonstrated that individual differences exist in the degree to which persons are interested or motivated to engage in cognitive activity, distinguishing between cognitive "misers" and "cognizers" (e.g., low versus high intrinsic motivation to engage in mental processing). Deficits in self-awareness are twofold, at minimum. First, deficits in self-awareness are associated with compromised intellectual functioning and attendant higher-order cognitive processes, including reasoning and problem-solving. In addition, from an interpersonal perspective, deficits in self-awareness—"mind-blindness"—necessarily limit the capacity for TOM and compromise the potential for understanding the feelings or intentions of others, for example. Consequently, persons a self-awareness deficit and resultant TOM deficit would be limited in perceiving things from any other perspective than their own; it provides the basis for egocentrism and for failure to appreciate the inappropriate nature of their behavior. Individuals who experience self-awareness deficit and resultant TOM deficit have difficulty determining the intentions of others, lack understanding of how their behavior affects others, and have a difficult time with social reciprocity.

Deficits in "Moral" Emotions (Callousness and Lack of Empathy/Lack of Remorse and Guilt)

In the modified form of the self-control theory of crime, Hirschi (2004) highlighted the significance of the presence of short- and long-term social bonds as particularly influential factors in self-control and constraint. Conversely, various forms of emotional "detachment" from others, particularly related to the so-called moral emotions of empathy, guilt, and shame/remorse, are centrally implicated in disinhibition of antisocial behavior. Both cognitive and affective elements have the potential to underlie deficits in the experience of and intentions based on moral emotions, thus persons may be unable or unwilling to act based on feelings for others, such as those associated with antisocial behaviors. Moral emotions require moral standards—some internalization of moral norms and conventions. In particular, moral standards are those that involve prohibitions against behaviors likely to have negative consequence for the well-being of others. Moral emotions provide a motivational force to "do good" and avoid doing "bad." It is useful to note that there is strong consensus from childhood through adulthood as to the difference between "transgressions of convention" and "moral transgressions." Huebner (2010) identified that the latter are

relatively universally perceived as more wrong, more punishable, independent of authority, and universally applicable. He demonstrated that for seven of eight types of hypothesized moral transgression (physical assault, vehicular assault, sexual assault, assault by a child, inducing illness, recklessly endangering the lives of others, and violating another person's property), subjects rated each scenario as strongly and clearly immoral by virtue of being more wrong, more punishable, having more normative force independent of simple authority, and more universally applicable. Empathy is conceived as an affective response to another person's experience, where an individual can "represent" the internal mental state of another (e.g., perspective-taking) and experience some emotional response congruent with the other's emotional state. Consequently, empathy is contingent on some degree of TOM (in turn contingent on self-awareness).

Relative to such standards, guilt is typically viewed as a more "private" negative emotional reaction (bad "feelings") arising from self-generated feelings to violating socially accepted rules or expected conduct and particularly negative consequences (e.g., harm) done to others as a result of one's behavior. Remorse involves feeling distress, typically guilt or regret, about past rule-violating behaviors. Thus, remorse or guilt refers to a relatively private emotional experience related to one's own negative evaluation of a specific behavior either in the present or past. In contrast, shame is viewed as arising from negative feelings related to public exposure and perceived social disapproval for one's behavior. However, both affects are necessarily tied to recognizing and appreciating moral norms or right and wrong. Callousness or unemotionality (or lack of empathy) refers to an inability or unwillingness (disinterest) to experience emotions, particularly empathy for others as well as guilt or shame; it can be an acquired or heritable (physiological) condition. Callousness is also manifest in a failure to respond to the distress cues of others. Thus, these conditions refer to being unaware of or indifferent (uncaring/unfeeling) regarding the thoughts or feelings of others and deficits in experiencing guilt or shame (a lack of indifference to violating one's own values or those of a social group); rather, such individuals are typically more concerned about the consequences of their behavior on themselves not others. [At the same time, some callous individuals appear capable of understanding enough about others that they are capable of engaging in effective manipulation of them.] These three characteristics are ones that strongly associate with each other; effectively, Blair (1995) referred to them as the "moral emotions" related to transgressions against the rights and welfare of others. These conditions are each one's that can involve perception, attitudes, and deficits in perspective-taking or emotional reciprocity. One key element of callousness is the perception or experience that other persons are objects. Keysers and Gazzola (2014) emphasize an important point, namely, the need to distinguish between the capacity and the propensity for empathy (and other moral emotions) along the lines of the distinction between motor capacity versus motor performance. Citing evidence that more empathic individuals are only moderately more likely to help others and that individual differences in empathy are relatively stable across the lifespan, they note that individual differences in attention and motivation "could thus turn the know of empathy up and down, creating individual differences in how strongly propensity and ability dissociate" (p. 165). They suggest that being sensitive to others can be viewed as "costly," leading to a motivation against acting empathically.

A key element of disinhibition for criminal, violent, and sexual offending are deficits in the identification of moral norms, the experience of "moral emotions," and the propensity to act on norms and emotions; such deficits can operate on automatic, unconscious level or affect more conscious decision-making. Per Patrick et al.'s conceptualization of psychopathy, a callous, coldhearted disposition is viewed and expressed as "meanness" (e.g., Patrick et al., 2009). Persons who lack guilt or remorse do not feel concerned and/or responsible for the consequences of their own behavior; in particular, they do not experience negative affect (e.g., "feel badly") in response to the results of their own behavior upon others (e.g., particularly to other's apparent distress, pain, or injury). More generally, lack of remorse or guilt exists in reference to consequences of most rule- or law-breaking. While some may have deficits in capacity, others lack the propensity to act with sensitivity to and concern for others. As noted, Leeuven et al. (2013) showed that several types of self-serving cognitions [(primary, self-centered) (secondary, minimizing; blaming others and assuming the worst)] appear to be a function of callous-emotional traits and mediate the initiation and maintenance of antisocial behavior.

Antisocial, narcissistic, and psychopathic individuals are commonly viewed by others as manifesting an absence of or deficiency in such feelings that is ego-syntonic. In contrast, they are typically more concerned with the negative effects of antisocial events such as sexual offending upon themselves. There is a consensus that lack or incapacity for empathy or some selective empathy (e.g., a "suspension" of concern for another in a particular situation or one's own victims) is the proposed mechanism for such affect and attitudes; that is, some persons cannot or do not feel others' emotions, while others may be deficient in understanding others' emotions or both. Joliffe and Farrington (2004) utilized a meta-analysis, and their results suggested negative relation between empathy and increased offending; they also found that controlling for intelligence or socioeconomic status eliminated this relationship. After committing violent acts such as sexual offending, certain persons do not identify experiencing remorse or guilt, and, in turn, such predispositions are not surprisingly associated with more persistent

violent behavior. Offenders often proffer verbal expressions of remorse after admissions of sexual offending, but the genuineness of such expressions is questionable, at least in many cases particularly repeat offenders. It has been suggested that select sexual offenders lack the capacity for empathy for most specifically for their victims. Marshall, Marshall, Serran, and O'Brien (2009) have suggested that most sexual offenders do not indicate a lack of empathy toward persons in general but do fail to display or experience empathy toward their specific victims or class of victims. Some empathy deficits may be defensive and mutable, serving as "self-protection" for experiencing emotional distress (e.g., against guilt or shame relative to sexual offending), while others are more pervasive and dispositional.

Callous disregard for the rights and feelings of others is a key hallmark of many antisocial individuals; the characteristic appears to be highly heritable (e.g., De Brito & Hodgins, 2009a). In a meta-analysis, Miller and Eisenberg (1988) showed that aggression and antisocial behavior were inversely related to empathy. In the DSM-5, the "moral emotions" are potential specifiers for conduct disorder in youth and highly predictive of more persistent antisocial and violent behavior. Blair (1995, 2009) reviewed research that indicated persons with greater degrees of psychopathy evidence selective impairments in emotional recognition of others, particularly of manifest fear and unhappiness (as opposed to happiness); thus, some more psychopathic individuals may possess some sense of self-awareness but lack capacity for awareness of distress emotionality in others. While showing that psychopathic individuals manifested deficits in emotional processing and in distinguishing conventional from moral transgressions, Cima, Tonnaer, and Hauser (2010) found evidence that, in a laboratory situation utilizing moral dilemmas, such individuals understood the distinction between right and wrong but did not care about that knowledge or consequences that ensue from morally inappropriate behavior. *Among others*, Keysers and Gazzola (2014) *point out that some apparently psychopathic individuals posses some capacity for empathy that they display in manipulating and "seducing" potential victims but little propensity to allow that empathy to prevent them from victimizing others for personal gain or reward*. Be it genetically and/or environmentally determined (or both), persons with distinctive callousness lack many of the conventional constraints on general antisocial behaviors and interpersonal violence in particular.

Along these lines, Keenan and Ward (2003) have suggested that persons at risk for sexual offending may be characterized by general or particular deficits in theory of mind such that they are unable or deficient in understanding that other people are also characterized by beliefs, emotions, motivations, and values. Alternately, entitlement suggests that other persons' psychological experiences are simply irrelevant given one's own desires or motivations. Referencing deficits in theory of mind, Keenan and Ward (2000) questioned whether certain sexual offenders cannot or do not appreciate that other persons have "minds" (e.g., act on the basis of mental states such as motivation/desired, emotions, and beliefs) and are impaired in their ability to infer other's mental and emotional states. If one does not appreciate that another has their own "mind," they may act as if others are simply objects or simply not grasp that others may view/experience events (e.g., shared events) different from oneself. As Meloy (2003) has noted, more psychopathic individuals display "part-object relations." Noting "The psychopath does not conceive of others as whole, real, and meaningful…" (p. 2). In addition, sexual offenders marked by callousness often "body part" others or over-focus on particular aspects of physical appearance that have emotional or sexual salience for them. Per Meloy, "The extreme of callousness is sadism, wherein indifference toward others has become pleasure at their suffering, submission, and loss of control. Given the degree to which psychopaths attempt to dominate their objects, rather than affectionately relate to them, it is not surprising that there is a strong and positive relationship between sadism and psychopathy" (p. 2).

Emotional Disinhibition or Failure in Emotional Regulation

In contrast to experiential deficits in emotional experiences, more intense affective and other arousal experiences are implicated as motivators in violent and sexual offending. Deficits in the process of modulating desires and strong feelings lead to an increased probability that such arousal experiences will be behaviorally enacted; consequently, such an inability to moderate affects and motivational desires is a key element in disinhibition. In addition, some persons are characterized by a dispositional variance toward unstable emotional experiences and mood (e.g., emotional lability) such that emotions are easily aroused (low sensitivity), manifest in relatively extreme experiences (intensity) to events and circumstances, and persist longer than for most individuals. Emotional regulation refers to the processes related to identification, monitoring, evaluating, and modifying emotional reactions so that they are prosocial or not unsociable; deficits in this domain would include faulty monitoring (recognition and tracking) of one's experiential and arousal states, personal appraisal, or interpretations of what one is experiencing (valence, meaning, attribution) and the range and skill an individual possesses to modulate or change the intensity or frequency of emotional and motivational experiences. Thus, individuals who are emotionally dysregulated typically experience arousal experiences more intensely than others, have difficulties identifying such

experiences based on both personal and situation qualities (e.g., biased toward perceiving more negative information), and do less to modulate (e.g., suppress) the behavioral expression of their feelings.

Emotional regulation is considered a central mechanism for everyday functioning as well as coping with more stressful experiences. Thus, Lazarus and Folkman (1984) distinguished between emotion-focused coping aimed at reducing or managing the emotional experience associated or cued by an internal or external stimulus (distinguished from problem-focused coping which is aimed a problem-solving or doing something to later the source of the problem). Emotion-focused coping involves distracting oneself, ventilating to others, ignoring the situation, or expecting something worse to happen. Similarly, Carver, Scheier, and Weintraub (1989) also identify a range of coping strategies, including acceptance of one's state, suppression of competing activities, behavioral and mental disengagement from "distractions," and denial; all of these strategies might be employed to facilitate motivated action toward a sexual offense. Persons with deficits in emotional regulation attempt few or none of such things or do them incompletely; maladaptive externalized coping involves the tendency to respond in a reckless, impulsive manner when faced with intense or overwhelming upset or distress. Deficits in emotional regulation begin at the attentional level, in terms of initial self-awareness of one's experience and secondarily self-monitoring the dynamics of that experience. Failure of initial response inhibition will likely lead to reactive behavior derived, unmodulated, from the arousal experiences. Avoidance or crude suppression (denial) of the arousal experience typically does not modulate the arousal itself, requires significant psychological resources, and may actually increase or potentiate less conscious behavioral responses. In particular, as a result of compromised psychological resources, arousal suppression reduces the ability of individuals to maintain focused attention on potentially more relevant social interaction and related cues. Distorted or inappropriate cognitive appraisals are associated with arousal-based behavioral enactment. Per this model, a hostile attribution bias (HAB) is the interpretation, in response to ambiguous or accidental circumstances, that another has provoked a person with hostile intent, potentiating an aggressive response (Dodge & Frame, 1982); this is similar to so-called grievance thinking. Folkman and Lazarus (1988) point out that "confrontive coping" with the source or target of negative affect invariably leads to negative consequences. In particular, behavioral expression of arousal states can be quite directly harmful to others and, additionally, compromise potential social support. Further, following Hofmann and Kotabe's notion of preventive intervention, emotional dysregulation would include repeated failures to avoid situations likely to elicit or be perceived as eliciting provocation.

Yet another form of deficient emotional regulation concerns so-called cognitive deconstruction (Baumeister, 1990) defined as an attempt to escape distressing feelings, including ones that may carry some threat of social exclusion or retaliation. Such a process can be understood as a psychological effort to confine awareness to the immediate present as opposed to making inferences or self-attributions about particular behaviors mainly in a cross-temporal sense. Current experiences are "detached" from hindsight or foresight ("self-meaning") to reduce or eliminate the potential for social disapproval and rejection and/or related negative affect.

Howard (2009) suggested that violence could be said to represent the extreme interpersonal manifestation of dysregulated affect (and related motivation). Similarly, Grieger et al. (2012) found that a primary aspect of deficits in self-control associated with violent recidivism was problematic emotional regulation (stress sensitivity and reactivity, compromised ability to modulate the relative intensity of strong hedonic or negative affective experiences, inability to delay the press of arousal, leading to aggressiveness). As noted, various theorists have identified dysregulated negative active as related to sexual offending. **S**exualized coping is defined as the use of sexual behavior, including sexual violence, to manage negative emotions and stressful life events (e.g., Cortoni & Marshall, 2001); it is hypothesized that persons who engage in sexualized coping show increased sexual activity [by themselves (masturbation or viewing erotic materials as a means of inducing arousal) or acting out with or toward others as a means of relief or distraction)] during periods of stress or "dysfunction." Serran and Marshall (2006) reported that sexual offenders are more likely to use other forms of emotion-focused coping (including increased deviant sexual fantasies, expressions of anger, or loneliness) and/or avoidance-focused coping (e.g., pursuing sexual behavior, substance use, or generalized aggressive behavior). In fact, sexual offenders often report increased deviant sexual fantasies and masturbation during periods of stress (McKibben et al., 1994). A link between negative emotion and sex is common among those who engage in high-risk sexual behavior (Bancroft et al., 2003, 2004) as it is among child molesters (Whitaker et al., 2008). Serran and Marshall indicate that certain sexual offenders are much less likely to engage in task-focused coping or PS as a direct means of addressing the provoking experience or stressor.

Relative to the role of emotional dysregulation as a component process of disinhibition is the notion of reconstrual. Such a reappraisal can fundamentally alter the memory of an experience such that any residual emotional element is suppressed or eliminated. Thus, any or some residual affect which might affect future behavior becomes disconnected or attenuated from memory and interferes with consequential learning.

General Emotional Deficiencies

General deficits (as opposed to excesses) related to emotional experience can serve as potent factors in disinhibition. The research literature offers several perspectives on the types of broad deficits in emotional experience that can lead to increased potency of motivators. Similar to reward insensitivity, hypoarousal (low state of arousal) is viewed as cognitively compromising (result in an inability or limitations) in sustaining attention on predictable and/or mundane activities; affectively, it can also be experienced as such an aversive state that it leads to stimulation-seeking or novelty (thus potentiating the value of action on strong arousal states (reinforcing) and leading to action behavior simply as a means of creating stimulation). Hypoarousal is associated with diminished stress sensitivity as well behavioral overactivity, causing such individuals to be less responsive to and likely to elicit positive consequences of social affiliation leading to social rejection and isolation.

Another aspect of emotional deficiency is proneness to boredom. The term boredom is used to refer to a wide range of experiences. Boredom can refer to an aversive subjective state of dissatisfaction attributed to an environment that is experienced as inadequately stimulating; boredom proneness appears to be dispositional condition of individual differences. Persons vary in their experience of environmental monotony and constraint, leading to a difficulty in sustaining attention. Boredom proneness is related to inattention to both external and internal stimulation. Persons also differ in their need for variety and change in their environment and their ability to generate sufficient stimulation for themselves. In part, this can be thought of as habituation. Consequently, boredom proneness can be a predisposing condition based on a failure or deficit in regulating attention in a directed or focused way, particularly to obtain stimulation in an environment or at a time that there is a perceived or experienced loss of interest or stimulation. Further, boredom is also a contextual phenomenon; for a number of people, socioeconomic and other conditions may preclude more socially acceptable forms of thrill-seeking while increasing monotony or sameness of everyday life. Thus, boredom proneness may interact with sensation-seeking by potentiating the motivation for increased frequency of or more intense stimulation (particularly hedonic or positive-valenced stimulation); increased experience of boredom leads to various negative affective states including hostility, anger, and loneliness. As such boredom has been linked to various problem behaviors, particularly externalizing behaviors (e.g., antisocial and substance use/abuse). Quay (1965) proposed that a distinctive feature of psychopathic behavior was the lack of tolerance for sameness, thus predisposing them to seek or create "excitement" or heightened pleasurable sensations. Susceptibility to even minimal sensation-seeking might be particularly true for persons characterized by chronic, generalized low (hypo) arousal or susceptibility to boredom. Such thrill-seeking to generate some arousal via norm violation might be stimulating enough on its own, regardless of the reinforcement that might occur as result of sexual gratification. Krueger et al. (2007a) identified boredom proneness as a key facet of the ES. Raine (2002) pointed out that boredom proneness may be complementary to sensation-seeking in that low levels of arousal predisposes to antisocial behavior both because of its association with fearlessness and its "encouragement" for thrill-seeking; Raine also suggested that such factors may act synergistically. [In addition, repetition and expansion of sensation-seeking behavior over varying periods of time might reflect a likely increase in type, frequency, or variety of a particular behavior because someone prone to boredom (e.g., potentially hypoaroused) would habituate even more quickly than others might to a particular (sexual) stimuli.]

A construct related to boredom proneness as well as callousness, lack of empathy, and lack of guilt/remorse is anhedonia, typically defined as the inability to experience pleasure from activities or experiences usually found enjoyable. Individuals with these personality characteristics are also noted to display particular difficulty in both recognizing and describing their feelings more generally. Alexithymia is considered both a personality disposition and a personality disorder trait of emotional dysregulation, such as found in persons with schizoid personality disorder. Alexithymia is typically viewed as composed of three factors: difficulty identifying one's own feelings, difficulty describing one's feelings to others, and "externally oriented thinking" (a tendency to approach decisions and problem-solving with "logic" as opposed to emotion). From the perspective of motivation, a lack of "anxiety" and other deficits in avoidance motivational processes may also be implicated in alexithymia (as well as callousness and a lack of remorse). Anhedonic persons, similar to persons easily or temperamentally bored, may be motivated to seek out relatively intense experiences that are expected to be arousing as a means of self-stimulation. Grabe, Spitzer, and Freeberger (2004) found that alexithymia was associated with a range of psychiatric disorders, particularly depressive disorders. Alexithymia resembles or would appear similar to persons characterized by the affective components of Factor 1 on the PCL-R; consequently, an inability to understand one's own emotions and those of others might constitute a disinhibitor. Kirsch and Becker (2007) suggested that the emotion recognition and emotional experience deficits found among psychopaths, and perhaps present in sexual sadists, may lead to deficits in their ability to empathize with others, in turn resulting in an increased likelihood for perpetrating instrumental violence.

Amoral Attitudes or Deficits in Common Moral Standards/Judgment or Personal Values

A premise of self-regulation as a top-down element of self-regulation is that persons possess defined personal values and goals, which at times may conflict with immediate desires. However, it is unclear that all individuals are characterized by either self-awareness or personal identities that incorporate "higher" values and goals and don't live much of their daily lives at a level of more immediate impulses and have little concern for how they are viewed by others. Rather, disadvantaged, socially alienated individuals—typically those with "low-embodied capital" (e.g., attributes associated with social success, Bock, 2002)—may be largely reactive to their limited, prepotent internal experiences and their surrounding environment. Thus, persons, including offenders, vary significantly in their psychological mindedness, including the depth and "presence" of higher-order conceptualization and "intellectual" discourse.

Morality refers to what is considered right or wrong by most people—e.g., a common or shared perspective on acceptable behavior. Deficits in moral beliefs and feelings and/or motivation for moral behavior have all been implicated in criminal, violent, and sexual offending. Beliefs are ideas that persons hold as true, and they can be held with varying degrees of certainty; typically, they are derived from what others say, perceived cultural and social norms, or what other people do or say. To the degree that certain beliefs about what is important to a person come to be seen as "true," they become personal values; persons vary as to their perception of importance and commitment to those values. By definition, values are more abstract principles that are hypothesized to guide persons' lives. Many values are viewed as instrumental ones because it is the means of acquiring something else of value (anticipated consequences). Attitudes are the mental dispositions or cognitive content that people develop regarding others and the current circumstances that typically "inform" behavioral enactments, either on an automatic or more conscious decision-making process. A body of research indicates that persons primarily form their attitudes from underlying values and beliefs. However, factors which may not have been internalized as beliefs and values can still influence a person's attitude at the point of decision-making. Typical social influences relative to values include the desire to please, political correctness, convenience, peer pressure, and psychological stressors.

Behavior that violates what are regarded as sociocultural moral guidelines is a fundamental feature of antisocial disorders and almost defines criminal behavior. Moral judgments are viewed as involving both cognitive ("reasoning") and affective components. Per Raine and Yang (2006), "Negative moral emotions likely evolved to counteract the breaking of social conventions. Moral feelings of indignation, disdain, disgust and contempt can give rise to the stronger emotions of outrage and vengeance that then give rise to ostracization of the cheat from the social group, injury or even death. At this level, morality is largely emotion-driven, relatively automatic, and has little or no higher cognitive control component in early hominids. As hominid society became more complex, higher-order cognitive processes likely became increasingly important for both dealing with more complex moral dilemmas, and for regulating the expression of moral emotions" (p. 208). Raine and Yang continued, "While some evidence exists for a difference in level of moral reasoning in delinquent, criminal and psychopathic groups… antisocial behavior could cause differences in moral thinking, rather than vice versa. That is, living an antisocial way of life may change moral thinking to justify the individual's repeated antisocial actions and reduce cognitive dissonance" (p. 209).

Some research shows that "…psychopaths show excellent (not poor) moral reasoning ability when discussing hypothetical situations—their real failure comes in applying their excellent moral conceptual formulations to guiding their own behavior" (Raine & Yang (2006); p. 209). Thus, it may be for some group of antisocial individuals that while formally "knowing" what moral and conventional standards, they do not appreciate the emotional attachment or basis for other person's adherence to those standards; that is, they are cognitively capable of distinguishing right from wrong, but they lack the capacity of the feeling of what is moral. Further, this lack of appreciation for general and/or specific moral and social transgressions and/or an endorsement of more deviant values and goals in social situations (e.g., viewing aggression and dominance as a more acceptable means for obtaining goals) leads to more disinhibited behavior. Alternately, a lack of self-awareness or critical insight, or the presence of ambivalence or uncertainty about sociocultural values, can lead to a less reasoned attitude to choices and consequences and ultimately to undesirable behavior.

Multiple Interactions and Reinforcement Among Personality and Related Conditions in Sexual Offending

It should be apparent that psychological functioning particularly in the management and "mismanagement" of behavior is clearly multidimensional and overlapping in nature. Clearly, the "emotional" and "cognitive" dispositions of self-control (e.g., attention, working memory, etc.) co-occur and interact in a dynamic fashion. Motivators also co-occur and interact with other motivators, likely potentiating the "energy" with which behavior is directed or driven. Even more strongly, dimensions of disinhibition also interact with other elements of disinhibition, potentiating the deficiencies in constraint and management of reactive and "goal"-directed, motivated

behavior. Motivators also interact with elements of disinhibition, likely in various ways and to various degrees. Both the available theoretical models and empirical data direct that individual nonsexual as well as sexual motivators on their own can lead to sexual offending. However, multiple motivators—both nonsexual and sexual—at varying intensities (including lower levels of arousal or activation) could also act cumulatively and/or interactively to cause the enactment of a sexual offense. It is difficult to conceptualize any one or an accumulation of the factors of disinhibition as responsible for a sexual offense without some internal arousal or impetus, either a sexual or nonsexual motivator or emotional experience. However, in the presence of one or motivators, at varying intensities, aspects of disinhibition could also act cumulatively and/or interactively to cause the enactment of a sexual offense. Megargee's (2011) notion of habit strength and like concepts—the number or density of motivators and elements of disinhibition, as well as their intensity—likely function in an interactive and exacerbating manner. Just as with risk factors generally, it makes sense that various personality and related dispositions affect each other differentially, so that some may significantly potentiate one another's power in leading to the enactment of sexual offending, while others might serve to modulate the impetus to sexually offend. Thus, Krueger et al. (1994) showed that anger in combination with low constraint was the most consistent set of predictors of persisting antisocial behavior. They also found that, in combination, alienation, lack of social closeness, and risk-taking were associated with increased antisocial behavior. Patrick et al.'s (2009) construct of "meanness" involves egocentricity, fearlessness, as well as deficits in guilt/empathy or unemotionality, leading to the exploitation of others. Self-regulation has been found to buffer against "risky" behavior but only among those low in sensation-seeking. Kirsch and Becker (2007) and Mokros et al. (2011) found thought affective deficits and "behavioral disinhibition" both have an effect on sexually sadistic behavior. Both the dark triad and Dark Tetrad involve interactions between multiple factors leading to sadistic behavior. In a study of particularly "high-risk" sexual offenders in Canada, Woodworth et al. (2014) demonstrated that offenders scoring high in psychopath were significantly more likely to have a sadistic paraphilia than those with low or moderate levels of psychopathy.

Further, it is useful to consider the role of personality and related conditions after sexual offending. For many or most sexual offenders, both theory and evidence are that such offending is rewarding or positively reinforcing. After criminal events take place, such as sexual offending, additional personality and related dispositions are activated that relate to the relative reinforcement of the event(s). In addition, particular cognitive styles of an engrained nature contribute to the maintenance of sexual offending as a form of antisocial behavior. Krueger et al. (2007a) called attention to externalization of blame as a key element of the ES spectrum. More broadly, Walters (2009) identifies the following aspects of criminal thinking as among those functioning to maintain the propensity for future antisocial behavior: mollification (externalizing the blame for any negative consequences of a criminal act) and super-optimism (unrealistic beliefs that one can escape from the nature negative consequences of a criminal act or lifestyle).

Making Sense of Nonsexual Personality and Related Conditions as Factors in Sexual Offending

Personality and related conditions appear to play several roles in the development and maintenance of sexual offending in the manner of a hierarchical system. Several of these factors may play relatively primary motivational or situational roles in sexual offending (e.g., when it appears that sexual factors play little or no significant role); they are directly related to sexual offending as sufficient conditions for the enactment of a sexual offense. Moreover, personality and related conditions as one of two sets of primary pathways to sexual offending clearly act in a potentiated manner when the other primary pathways (deviant sexual interests, sexual preoccupation) are present. The most well-documented example of that is the so-called dynamic duo of sexual offending where the presence of the both sexual and personality risk factors significantly increase the risk of future sexual offending (e.g., Hawes et al., 2012). Similarly, personality and related conditions may also function as "secondary" risk factors that act in combination (additive and/or interactional) with the presence of either or both primary factors in the enactment of sexual offense. Thus, they magnify the likelihood that predisposing deviant sexual interests and sexual preoccupations on the one hand and primary nonsexual motivational/situational risk factor lead to sexual offending. Further, it seems likely, given existing research that such secondary risk factors frequently act in an additive and/or interactive manner in potentiating and enhancing other predisposing sexual and nonsexual psychosocial risk factors. Thus, sensation-seeking is potentiated by both boredom and disinhibition (e.g., Zuckerman, 1979). In addition, it seems increasingly clear that personality and related conditions may act as or more potently on the level of implicit cognition and affective dimensions, Thus, a significant subset of sexual offense predisposing factors most likely function largely automatically and out of conscious awareness and are not necessarily accessible to rational-analysis or intentional control. Finally, both primary and secondary risk factors, acting alone or in combination, act in a circular manner regarding the actual enactment of a sexual offense, such that their predisposing qualities of such characteristics likely or potentially

become greater over time via simply the rewarding or positive reinforcement aspect of obtaining the goal of a sexual offense. Thus, "positive feedback" increases the "habit strength" of one or more personality and related conditions as key factors in the occurrence of sexual offending.

Situational Opportunities and Constraints

As noted earlier, personality patterns demonstrate relative consistency by context or situation; however, without an appropriate or permissive context, those manifestations may not occur. Relative to intermittent, violent behavior, including sexual offending, some manifestations of personality involving "hot" motivators will only emerge as behavioral enactments at particular times and in particular contexts. Such contexts may be perceived or actual opportunities that allow for a behavioral enactment. For example, while persons might be similar or differ in their general levels of aggression, the key issue is that individuals would nevertheless differ predictably and clearly in the types (and number) of situations in which they committed acts of aggression. That is, even globally similar "aggressive" individuals would "vary in the their pattern of where [aggression] is displayed" (Mischel, 2004; p. 6); he noted that some persons will be highly aggressive with individuals over whom they perceive themselves as having power over (e.g., perceived vulnerable females and children) but might be exceptionally friendly and compliant with those who they perceive as being "in control" of them (policemen, correctional personnel). Such "signatures" of personality were, in fact, revealed in a large observational study of behavior, especially social behavior, across multiple repeated situations over time (Mischel & Shoda, 1995). Qualities of environmental conditions also exert an eliciting or provocation effect on aggressive predispositions and individuals' differ in their susceptibility to potentially stimulating situations; greater aggressive responses are found for persons high in trait anger, generalized hostility, narcissism, and impulsivity (e.g., Bettencourt, Talley, Benjamin, & Valentine, 2006). Similarly, some persons are more sensitized to a greater number of situations so that similar personality dimensions will be displayed more frequently, with greater intensity and more consistently than others. Conversely, some personality dimensions and related behavior will require some very specific situational or contextual cues in order for them to be instigated and displayed. Mischel (2004) utilized the term "personality types" to define people who shared common characteristics in processing certain situational features: "The types are defined in terms of characteristic social cognitive and affective processing dynamics that generate characteristic *if…then…*patterns of thought, feeling and behavior visible in distinctive types of situations" (p. 14). Similarly, in their discussion of self-regulation, Hofman and Kotabe (2012) noted that "opportunity constraints" were powerful situational determinants of the "appearance" of self-regulation; environments that do not permit access to desire gratification provide powerful "preventive interventions," often absolute preventive interventions. As per Fujita (2011), "Research has repeatedly show that when people are able to anticipate potential self-control failures, the prospectively restrict the future availability of an opportunity to indulge in temptations…the first step to self-control is to avoid having the opportunity to indulge in immediately available temptations" (p. 355). He pointed out that "Indeed, research has demonstrated that those with a history of better self-control are more likely to capitalize on opportunities to engage in prospective self control…" (p. 359) often to the point where what was effortful control becomes automatic and less dependent on conscious monitoring. Thus, it is notable that Edens, Kelley, Lilienfeld, Skeem, and Douglas (2014) found that no symptoms of ASPD, including a lack of remorse, or that diagnosis predicted institutional misconduct. For most persons with ASPD, they do not commit aggressive or other antisocial acts while in prison or they escape detection; nonetheless, their antisocial behavior decreases in a more monitored and controlled environment.

For sexual offenders, it is clear that a significant group of such offenders attempt or commit sexual offenses at a rate greater than the general population as well as the general population of criminals. However, they do not commit sexual offenses "all the time" or even necessarily frequently (although for certain offenders, that may be the case). Yet, *at certain times*, perhaps when particularly predisposed (for some by particular "hot" impulses and others by some greater number of motivators in combination with dimensions of disinhibition), when presented with particular situations (or if able to create particular contexts) involving personally "appropriate victims" and "perceived permissive circumstances," some sexual offenders show much more characteristic (and/or repetitive) patterns of sexual offending. A smaller group appears to act simply on the basis of subjective, perceived opportunity, and of that group, a subset demonstrates more varied types and targets of sexual offending, as differing sexual and nonsexual motivators are in play within particular, diverse contexts. Individual differences (in general predisposing personality characteristics, a larger set of potentiated motivational or emotional states, more varied and extensive deficits in self-control, self-regulation, or executive functioning) differ among sexual offenders and may be more or less "active" at different times, intensities, and levels of awareness. Clearly, despite the experience of similar or even exaggerated motivational states via general arousal or mental self-stimulation

(perhaps even intensified by situational deprivation), virtually no sexual assaults of females or children occur while identified sexual offenders are incarcerated or detained; neither the situational factors of appropriate victims and/or permissive circumstances exist and so behavioral enactments do not occur. Consequently, varied combinations of predisposing personality and related conditions and the particular nature of situations (or perceived situations) that an individual finds himself in (or creates for himself) will determine the expression or manifestation of those traits or predisposing characteristics as sexual offenses. Thus, the presence of increased influence of motivators and elements of disinhibition, in conjunction with particular situational elements, plays a critical role in the likelihood of many sexual offenders to reoffend.

Aggregating Nonsexual Dimensions of Personality in Relationship to Sexual Offending

From a consideration of personality and related conditions, numerous personality and related variables are identified by theory, empirical study, or both as related to future sexual offending. In examining this set of factors, namely, those including motivators, disinhibition (or lack of self-control), it seems clear that they are predominantly elements of or related characteristics of various personality disorders, executive functioning, or alcohol use disorders. The primary categories of PDs that contain personality-based predisposing characteristics for sexual offending are the set of so-called Cluster B disorders (per the DSMs). Smaller secondary categories of personality disorders related to sexual offending are those involving issues in social bonding, social skills/immaturity, and social anxiety, particularly, avoidant personality disorder.

Clearly, ASPD by means of its subsidiary traits appears to be the principal personality disorder related to sexual offending. Its manifest components include primary motivational elements (irritability or aggressiveness) and multiple elements of disinhibition (indifference/disregard for rules, impulsivity, reckless disregard for safety of others, and lack of remorse). In addition, to those particular antisocial elements identified in the DSMs are related characteristics that empirical research has demonstrated accompany antisocial characteristics (or are consequences of the previously mentioned ones) such as deceitfulness and irresponsibility.[5] Relative to the dimensional construction of ASPD in DSM-5, components include several primary motivational elements (egocentrism, goals for personal gain or pleasure, hostility, risk-taking, irritability, or aggressiveness) and aspects of disinhibition (callousness, impulsivity, reckless disregard for safety of others, and lack of remorse).

In addition, BPD also includes potential primary motivational elements (inappropriate, intense anger; unstable interpersonal relationships (social bonds), including idealization of potential "partners;" chronic feelings of emptiness; identity disturbance) as well as multiple elements of disinhibition [impulsivity and affective instability/reactivity (dysregulated affect)]. Relative to the dimensional construction of BPD in DSM-5, components also include potential primary motivational elements (chronic feelings of emptiness, hostility, risk-taking) as well as multiple elements of disinhibition (impulsivity, emotional instability, compromised empathy, unstable relationships). In addition, a number of studies have demonstrated significant comorbidity in diagnoses of ASPD and BPD. Zanarini et al. (1998) found that males who met criteria for BPD were significantly more likely than female borderlines to meet DSM-III-R criteria for paranoid, passive-aggressive, narcissistic, sadistic, and antisocial personality disorders relative to persons with other personality disorders. Black, Gunter, Loveless, Allen, and Sieleni (2010) found that in a random sample of newly incarcerated offenders, those who met the criteria for ASPD showed higher rates of BPD, ADHD, and SUA. Grant et al. (2008) showed a strong relationship between BPF and NPD and substantial disability. Berger et al. (1999) found the criteria for the former sadistic personality disorder overlapped with both ASPD (42 %) and BPD (32 %) and suggested that sexually sadistic behavior might be an important sub-dimension of such Cluster B disorders.

Per the categorical approach in DSM-5, NPD too includes primary motivational elements (grandiosity and self-importance, particularly in reaction to experienced inadequacy, entitlement, and arrogant, haughty attitudes) and elements of disinhibition (lacking empathy, interpersonally exploitative, need for others for self-esteem or inflated self-esteem, grandiosity leading to entitlement, and attention-seeking). Relative to the dimensional construction of NPD in DSM-5, components also include potential primary motivational elements (entitlement/grandiosity/egocentrism, excessive attention-seeking, fluctuating self-appraisal, sensitivity to approval from others, superficial or limited intimacy) and

[5]It should be noted that Markon and Krueger (2005) also found that conduct disorder and antisocial personality disorder were not related in the manner generally believed; conduct disorder did not appear to be a necessary prerequisite for adult antisocial behavior disorders. Other investigators have made similar findings, although the presence of conduct disorder may identify a particularly persistent form of ASPD. However, per Robins (1978) and Moffitt (1993), early-onset antisocial behavior was a "sturdy" predictor of persistent antisocial behavior over time.

elements of disinhibition (impaired or absent empathy, inability for intimacy). Again, available research indicates the significant comorbidity in diagnoses of ASPD, BPD, and NPD as well as substance abuse (Stinson et al., 2008). Cox, Clara, Worobec, and Grant (2012) recently found that via factor analysis of NESARC, data identified a three-factor cluster model, supporting the DSM grouping of theoretically related personality disorders. Similarly, Warren and Burnette (2012) found that the primary factor associated with criminal offending was composed of predominantly antisocial personality traits as well as select traits associated with BPD and NPD. Indirectly, these results highlight the continued usefulness of psychopathy. As a construct, psychopathy as a collection of maladaptive personality traits and antisocial behaviors (in particular as measured by the PCL-R) obviously offers a particularly useful approach to aggregating many of the key elements of personality and other predisposing elements related to violent and sexual offending. Relative to the PCL-R, motivators include grandiose sense of self-worth, need for simulation/proneness to boredom, and (what is termed) poor behavioral controls. Elements of disinhibition include impulsiveness; lack of remorse or guilt; callous/lack of empathy; shallow affect; failure to accept responsibility for own actions; lack of realistic, long-term goals; and irresponsibility. Woodworth et al. (2013) found that a substantially greater portion of (four times) sexual offender who scored high on the PCL-R reported engaging in sexually violent fantasies (relative to those low on the measure).

In addition, avoidant personality disorder (APD or key traits associated with that disorder) also represents a condition that likely predisposes select individuals to sexual offending, both for rape but particularly for child-focused sexual offending. APD also includes potential primary motivational elements (low self-esteem, anxiety about "acceptance" in relationships, reluctance to take risks in interactions with peers); thus, persons with APD may be characterized by powerful motivations for belonging, acceptance, approval, and nurturance, leading them to seek and even force social contact with minors in efforts to "achieve" perceptions of those experiences. Relative to the dimensional construction of APD in DSM-5, components also include potential primary motivational elements [low self-esteem, reluctance to take perceived risks (such as social behavior with appropriate peers, frustration from anticipated or real social rejection, and limited or nonexistent intimacy] as well as – disinhibitors (anhedonia, social or emotional detachment).

It is also worth considering that the predominant DSM personality disorders model as consisting of "categorical" conditions (requiring a minimum number of specific maladaptive personality traits to be present) reflect the notion that a minimum additive effect exists. As with other phenomena, studies indicate the most valid way to view the significance of personality and other related condition is in a dimensional, additive model so that both the total number of and severity of characteristics present are predictive of increased criminality, violence, and sexual offending. Thus, Skilling, Harris, Rice, and Quinsey (2002) found that the severity of life-course-persistent antisocial conditions (both ASPD and psychopathy) as measured by the number and strength of symptoms/characteristics was strongly associated with future violence. Assessed dimensionally, both ASPD and psychopathy were highly correlated ($r = .85$).

In considering the role of the DSM-defined personality disorders, it is clear that the particular definitions of these disorders fail to acknowledge, let along privilege, what are key aspects of personality that are likely related to sexual offending, such as reward/novelty-seeking, dominance, generalized hostility, social inadequacy, and social isolation.

Comorbidity of Personality and Related Predisposing Conditions: Implications for Sexual Offending

Various motivators and elements of disinhibition appear likely to interact to increase the predisposition to sexual offending. Similarly, select traits associated with one or more personality disorders, deficits in executive functioning, and substance abuse/dependence are also likely to interact or converge to aggravate the likelihood of sexual offending. Tyrer and Mulder (2006) demonstrated that the "complexity" and severity of a personality disorder (the former defined in terms of meeting criteria for more than one personality disorder and the latter in terms of the possibility of severe disruption to both individual and to many in society) were robust predictors of more negative outcome. Empirically, the *combination* of or comorbidity of so-called Cluster B personality disorders and their subsidiary (and overlapping) traits show a particularly strong relationship to criminal and violent behavior; in particular, persons with traits of both ASPD and BPD and/or narcissistic or paranoid traits showed particularly high levels of such antisocial behavior. Black et al. (2010) reported that as many as 50 % and 75 % of those meeting criteria for ASPD meet the criteria for alcohol dependence or drug abuse. Blackburn and Coid (1999) used cluster analysis to identify six diagnostic patterns among personality disorder among violent offenders; three of those groups (antisocial-narcissistic, paranoid-antisocial, borderline-antisocial-passive-aggressive) had more extensive criminal histories, were more likely to be identified as psychopaths, and more lifetime history of substance abuse. Both Blackburn and Coid (1999) and Egan (2009) identified

that persons with antisocial, narcissistic, borderline, and paranoid personality disorders were more likely to be arrested (due in part to high levels of angry hostility, excitement-seeking, and impulsiveness) and that violent offending among those with such diagnosed personality disorders was more strongly associated by their comorbid traits than by one particular category of personality disorder. Howard, Mccarthy, Huband, and Duggan (2013) showed that patients with antisocial/borderline comorbidity took significantly less time to reoffend compared with those without such comorbidity; in addition, Factor 2 of the PCL-R also strongly predicted a more rapid reoffense.

Further, as noted, substance use disorders, particularly recurrent alcohol use, have been implicated as a significant factor in violent and criminal offending; while situational alcohol consumption *independently* contributes to increased rates of violent behavior, it is also genetically associated with externalizing personality disorder traits and likely interacts with other dispositional features to aggravate the risk of violence. In substance-abusing populations, the co-occurrence of substance abuse and any personality disorder is particularly high, with a median prevalence of co-occurrence of 61 % identified in one review of 50 studies; the association is particularly strong between substance misuse and antisocial and/or borderline personality disorders; and illicit drug users show a higher co-prevalence rates personality disorder than problem drinkers (Verheul, Bartak, & Widiger, 2007). Fifty percent of males who demonstrated a life-course-persistent pattern of antisocial behavior were diagnosed as alcohol dependent at age 18 (e.g., Moffit et al., 1991). In the ECA study, Regier et al. (1990) showed that persons with ASPD were approximately 30 times more likely than non-antisocial individuals to have any type of substance use disorder, 21 times more likely to show alcohol abuse/dependence, and 13 times more likely to show substance abuse/dependence.

Nestor (2002) concluded that higher rates of violence were firmly established most prominently for individuals with Cluster B personality disorders in addition to substance abuse/dependence disorders (SAB); he noted that rates of violence are 12 to 16 times higher for individuals with SAB and Cluster B personality disorders. Further he noted that these conditions interacted so that persons with SAB and comorbid personality disorder were as high as 43 %. When characterized by comorbid substance dependence, 52 % of personality disordered individuals reported committing acts of violence (Coid et al., 2006). Similarly, Howard (2009) pointed out that persons with both ASPD and BPD with a history of drug and alcohol problems had significantly more violent convictions; they also showed significantly higher levels of anger and impulsivity (affective impulsivity). Stinson et al. (2008) found that substance use disorders, particularly drug abuse or dependence, were quite common in persons with narcissistic personality disorder (e.g., greater or equal to 50 %). Howard et al. (2013) showed that patients with antisocial/borderline comorbidity took significantly less time to reoffend if they were characterized by comorbid substance use. Utilizing exploratory factor analysis, Warren and Brunette (2012) found that the primary personality factors associated with future violence including predominantly traits of ASPD (violation of social norms, aggressiveness, deceitfulness, impulsivity, reckless disregard for the safety of others, and irresponsibility), BPD (impulsivity and anger), and NPD (exploitation).

As in criminal and general violent behavior, personality and related conditions particularly motivation/emotions and self-regulation/self-control acting as motivators and elements of disinhibition clearly play several roles in sexual offending. In some instances, such conditions serve as predisposing factors which singly or, more commonly, in various combinations provide the primary basis for enactment of sexual offenses. Such personality and related conditions consist of several components. First, as nonsexual appetitive or incentive or consummatory motivations, blends of cognitions, affects, and arousals/impulses provide pushes of varying intensities toward inappropriate sexual behavior. In addition, as noted previously, nonsexual arousal and motivations may become sexualized as well and lead to additional sexual arousal. Second, deficits or other limitations in self-regulation/self-control and/or executive functions represent failures of inhibition and constraint—elements of disinhibition—that to various degrees function singly or more commonly in varied combinations to allow appetitive motivations to emerge relatively unmodulated in a press for sexual and other psychologically meaningful gratifications. Further, both nonsexual appetitive motivations and deficits or failures in self-regulation may also combine with varied degrees of awareness of primary sexual appetitive motivation and generalized sexual preoccupation to result in attempts at varied sexual offenses. In fact, this seems like the most common set of states and traits involved in the enactment of sexual offenses. In addition, in limited cases, it appears that situational or contextual factors, particularly alcohol and/or drug intoxication (e.g., excessive use) and negative peer associations, can be sufficient to lead to the occurrence of a sexual offense.

Personality and related conditions are composed of multiple elements that are dimensional in nature. Research and theory has increasingly defined which dimensions of personality appear relatively universal and cohere to account for the most potential behavior. As dimensions, atypical or maladaptive effects can be created by extremes at each end of a continuum. Personality and related dimensions appear to be strongly influenced by factors of heritability as well as shaped by an interactive reciprocity where biologically based dispositions repeatedly interact negatively with particular environmental influences to amplify their dysfunctional potential relative to behavior conditional on situations;

thus, developmental environmental forces often exacerbate or aggravate problematic personality and related predispositions toward antisocial, violent, and sexually violent behavior. In particular, motivational domains and EF/SR domains each appear to be characterized by "cool" and "hot" elements or dimensions; more biologically elementary "hot" dispositions may function relatively autonomously of more "cool" systems optimized for affect/arousal neutral information-processing and behavioral regulation. Given such vulnerabilities, more automatic and reactive sexual offending might result, particularly for visceral motivational factors. In contrast, despite "hot" dispositions, "cool" systems (associated with better-managed inhibiting factors) may allow for more calculated and premeditated—instrumental and predatory—enactment of sexual offending; thus, intense motivation may be titrated to improve the likelihood of behavioral gratification and the minimization of undesired consequences. Further, persons with a greater frequency or intensity of "hot" affective-arousal factors appear to be characterized by lower degrees of self-control, a dynamic duo of disinhibition. While data suggests that personality and related dispositions are relatively enduring and consistent over time and situations (e.g., relatively characteristic), situational stimuli can exert a very powerful influence in eliciting such predispositions (both in evoking or provoking motivators or compromising deficits or limitations in EF/SR) and in further impacting one or more elements of disinhibition. Behavior resulting from personality and related dimensions thus are a function of the type, degree, and number of motivators and elements of disinhibition but also the degree to which a particular situation impacts on those particular dimensions and provides "permissive circumstances" (or a lack of "opportunity constraints") for related behavior to occur. Thus, one would expect to find the enactment of a particular type of sexual offense on occasions when sets of motivators and elements of disinhibition are present and activated *and* when the situation or context are both appropriately stimulating and permissive of the desired behavior. Absent appropriately stimulating and permissive environmental elements, particular types of sexual offending, are less likely to occur. At the same time, particularly heightened motivators, deficient mechanisms of self-control, and the relative "availability" of potential sexualized target individuals or activities might also lead to more diverse sexual offenses. Thus, given knowledge of particular characteristics of the contexts of one or more sexual offenses, one might be able to evaluate the relative but general strength of a set of dispositions (motivators and/or elements of disinhibition) toward sexual violence. However, without full or accurate knowledge of the specific characteristics of time and situation that one or more combination of predisposing conditions became manifest in particular acts of sexual offending, it is very likely that only a general picture of the nature of the predisposing conditions to such offending can be obtained.

Thus, nonsexual motivators and elements of disinhibition can be understood as enduring predispositions (e.g., trait-like) or vulnerabilities that also manifest contextually as well as more intense "state-like" phenomenon under particular types of environmental stimulation and circumstances. Each personality and related predisposition is characterized by individual differences in the nature and variety of conditions; the sensitivity, intensity, persistence, and frequency of such conditions; the nature and degree of their interactions (e.g., additive or interactive/synergistic); and the degree (magnitude) to which they are elicited or provoked by a range of situational factors. In certain instances, it may be that one identified predisposing personality and related factors might be sufficient on its own to lead to sexual offending, such as a particular intense motivator and/or a profound type and extreme degree of disinhibition (particularly at particular times and in specific situations). However, it appears most likely and most commonly that these factors act in combination and sometimes interactively or synergistically. That is, motivators and aspects of disinhibition exist and appear as part of a dynamic process. Consequently, one can conceptualize multiple pathways for a particular individual with a particular set of predisposing motivators and/or elements of disinhibition to enact a sexual offense; many different combinations of predisposing conditions given eliciting or provoking situations might lead to sexual offending. Varying combinations of personality-related motivators of differing degrees interplay with differing combinations of elements of disinhibition of varying degrees or intensity. Further, the added impetus or motivational power of sexual predisposing factors in addition to the presence of nonsexual predisposing conditions, including motivators and elements of disinhibition, would create particularly powerful forces that both press for and permit the enactment of sexual offending, given fluctuating or divergent situations. Finally, the degree of relative reward (reinforcement of one or multiple motivators) experienced in consummating a sexual offense would most likely dramatically increase the habit strength of the source motivations as well as further degrade the influence of elements of disinhibition. Thus, it is understandable that research efforts might best be able to only characterize the broad themes of nonsexual personality and related conditions as they relate to sexual offending. The reality of varying sensitivities to varying and multiple motivators and relative presence of multiple potential elements of disinhibition, all activated to varying degrees by varying situations and circumstances, would be quite difficult to capture in even sophisticated statistical analyses.

For some individuals with some of these predisposing conditions, developmental experiences likely further aggravate their genetic liabilities either in more or less enduring

ways by interfering with the acquisition of more normative means and levels of self-control and heightening key motivators of antisocial and violent behavior. In contrast, alternate developmental experiences likely mitigate their genetic liabilities either in more or less enduring ways by enhancing the acquisition of more normative means and levels of self-control (e.g., in part, via the acquisition of skills to manage both motivators and elements of disinhibition or through the development of particular values and self-schema that act as particular inhibitors). Thus, well-developed self-control mechanisms could potentially mitigate the effects of the presence of one or more appetitive-predisposing conditions at certain times and across situations. In contrast, the apparent interrelationships between elements of disinhibition might allow a more or even less powerful motivator (or convergence of less intense motivators) to be expressed with little or no modulation. It would seem clear various issues (e.g., acute or chronic stress, particularly vulnerability-reactive stress) might also interfere with or exacerbate such predisposing conditions for sexual offending. In sum, it seems clear that multiple personality and related conditions exist which potentiate and play key causal roles in sexual offending in perceived permissive contexts, either on their own or in the presence of general or specific heightened sexual arousal, interests, and/or urges.

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Adolescents Who Have Engaged in Sexually Abusive Behavior: An Overview

William D. Murphy, I. Jacqueline Page, and Harry M. Hoberman

Over the last 20 years, there have been numerous advances in our understanding of adolescents who have engaged in sexually abusive behavior. The current chapter highlights research related to this population including prevalence, characteristics, etiology, and recidivism. In addition, assessment, treatment, and public policy issues will be addressed.

Definition and Prevalence

Adolescents who engage in sexually abusive behavior are generally youth between the ages of 13 and 17 who are involved in sexual behavior with youth significantly younger than themselves (usually defined as 4–5 years younger and generally under age 13) or who engage in sexual behavior with peers or adults against their will through the use of threats or physical force (Kemper & Kistner, 2010; Murphy, Haynes, & Page, 1992; Ryan, 1997). Some studies include 12 year olds or 18- to 19 year olds (Seto & Lalumière, 2010). However, youth below the age of 13 with problematic sexual behavior are typically referred to as children with sexual behavior problems. Children with sexual behavior problems differ considerably, including developmentally, from adolescents who have engaged in sexually abusive behaviors, and research specific to this population supports different approaches to assessment and treatment (e.g., Chaffin et al., 2008). In some jurisdictions and in some research studies, juvenile or adolescent sex offenders are those who have charges and/or adjudications for a statutorily defined sexual offense. However, we prefer a definition based on behavior as many juveniles may not be officially charged or adjudicated and a number may be identified by Social Services or Child Welfare systems rather than the Juvenile Justice system (Kjellgren, Wassberg, Carlberg, Långström, & Svedin, 2006; Prentky et al., 2010).

The actual incidence (the rate of new cases) or prevalence (the percentage in a population with the condition) of sexually abusive behavior by adolescents is difficult to determine. There are a number of estimates based on different data sources which include criminal justice reports, victim surveys, surveys of general nonclinical populations, and adult offender self-reports of age of onset. These sources do suggest that adolescents are responsible for a significant proportion of sexual offenses. In 2009, approximately 15,400 youth were seen in juvenile courts in the USA for a sexual offense (Puzzanchera & Kang, 2012). Data from the FBI's Unified Crime Report indicated that about 17 % of arrests for rape or other sexual offenses were of individuals under age 18 (Puzzanchera, Adams, & Kang, 2012). Finkelhor, Ormrod, and Chaffin (2009) analyzed data from the 2004 National Institutional Based Reporting System (NIBRS). The NIBRS is designed to replace the FBI crime reports; it provides more case detail and covers a wider number of criminal offenses. They found that 25.8 % of all sex offenses known to the police were perpetrated by persons under age 18 and 35.6 % of those sex offenses committed against juvenile victims were by youth under 18. It should be noted that the 2004 NIBRS did not have complete coverage of all jurisdictions in the United States and therefore cannot be considered a representative sample of police data.

Surveys of victims also find that a significant minority report that the offender was an adolescent. Analysis of data from the National Incident Study of Missing, Abducted, Runaway and Throw Away Children (NISMART-2) found that 25 % of the sexual victims indicated that the offender

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was under 18 with only 30 % of these victims reporting the offense to the police (Finkelhor, Hammer, & Sedlak, 2008). The NISMART study is based on a national representative sample of children. Information on victimization was obtained through telephone interviews with caretakers of youth under age 17 and additional direct interviews with the youth themselves for children ages 10 to 17. It should be noted that in all the studies cited above, some of the youth identified as engaging in sexually abusive behavior were under 13. For example, in the Finkelhor et al. (2008) study, about one out of eight was under age 12.

There have also been attempts to determine the prevalence of sexual abuse among adolescents by studying nonclinical populations. One of the first studies was by Ageton (1983), in an analysis of youth from the National Youth Survey, a representative sample of over 1700 youth nationwide. Her findings indicated that 2.4 % of adolescents engaged in sexually assaultive behavior. Two additional studies (Borowsky, Hogan, & Ireland, 1997; Casey, Beadnell, & Lindhorst, 2009) studied sexual coercion in relatively large representative nonclinical samples. Borowsky et al. (1997) used data for 9th and 12th graders from the Minnesota Student Survey. This survey included over 71,000 students and they found a history of sexually coercive behavior in 4.8 % of male and 1.3 % of female adolescents. Similarly, Casey et al., in an analysis of the male participants in the National Longitudinal Study of Adolescent Health, found that 5.6 % of the respondents had engaged in sexually coercive behavior. It should be noted, however, that in both the Borowsky et al. study and the Casey et al. study, sexual coercion/aggression was defined by one question generally asking whether they had ever "forced anyone to engage in sexual activity." In addition, Casey et al. included the third wave of the national longitudinal study when the average age of subjects was approximately 22 years of age, so some coercive sexual behavior may have occurred after adolescence.

In a clinical sample of sexual offenders from the community, Abel and his colleagues (e.g., Abel & Rouleau, 1990) found that many of those individuals reported early onset of sexual offending and paraphilic behavior. For example, 50 % of those with voyeurism, frottage, exhibitionism, and nonincest pedophilia indicated an onset of those behaviors before age 18. It is not clear how well the population studied by Abel and colleagues represents the general adult sex offender population. These data were collected as part of a research study operating under a Federal Certificate of Confidentiality so no disclosures were reported to authorities. There have been no replications of this study under these conditions.

Collectively, the available research suggests that a significant number of sex offenses are committed by adolescents. Abel and colleagues' data would suggest that at least a significant minority of adult offenders may begin in adolescence. However, as we will see in later sections, most adolescents, once detected for a sexual offense, are not detected for future offenses. A challenge to the field is to be able to identify those at most risk so that interventions are targeted to those most in need of services.

Characteristics and Typologies

Early publications in the juvenile field suggested that juvenile sex offenders show similar characteristics to adult offenders (National Adolescent Perpetrator Network, 1993). It was speculated that issues such as deviant sexual arousal, cognitive distortions, lack of victim empathy, and social skills were important drivers of adolescent sex offending. Twenty years later it is clear that adolescents who engage in sexually abusive behaviors are a very heterogeneous group who vary on many characteristics (Dwyer & Letourneau, 2011). In addition, several factors thought to be relevant to adult offenders may occur much less frequently in adolescent offenders. The lack of consistent findings in attempts to define characteristics of adolescents who have engaged in sexually abusive behavior has resulted in attempts to develop classification systems to better understand the heterogeneity. There have been attempts to subdivide youth on such factors as the presence or absence of other delinquent behavior, the age of the victim, whether the offender has been victimized themselves as well as other classifications based on psychological profiles rather than offender or victim characteristics, and typologies based on offense trajectories.

Classification Based on the Presence of General Delinquency

A consistent finding in the literature is that adolescents who engage in sexually abusive behavior are characterized by high rates of engaging in nonsexual offending delinquent behavior (Seto & Lalumière, 2010) and have much higher recidivism rates for general delinquent offending than they do for sex offending (Caldwell, 2010). There have been multiple studies comparing adolescents who sexually offend to adolescents who have engaged in general delinquent behavior but not sexual offending. These studies have been summarized in a qualitative review by Van Wijk et al. (2006) and in a meta-analysis by Seto and Lalumière (2010). The Seto and Lalumière meta-analysis reviewed 59 studies comparing adolescent sex offenders (3,855) to adolescent nonsex offenders (13,393). Both the qualitative review and quantitative review indicated many similarities between the two groups; in general, there were more similarities than differences. However, Seto and Lalumière did find some significant differences with adolescents who had committed sexual offenses having greater exposure to pornography, more atypical sexual interest, more history of sexual abuse, and to a lesser degree, but still significant, more anxiety problems

and lower self-esteem than general delinquents. On the other hand, the general delinquent youth were characterized by a more extensive criminal history, associations with more antisocial peers, and more substance abuse issues.

Given the overlap between these groups, there have been attempts to classify adolescent offenders on the basis on the presence or absence of other delinquent behavior and/or other violent behavior (Aebi, Vogt, Plattner, Steinhausen, & Bessler, 2011; Butler & Seto, 2002; Wanklyn, Ward, Cormier, Day, & Newman, 2012; Way & Urbaniak, 2008). Butler and Seto (2002) compared a group of sex-only offenders and a sex-plus group that had both sexual and nonsexual offending with half in the sex-plus group having aggressive and non-aggressive offenses. These groups were also compared to two control groups: a group that engaged in non-aggressive, nonsexual offending and a second group that engaged in both non-aggressive and violent non-sex offending (and was termed a "versatile" group). The sex-only group had less childhood conduct problems, better current adjustment, more pro-social attitudes, and lower risk for future offending as measured by a youth version of the Level of Service Inventory (YO-LSI, Shields & Simourd, 1991). The sex-plus group was most similar to the versatile group. Way and Urbaniak (2008) also compared adolescents with and without other delinquent behaviors, but did not have a non-sex offending delinquent control group. Those adolescents with no delinquent history tended to have younger victims and more often sexually abused a relative (including siblings) than the group with both sexual and nonsexual offending. They also investigated a number of individual/family history factors such as drug and alcohol use and criminal history of the male and female caregivers. In general, the youth with both sexual and nonsexual offending had histories characterized by more childhood maltreatment, multiple maltreatments, indications of alcohol and drug use, prior mental health treatment, and prior out-of-home placements. It should be noted that the delinquent and nondelinquent groups did not differ significantly on history of being sexually abused. The female caregivers of the delinquent youth were more likely to have histories of alcohol and drug abuse and were more likely to have a past history of being arrested; there appeared to be no differences between the delinquent and nondelinquent youth in terms of male caregivers.

Aebi et al. (2011) also compared a sex offending group to a sex offending plus other offending group. The sex-plus group was slightly older, had more nonsexual violent recidivism, was more likely to use alcohol and drugs, and more likely to use verbal aggression. However, they did not find significant differences on a number of variables including sexual recidivism or victim characteristics such as sex of the victim, multiple victims, related victims, or unknown victims. They also did not differ on being a victim themselves.

Wanklyn et al. (2012) compared three groups that all had histories of nonviolent general offending. The groups differed on either the presence of sex offending or the presence of violent offending. They compared a sex offending group that had no violent offending apart from sex offending, a violent non-sex offending group who had no sex offending but had violent offenses, and a versatile violent offending group that had both sex offending and other violent offending. In univariate analyses, the versatile violent group had a greater history of sexual abuse, physical abuse and emotional abuse, criminal family members, overt antisocial behavior, family relationship problems, involvement with alternative care, and having an adolescent mother. The sex offender only group tended to be intermediate between the versatile group and the non-sex offending, nonviolent group.

Because of the differences in control groups and measurement procedures, it is difficult to draw firm conclusions from this set of studies. Those youth who engage in both sex offending and criminal delinquent behavior appear to have characteristics similar to delinquent youth. However, those who have both sex offending and violent offenses seem to represent a more severe group with significantly more behavior and family problems and a higher number of adverse childhood experiences.

Classification Based on Victim Characteristics

Research with adult sexual offenders has found consistent differences between those who sexually offend against children and those who sexually offend against adults. For example, those adults who target children are more likely to have been sexually abused themselves and to have more social deficits, while those who target adult women show more issues with anger and hostility and are more generally antisocial (Lee, Pattison, Jackson, & Ward, 2001; Olver & Wong, 2006). There have also been multiple studies in adolescent sexual offending examining those who abuse prepubescent children and those who abuse pubescent children (see Fanniff & Kolko, 2012 for a review). Hunter, Figueredo, Malamuth, and Becker (2004) used path analysis and contrasted adolescents who sexually offended against prepubescent children and those who targeted postpubescent females. They found those adolescents who targeted children had greater deficits in psychosocial functioning, used less aggression in sex offending, and were more likely to offend against relatives. Fanniff and Kolko (2012) conducted a qualitative review of studies comparing groups of sexually abusive youth with prepubescent children to those with peer or adult victims and found inconsistent findings across studies. Their conclusion was that the most consistent findings were that youth who offended against peers or adults were more likely to use force or aggression and were more likely to offend against strangers. Those adolescents who offended against child victims are more likely to offend against family members or acquaintances and were more likely to offend

against at least one male. In their own study of an outpatient sample, which was presumably a lower risk sample, Fanniff and Kolko (2012) found few differences based on the age of the victim. Inconsistencies in results across studies may be related to result of different populations (e.g., higher risk versus lower risk populations) and different measurement methods. There is at least some support for the conclusion that adolescents who sexually offend against peers may be more similar to general delinquent adolescents than those who molest children, with this latter group more characterized by social deficits [although this is not always found (e.g., Kempton & Forehand, 1992)].

Classifications Based on Sexual Victimization

A history of sexual victimization is a characteristic of some adolescents who engage in sexually abusive behavior that may also be a factor that impacts the difference found in the above-cited studies. Cooper, Murphy, and Haynes (1996) found that those adolescents who engaged in sexually abusive behavior who reported having been sexually abused tended to have an earlier onset of offending, more victims and more psychopathology and interpersonal problems. The groups did not differ on either general delinquency or family functioning. In a similar vein, Burton, Duty, and Leibowitz (2011) and Leibowitz, Burton, and Howard (2012) found that those youth who had been sexually abused had more severe and more recent behavioral difficulties including both sexual and nonsexual criminal behavior than the group who had not been victimized.

There is some evidence that those adolescent offenders who have been sexually abused, especially those who also target male victims, may show more age inappropriate sexual arousal patterns while undergoing physiological testing (Becker, Hunter, Stein, & Kaplan, 1989; Becker, Kaplan, & Tenke, 1992; Murphy, DiLillo, Haynes, & Steere, 2001), although this is not found in all studies (Hunter, Goodwin, & Becker, 1994). Studies have shown that when comparing adolescents who engage in sexually abusive behavior that report a history of sexual abuse to those who report no history of being sexually abused, those that report a history of sexual abuse are more likely to have male victims (Cooper et al., 1996; Worling, 1995). Consequently, in investigating such factors as delinquent vs. nondelinquent or child vs. peer victims it may be important when to control for victimization history.

Classification Based on Psychological Factors

In view of the studies above, it appears that classification systems based upon characteristics such as delinquent/nondelinquent, victim age and presence, or absence of sexual abuse may be somewhat overlapping. In fact, Aebi et al. (2011) presented data related to various classification schemes including classifying by age of victim, presence of delinquency, and group versus solo offenders. They found that the classification types were actually correlated with one another, leading them to suggest that a dimensional system of understanding heterogeneity of this population may be more valuable than classification by simply one characteristic of the offense or the offender. In a similar vein, Fanniff and Kolko (2012) suggested that classifications based on personality variables or meaningful psychological factors might be more relevant than classification systems based on factors related to the offense.

Four studies have used cluster analyses of various personality inventories to develop subgroups of youth (Oxnam & Vess, 2006; Richardson, Kelly, Graham, & Bhate, 2004; Smith, Monastersky, & Deisher, 1987; Worling, 2001). For example, Worling (2001), in a study of 112 adolescent males who had engaged in sexually abusive behavior, used cluster analyses to classify subjects using scores on the California Personality Inventory (CPI). He identified four personality-based subgroups: Antisocial/Impulsive, Unusual/Isolated, Over-controlled/Reserved, and Confident/Aggressive. Worling described two of the groups as being "healthier" (the over-controlled/reserved and the confident/aggressive) compared to the groups described as antisocial/impulsive or unusual/isolated. The Antisocial/Impulsive adolescent sexual offenders were the largest group (e.g., "almost half"). Subgroup membership was not related to the age of the victim or their gender, or the adolescents' history of sexual victimization. However, Worling observed statistically significant differences between these groups regarding history of physical abuse, parental marital status, residence of the offenders, and whether or not offenders received criminal charges for their index sexual assaults. The Antisocial/Impulsive adolescents were those most likely to have received criminal charges for their index sexual assaults; they had also experienced more abusive physical discipline from their parents. Recidivism was measured by criminal charges; the follow-up period ranged from 2 to 10 years. No differences were found for subsequent sexual offenses among the groups (mean = 11 %). Adolescents in the Antisocial/Impulsive (37 %) and Unusual/Isolated (47 %) were more likely to be charged with a subsequent violent (sexual or nonsexual) or nonviolent offense. Worling concluded that the four-group typology is suggestive of different pathways and treatment needs.

Worling's results are very similar to those of Smith et al. (1987) using the MMPI and those of Richardson et al. (2004) and Oxnam and Vess (2006) using the Millon Adolescent Clinical Inventory (MACI), although none of these studies reported recidivism data. In general, the clusters found in these studies using multidimensional psychological inventories appeared to identify three groups of adolescents who engage in sexually abusive behavior: a group high on

internalizing behaviors and/or significant mental health issues, one characterized by externalizing behaviors and one that appeared to not have significant psychopathology.

Classification Based on Developmental Pathways

Another approach to classifying adolescent offenders draws from the literature from developmental and life-course criminology (Farrington, 2003). This approach focusses not only on correlates of recidivism but in addition factors related to the initiation of offending and desistance from offending. Similar to Moffitt's (1993) conceptualization of life-course persistent delinquency and adolescent limited delinquency, Hunter (2006) proposes three developmental pathways for youth engaging in sexually abusive behavior based on his and colleagues' earlier empirical work. (e.g., Hunter, Figueredo, Malamuth, & Becker, 2003, 2004, Hunter et al., 2004). The "Life Course Persistent" group is "characterized by psychopathic traits, including superficial attachments to peers and family. They distrust others, aggressively seek dominance interpersonally, manifest hostility towards females, and predominantly assault pubescent and postpubescent females" (e.g., same age or older females). This group is more likely to engage in more general antisocial behavior than other groups, and sex offending is most likely part of a general antisocial lifestyle. The "Early Adolescent-Onset Paraphilic" group is thought to possibly represent early onset pedophilia; they are motivated largely by deviant sexual arousal/interests and target pre-pubescent children. This group is considered to have the highest risk of continued sexual offending. Lastly, "Adolescent-Onset, Non-Paraphilic" group is composed of youth believed to engage in transient sexual offending as a form of adolescent experimentation and/or in compensation for psychosocial deficits that impair healthy peer relationship development. From clinical experience, only a few youth seem to fit the Early Adolescent-Onset Paraphilic group which may partially explain the low detected sexual recidivism rates in adolescents who engage in sexually abusive behavior. The Life Course Persistent Group also may be the group that contributes significantly to the much higher general recidivism rate for adolescents who engage in sexually abusive behavior.

The above typology is primarily based on clinical observation, but Lussier, Van Den Berg, Bijleveld, and Hendriks (2012) provide partial support for this model. They studied offense trajectories of 448 Dutch juveniles convicted of a hands-on sex offense who were sent to a specialized institution for assessment. It should be noted that the group was considered a moderate- to high-risk group. They were followed for on average 14 years with the average age at time of assessment being 14.4 (SD = 1.8). They found two trajectories for sexual offending, an adolescent limited group and what they labeled a high-rate slow desister group. The high-rate slow desister group compromised 10.4 % of the sample and the adolescent limited group comprised 89.6 % of the group. The high rate slow desister group's offending peaked at around age 12 and went down at a very slow rate and did not match the rate of the adolescent limited group until they were around age 30. Fifty percent of the high-rate slow desister group offended in adolescence, 60 % in adulthood, and had on average 3.77 convictions for sexual offense. For the adolescent limited group, their offending peaked at age 14 and then rapidly declined. Thirty-five percent of this group reoffended in adolescence but only 2 % in adulthood. These groups did not differ in terms of age of victim. It should be remembered that this was a select group of youth who were considered to be moderate to high risk. If low risk groups were included, other trajectories may have been found that had low recidivism in adolescence and adulthood.

It was also found that even though the youth may have been in the adolescent limited group for sex offending that did not mean they were in an adolescent limited group for general criminal offending. While most of these subjects' sexual offending stopped in adolescence, many continued to engage in other criminal behavior into adulthood.

A study by Carpentier, Proulx, and Leclerc (2011) also looked at offense trajectories and characteristics of youth with different offense trajectories. The sample was 351 youth assessed in an outpatient psychiatric clinic and followed for an average of 8 years. Their classification included what they termed stable highs, who were charged with at least one sexual and/or violent offense after assessment; de-escalators who were charged with other offenses, none with which were sexual and/or violent; and desisters who were not charged with any new offenses. The stable highs were characterized by significant adverse childhood experience, family dysfunction, early signs of antisocial behavior, early onset of sex offending, and versatile criminal careers. There were few differences between de-escalators or desisters.

Summary

Given the apparent heterogeneity among adolescents who engage in sexually abusive behavior, there have been multiple attempts in the literature to try to find typologies or classification systems to produce more homogenous groups. The field in the future might be better served by moving away from typology approaches to systems that are related either to etiology, various possible pathways to offending, offense trajectories, or dimensions more relevant to treatment need such as the identification of psychologically meaningful risk factors for adolescents as have been identified for adult offenders (Mann, Hanson, & Thornton, 2010).

Etiology

There has been a recent emphasis in the field to recast sexual abuse as a public health problem (ATSA, 2011; Kaufman, Barber, Mosher, & Carter, 2002). Those working with sex offenders up until this time have tended to focus on tertiary prevention by treating those engaging in sexually abusive behavior. This knowledge of sexual offenders has also been used to inform primary or secondary prevention efforts. However, to truly adopt a public health approach, one needs to understand the cause of sexually abusive behavior in adolescents and be able to identify both risk factors and protective factors that can be targeted for intervention (Hammond, 2003). Unfortunately, the field of sexual offending is significantly lacking in the identification of etiological factors in the development or onset of sexually abusive behavior in either adolescents or adults. Studies that do exist are almost exclusively cross-sectional in nature. As compared to other areas of developmental psychopathology, the research on adolescents who engage in sexually abusive behavior lacks prospective longitudinal studies that assess relevant variables over time before the behavior of interest manifests itself and which distinguish such youth from others with different problems. In marked contrast, the availability of prospective, longitudinal studies has advanced the knowledge of risk and protective factors for general delinquency and general youth violence (Lösel & Farrington, 2012).

Another inherent difficulty in determining etiology is the aforementioned heterogeneity among adolescents who engage in sexually abusive behavior. Thus, adolescents who engage in sexually abusive behavior vary on numerous factors such as degree of nonsexual delinquency, age of victim (child versus peer/adult), presence or absence of personal sexual abuse trauma, and offense trajectories. In addition, the previous section on typologies suggests several subgroups of offenders or that youth who engage in sexually abusive behavior vary on at least several psychosocial dimensions. In general, it appears that there are groups most characterized by antisocial/impulsive traits, those characterized by social and relationship deficits, those that may have early onset paraphilias, and those that appeared to have very limited psychopathology. It is likely that these groups will differ in developmental pathways and risk and protective factors that should be targeted in prevention studies. Studies that tend to "lump" all adolescents engaging in sexually abusive behavior together are unlikely to be fruitful, and true comprehensive longitudinal research is required to understand the development of sexually abusive behavior among different subgroups of youth.

Studies Focusing on General Delinquency and Youth Violence

As noted, a consistent finding in the literature is that there is a good deal of overlap in characteristics between adolescents who engage in sexually abusive behavior and adolescents who engage in general delinquent behavior or general youth violence. In addition, there are fairly consistent findings that youth who engage in both sexually abusive behavior and general delinquent behavior differ from those who engage in only sexually abusive behavior. Therefore, it is instructive to consider the risk and protective factors identified for general delinquency and violence, but a review of this literature is beyond the scope of this chapter. Much of these data have been summarized by Lösel and Farrington (2012) and the outcomes of longitudinal studies have been summarized by Hall et al. (2012). This research has identified a number of promising factors that might be targeted in prevention efforts for general delinquency and violence. Factors include impulsivity, attention deficit disorder, lack of parental supervision, lack of bonding to school and poor achievement, lack of positive peer groups, deviant peer association, and belief systems that support antisocial and aggressive behavior. There also are environmental factors related to general criminal behavior (such as economically deprived neighborhoods and those with high crime rates) that speak to broader sociological contributors to criminal behavior in youth.

Nonclinical Samples

As noted, there have been studies of nonclinical samples that have examined factors that differentiate those youth engaging in sexually aggressive behavior and those who have not engaged in sexually abusive behaviors. However, such studies are somewhat limited in that the measurement of sexual aggression tends to be one or two broad questions, generally such as have you ever done something sexual against someone's will or have you ever forced someone to do something sexual? Also, these studies are probably most relevant for sexual aggression against peers.

One model that has influenced research both in studies of the general population and research with offenders is the confluence model developed by Neil Malamuth and colleagues (Malamuth, Linz, Heavey, Barnes, & Acker, 1995; Malamuth, Sockloskie, Koss, & Tanaka, 1991). This model was mainly developed on college student samples, but some of their sexually aggressive behavior that was the focus of study would likely have occurred in adolescence. This model posits that early adverse childhood experiences of physical and/or sexual abuse and exposure to family violence lead

to increased delinquency which is then linked to sexual aggression via two pathways. The hostile masculinity pathway is characterized by viewing relationships with females as adversarial and hostile; it may also include feelings of inadequacy which are masked by anger and the need to control (Malamuth et al., 1991). The second pathway was labeled sexual promiscuity (and in later studies identified as sexual promiscuity/impersonal sex) and is reflected by a high emphasis on sexual conquest (Malamuth et al., 1991; 1995). This model was generally replicated when an additional group of college students were followed up after 10 years. From an etiological standpoint, the confluence model suggests parental violence and child abuse as key causative factors, with general delinquency being an early step in the chain to sexually coercive behavior. It should be noted that many of the early precursors to sexual promiscuity and hostile masculinity were collected retrospectively and therefore can be biased by memory distortions. Malamuth's work has influenced studies of adult offenders and adolescent offenders.

The confluence model was used as a theoretical framework for the Casey et al. (2009) study which utilized data collected as part of the Longitudinal Study of Adolescent Health. As noted in the prevalence section, the Casey study used the third wave of this longitudinal study when the average age of subjects was 22; consequently, some of the coercive sexual behaviors may not have occurred during the subjects' adolescence. However, a positive aspect of the study was that some data were collected prospectively. Data regarding adolescent behavior were collected longitudinally, although data related to childhood reports of abuse were retrospective data. The results did provide support for the confluence model in this nonclinical population. They found that child sexual abuse was predictive of age at first sexual experience and number of sexual partners and age at first sexual experience was related to sexually coercive behavior reported when the sample was adults. In addition, child sexual abuse had a direct pathway to sexual coercive behavior. In this study, child physical abuse was found to be directly related to impersonal sexual beliefs, delinquent behavior, problems with alcohol, and co-occurrence of sex and drinking. However, only delinquent behavior had a direct impact on sexual coercive behavior.

The second study of a nonclinical population was the Borowsky et al. (1997) Minnesota student survey. Their results were also consistent with the confluence model. They found that sexual aggression was related to experiences of intra-family or extra-family sexual abuse, witnessing family violence, frequent use of illegal drugs, anabolic steroid use, daily alcohol use, gang memberships, high levels of suicide risk behavior, and excessive time spent "hanging out." They also found that emotional health and connection with friends, adults, and communities was a protective factor for male adolescents and academic achievement was a protective factor for female adolescents.

This data with nonclinical samples would suggest that at least for sexual coercive behavior with peers, targets for prevention programs would be early histories of abuse and that factors related to general delinquency would also be promising targets for the prevention of general sexual coercion. However, although some of the data in these studies could be considered longitudinal, much of it was retrospective and the types of sexual aggression being reported are probably less extreme than that seen in clinical populations. These studies also suggest that sexual abuse may have a direct effect on sexually abusive behavior and indirect effects on sexually aggressive behavior through the concept of sexual promiscuity/impersonal sex.

Studies of Adolescents Who Have Engaged in Sexually Abusive Behavior

There have been a series of studies by Knight and colleagues (Daversa & Knight, 2007; Johnson & Knight, 2000; Knight & Sims-Knight, 2004) and Hunter and colleagues (Hunter et al., 2003; Hunter, Figueredo, & Malamuth, 2010) that have investigated developmental pathways to adolescent sexual abusive behavior. These studies were retrospective, including reports of early childhood abuse and studied adolescents who had already engaged in sexually abusive behavior. These studies as a whole used path analytic and structural equation modeling approaches that at times produced rather complex models of potential risk factors that need replication. Some of these findings are highlighted below.

Daversa and Knight (2007) investigated developmental pathways to sexual coercion against children in a group of 329 adolescent offenders. It should be noted that this appeared to be a high risk group: the sample had an average age of first arrest of 9.55 years, an average of 3.43 arrests, only 7 % had not been in a juvenile detention facility, and they were sampled from inpatient treatment facilities. Variables in the study were derived from subscales of the Multidimensional Assessment of Sex and Aggression (MASA; Knight & Cerce, 1999). The relationship of sexual abuse, physical abuse, and emotional abuse was investigated both in terms of direct effect on choice of child victim and indirectly through the constructs of psychopathy, sexual inadequacy, sexual fantasy, and child fantasy specifically. They found four pathways to choice of child victim by adolescents who engaged in sexually abusive behavior. These were (Daversa & Knight, 2007; pg. 1323):

(a) From emotional abuse and physical abuse, through psychopathy and sexual fantasy, to child fantasy and child victim
(b) From emotional abuse and physical abuse, through sexual inadequacy, sexual fantasy, and child fantasy, to child victim

(c) From emotional abuse and physical abuse, through sexual inadequacy, to child fantasy and child victim
(d) From sexual abuse directly to child victim

To better understand the model, it is also important to understand how some of the constructs are defined. The concept of psychopathy was measured from subscales of the MASA tapping impulsivity, "gaming" and superficial charm, and pervasive anger, reflecting a general criminal or antisocial construct. Sexual inadequacy reflected erectile dysfunction, sexual anxiety, and female anxiety reflected more internalizing symptoms. The construct of sexual fantasy reflected sexual preoccupation, hypersexuality, and sexual compulsivity. This model is consistent with other formulations reflecting delinquent/criminal pathways, sexual pathways, and possibly those related to internalizing behavioral problems. In addition, this study included emotional abuse which seemed to be a stronger predictor of psychopathic traits than physical abuse.

Hunter et al. (2010) investigated developmental pathways to "social and sexual deviance" in a group of 256 youth with "hands-on" sexual offenses recruited from residential treatment programs in five states. They investigated the direct and indirect relationship of four exogenous variables, "extent of exposure to pornography prior to age 13, extent of exposure to male-mediated violence prior to age 13, extent of physical abuse by a father or step-father prior to age 13, and extent of sexual abuse by a male perpetrator prior to 13" (pg. 142) to nonsexual delinquency and number of male child victims. Intervening constructs were psychosocial deficits, psychopathic and antagonistic attitudes, hostile masculinity, and pedophilia measured by a self-report measure of sexual attraction. Exposure to pornography, physical abuse, and sexual abuse impacted psychosocial deficits, which in turn had direct effects on hostile masculinity, and psychopathic and antagonistic attitudes. In addition, psychopathic and antagonistic attitudes also showed a path to hostile masculinity. Hostile masculinity was related to pedophilia and predicted the total number of male victims. Sexual victimization had a direct pathway to total number of male victims but, in addition, had an indirect pathway through pedophilia.

Knight and Sims-Knight (2004) have also used similar measures to investigate pathways for severity of sexual coercion against peers and adults by adolescents who engaged in sexually abusive behavior. Similarly, they found pathways from sexual abuse and physical/verbal abuse to the extent of coercive behavior through antisocial behavior, callous unemotional traits, and sexual fantasy. It is of note that, unlike other studies looking at victim age, there was no direct pathway from sexual abuse to degree of sexual coercion. Thus, while a personal history of sexual victimization plays a role in the onset of sexual offending for some adolescents who engage in sexually abusive behavior, it is not a uniform or necessarily direct pathway.

One final study to note is by Johnson and Knight (2000), which found that alcohol abuse prior to age 13 also had both direct and indirect effects on degree of sexual coercion, which is consistent with the finding of Borowsky et al. (1997).

Summary

Integrating the studies reviewed related to typologies and studies related to etiologies, it appears that across these various studies early adverse child experiences have shown correlations both directly and indirectly to sexual coercion, degree of coercion, and age of victim choice. Such adverse childhood experiences seem to lead by various pathways to sexually abusive behavior that involve social competence, general antisocial behavior/attitudes, hostile masculinity, and sexualization. However, as noted, these data (even studies using sophisticated data analytic techniques) are correlational and the studies are cross-sectional. Secondly, negative sequela to childhood abuse are not specific to the onset of sexual offending and are implicated in the development of a number of psychiatric disorders (Burnam et al., 1988) as well as general youth violence and delinquency (Feiring, Miller-Johnson, & Cleland, 2007; Mass, Herrenhohl, & Sousa, 2008). It is not clear whether childhood maltreatment is a general risk factor for dysfunctional behavior in youth rather than one linked to specific disorders. Thirdly, not all youth who engage in sexually abusive behavior report a history of childhood abuse or victimization, with wide variations in reported rates depending on such factors as whether abuse is assessed pretreatment or posttreatment, whether the youth victimizes males or females (Worling, 1995), and whether the sample is from outpatient programs or residential programs (Zakireh, Ronis, & Knight, 2008). History of sexual abuse may be more relevant for those youth who offend against children than against adults (Jespersen, Lalumière, & Seto, 2009). In a longitudinal study of 224 males sexually abused as children followed into adulthood, only 11.6 % were identified as committing a later sexual offense using criminal justice records in the UK (Salter et al., 2003). In a 45-year follow-up study of 2,759 children sexually abused and a group not abused, Ogloff, Cutajar, Mann, and Mullen (2012) found that 0.1 % of the non-abused group later completed a sexual offense as compared to 1.1 % of the sexually abused children. Although, sexual abuse may be a risk factor for future sexual offending, these studies suggests that most males who are victims of sexual abuse are never identified as committing further sexual offenses. While some advances have been made in gaining perspective on potential

etiological factors and processes related to adolescents who engage in sexually abusive behavior, a large number of unanswered questions remain. Without prospective studies, many questions will probably remain unanswered.

Sexual Offense Recidivism Among Youth Who Have Sexually Offended

Recidivism refers to reoffending (or repeat offending) among persons who had previously been detected for an offense of interest, such as a sexual or violent offense. However, determining "true" recidivism rates for both adult and adolescent offenders is difficult for a number of reasons.

One significant factor is that sexual crimes are underreported. In a national probability sample of adult women, Hanson, Resnick, Saunders, Kilpatrick, and Best (1999) found that 437 reported a rape before age 12 and only 11.9 % of these were reported to the police. Truman and Planty (2012), in data from the National Crime Victimization Survey, which include individuals age 12 and above, found that 27 % of rapes, forcible rapes/sexual assaults, were reported to the police which was significantly lower than previous years where the rate reported to the police is generally around 50 %. Finkelhor et al. (2008), in data from the National Incident Study of Missing, Abducted and Runaway Children, found that only 30 % of sexual offenses against children were reported to the police. Even when reported to the police there may not be an arrest, as Finkelhor et al. (2009) found that for sexual offenses by juveniles reported to the police, 30 % led to an arrest.

In addition, there is evidence that one finds higher re-offense rates if law enforcement/criminal justice data are supplanted by other data sources, at least for adults. Marshall and Barbaree (1988) found that the rate of sex offenses by adult offenders increased by 2.4 times when less formal reports of sexual offending than those to law enforcement were included. Similarly, Marques, Day, Nelson, and West (1993) found that reviewing parole office records produced a 33 % increase in estimates of the number of serious crimes committed by sex offenders (e.g., crimes that were recorded and/or resulted in release violations but were not necessarily charged for more formal prosecution). Thus, a significant number of subsequent sexual offenses are managed as probation or parole violations and may not register as new, independent sexual crimes, at least for adults. In addition, research indicates that even when sex offenses are reported, particularly those involving children, less than 70 % of those offenses are processed through the legal system. Falshaw, Bates, Patel, Corbett, and Friendship (2005) found that collecting evidence of recidivism for offense-related sexual behavior from multiagency information increased the identification of any sex offense by fivefold relative to just a reconviction rate. The implication of this study was that convictions represent perhaps half of the sex offenses perpetrated by sex offenders. This type of data are limited for adolescents. Bremer (1992) reported that for 193 youth who completed a treatment program, 6 % were officially identified as recidivist, while 11 % self-reported reoffending.

Length of follow-up will also significantly impact observed re-offense rates, and many juvenile studies have shorter follow-ups than the 5 years generally considered a minimum follow-up period. For adult offenders, some have suggested that 20 year rates of reoffending are at least twice that of 5 year rates, although others have questioned this multiplier (Wollert & Cramer, 2012). It is clear that the longer the follow-up period, the higher the identified re-offense rate for adult offenders. Similarly, increased sexual offense recidivism has also been found for adolescent offenders when they are followed for longer periods of time (Gerhold, Browne, & Beckett, 2007). They looked at studies with 3-, 5-, or 7-year follow-up with the largest increase in recidivism rates found between studies with 3- or 5-year follow-up compared to the 7-year follow-up. However, across studies, only 236 subjects had at least 7 years of follow-up, and one of these was the Långström (2002) study which included exhibitionists, a group with high recidivism rates. Therefore, the increase may be somewhat related to type of subjects followed and not just the longer follow-up period.

Worling, Litteljohn, and Bookalam (2010) presented results of a long-term follow-up study (Mean follow-up 16 years; Range 12–20 years) of the Worling and Cruwen (2000) study (Mean follow-up of 6 years; Range 2–6 years). At the first follow-up, the recidivism rate of sex offense for the treatment group was 5 % and 18 % for the comparison group. At the longer term follow-up, the treatment group had a recidivism rate of 9 % versus 21 % for the comparison group. While approximately double, this is not as great an increase as is found in studies of adults.

There are also multiple of other factors that can impact reported rates (Gerhold et al., 2007). Studies use different definitions of recidivism: some use convictions, others use charges or arrests, and some use self-report. Most studies of adolescents who engage in sexually abusive behavior to date have included only treated subjects (Fortune & Lambie, 2006) and some have not controlled for time at risk (Hagan, Gust-Brey, Cho, & Dow, 2001). Some studies such as Långström (2002) included subjects aged 15–20 and not just adolescents.

Given these limitations, the most comprehensive review of recidivism rates is the meta-analysis by Caldwell (2010). He identified 61 data sets with a total of 9,726 juvenile offenders with a weighted mean follow-up of 58.4 months. He included only studies where the youth was under 18 at the time of the offense and excluded samples that were prescreened and selected because of severe mental illness or developmental

delays. Approximately half (e.g., 29) of these studies had been published in peer-reviewed journals while the remainder were unpublished papers, government reports, data sets, or unpublished dissertations. Recidivism was defined as arrests or convictions; the sexual re-offending rate was 7.32 % for approximately 5 years, but the general recidivism rate was 43.2 %. Sexual offense recidivism rates were higher during adolescent follow-up periods than during adult follow-up, despite the former studies characterized by time frames that were half of the latter studies.

It should be noted that there are more restricted meta-analyses that have found rates of sexual reoffending from 12 to 14 % among adolescents who have engaged in sexually abusive behavior. Reitzel and Carbonell (2006) looked at only studies that had a treatment and some type of comparison group, while Gerhold et al. (2007) and McCann and Lussier (2008) limited their meta-analysis to studies that were investigating risk factors for recidivism, therefore excluding many of the studies in the Caldwell (2010) meta-analysis. Similar comprehensive meta-analyses with adult sexual offenders find higher rates. For example, the Hanson and Bussière (1998) meta-analysis of primarily adult sexual reoffense (although three samples were adolescents and three samples were mixed) found a recidivism rate of 13 % over approximately 5 years of follow-up. Hanson and Morton-Bourgon (2009), in their meta-analysis of risk assessment instruments, found an average re-offense rate of 11.5 %; this study included 18 studies with adolescent samples. If one compares the results of the Caldwell meta-analysis to the adult meta-analysis, adolescents appear to have lower rates, although the more limited adolescent meta-analyses presented above indicate rates which are similar to those found in studies of adult sexual offenders. However, this difference may be less important than the fact that most adolescents are not detected for future sexual offense and that there is significant variability between studies, with some investigations showing relatively high rates.

There are two studies involving presumably high risk adolescents who had engaged in sexually abusive behavior; youth in these studies were those identified as possibly meeting statutory criteria for civil commitment but were not committed; Milloy (2006) studied 21 juvenile sex offenders in Washington and Hagan, Anderson, Caldwell, and Kemper (2010) studied 12 juveniles in Wisconsin. In the Milloy study, 33 % were subsequently convicted for a new felony sex offense and one for a misdemeanor. Hagan et al. (2010) reported a 42 % rate of sex offender recidivism during a 5-year follow-up. It is of note that these youth represent a small proportion of adolescent offenders, and in the Milloy (2006) study they represented only 1 % of juvenile sex offenders paroled over a 13-year period. These rates are similar to adult offenders referred for civil commitment, but not committed (Milloy, 2003). Other studies of "pre-selected" groups of adolescents who have engaged in sexually abusive behavior, such as those evaluated in secure residential forensic settings, appear to have high rates of sexual reoffending (Lussier et al., 2012). These variations in rates stress the importance of trying to identify the higher risk youth earlier in their criminal careers.

Editor's Comment: A reliance on Caldwell's (2010) meta-analysis for sexual offense recidivism of adolescents who sexually offend is problematic for a variety of methodological reasons. Meta-analysis of adult sexual offenders (e.g., Hanson & Bussière, 1998) relied primarily on sexual offense recidivism rates of sexual offenders who had not received treatment. However, not unexpectedly, most of the subjects covered in the Caldwell study was exposed to some form of sex offender treatment: 24 % in community programs, 21 % in residential programs, and 18 % in secure programs. Of note, the youth placed in secure settings demonstrated somewhat higher rates of sexual offense recidivism despite a follow-up period that was an average of 9 months less than the other two groups. In addition, in the Caldwell study as in most adult meta-analyses of sexual offense recidivism, methodological techniques such as survival analysis were not utilized and most, if not all, studies did not control for actual time in the community (Caldwell, personal communication). Survival analysis provides a control for sample censorship, particularly opportunity time to commit an offense; that is, as an example, time that persons are reincarcerated are controlled by subtracting that time from opportunity time to reoffend. Caldwell's study showed that 43 % of the total sample of adolescents who had sexually offended were rearrested or reconvicted for a nonsexual offense during their adolescence or early adulthood, suggesting that a significant number of the samples studied were potentially detained for some indefinite period of time and not available to commit a sexual offense during the study period. In studies of adult sexual offenders, where survival analysis is utilized, identified rates of sexual offense recidivism can be increased by a factor 1.5 (e.g., Prentky, Lee, Knight, & Cerce, 1997).

Assessment

Assessment plays a key role in the characterization and management of youth engaged in sexually abusive behavior. This section will review the purposes of the evaluation, appropriate and inappropriate uses, briefly review the content of evaluations, describe the use of the risk/need/responsivity principles to guide assessment, discuss research literature on factors related to risk/need, review specific risk instruments, and review more controversial issues such as physiological assessment of sexual arousal, viewing time, and polygraph.

Purpose of Evaluations

Assessments of youth engaged in sexually abusive behavior are designed to serve the following purposes, among others:

1. Identify factors that may be related to youth's individual risk.
2. Identify treatment needs or criminogenic needs that if addressed might reduce risk
3. Identify strengths or protective factors of the youth and family
4. Identify factors that may impact on the youth's response to treatment such as significant psychiatric disorders, intellectual disabilities, and learning disabilities.
5. Assist decision makers in terms of level of supervision, level of structure, and intensity of services needed.

Evaluations are not appropriate to determine guilt or innocence and cannot determine whether a youth fits the "profile" of a "sexual offender." As is clear, this group of youth who have engaged in sexually abusive behavior is clearly heterogeneous, and there is no one profile for youth who engage in sexually abusive behavior.

Clinical and Forensic Evaluations

Assessment of adolescents who have engaged in sexually abusive behavior can be viewed in two broad contexts, clinical and forensic. An evaluation is considered forensic in nature when it is a part of, or related to, proceedings within the legal system. Clinical evaluations provide information to assist professionals working with the youth and his/her family and are not a part of the legal decision process.

Not all adolescents who have engaged in sexually abusive behavior are prosecuted, and reasons for this vary across jurisdictions. In some instances, the youth is already involved in the state social services system due to his/her own history of abuse and neglect, and the system chooses to handle the situation without prosecution since the youth is already being overseen by the state system. Evaluations of youth who have not been prosecuted and evaluations that occur after adjudication and disposition and that have no legal implications can be considered clinical since these evaluations inform the treatment process rather than the legal process. Clinical evaluations provide information about risk, needs, and responsivity to assist those working with the youth and his/her family in developing management strategies and treatment goals and in treatment planning.

Juvenile courts have a rehabilitation focus rather than a punishment focus and are designed to be less adversarial than the adult criminal system. However, juveniles have similar protection and rights as adults do in the court proceedings (In re Gault. 387 U.S. 1, 1967). At times, the court utilizes evaluations to inform legal decisions and these evaluations are considered forensic in nature since they provide information that serves the legal system (Hoberman & Jackson, 2014, 2015). Forensic evaluations differ from "clinical" evaluations and are informed and guided by more traditional forensic concerns (e.g., Greenberg & Shuman, 1997; Heilbrun, 2003).

When forensic type evaluations are completed is an area of discussion and at times is controversial. General practice is for evaluations to occur post-adjudication and be utilized to help inform disposition. Pre-adjudication evaluations raise concerns regarding self-incrimination and that the evaluation could subtly impact the outcome of the adjudication phase of the legal proceedings. Concern about pre-adjudication evaluations being less reliable and valid has also been raised. This concern notes that the youth and family may be less forthcoming due to their concern that the evaluation may impact a finding of guilt within the court proceeding. However, there is little data to support this belief and youth and families do not "automatically" become more honest post-adjudication when there may still be significant concern that the evaluation may impact the youth's removal from the community and a possible placement in a residential or correctional facility.

While evaluations for youth involved in the juvenile justice system are best conducted post-adjudication, thereby avoiding any issues of self-incrimination, the reality is that there are situations or jurisdictions in which this may not occur. One of the situations involve potential plea-bargains as many judges and prosecutors are unwilling to consider a plea-bargain or include community-based treatment as a part of the plea-bargain without information about the youth's risk for future sexual offending. Another situation involves courts choosing to postpone taking official action on the criminal charge and instead monitoring the youth's progress in treatment and possibly dismissing the charge at a later date.

Each evaluator has to weigh the ethical issues related to pre-adjudication evaluations. At a minimum, it is recommended that there needs to be clear information that the youth did engage in the sexually abusive behavior. This information may be provided by: (1) a child protective services agency investigation's finding substantiating the abuse; (2) the youth admits to the abusive behavior; and/or (3) the behavior was observed by a reliable witness. In addition the youth, his/her guardian or custodian and his/her legal representation should understand the potential risk of a pre-adjudication evaluation and provide informed consent to the evaluation.

Overview of Assessment Process

This chapter is not intended to provide detailed clinical instructions for completing assessments of adolescents engaging in sexual behavior and such detailed assessments can be found in Prescott (2006) and O'Reilly and Carr

(2004). However, an overview of the assessment process is provided.

O'Reilly and Carr (2004) and Center for Sex Offender Management (CSOM, 2007) have identified factors related to a good assessment which are worth noting.

1. Assessments should be developmentally appropriate.
2. Assessment methods should have some research support.
3. Assessments should be approached as being collaborative and the youth and family should be treated with respect.
4. Evaluators should use multiple sources of information.
5. Evaluations should focus on both strengths and weaknesses.

Evaluations should at a minimum include detailed interviews with the youth and youth's caretakers; review of information regarding the sexually abusive behavior; collection and review of information from other sources such as social services, police, court, school, previous mental health records, past evaluations, and past treatment records.

Depending on the nature of the case, at times the use of more structured standard psychological tests and sex offender specific tests may be of assistance. For some youth, where there is suspicion of significant intellectual disabilities or learning disabilities, a more detailed psychological assessment may be warranted and for some youth with suspicion of more serious behavioral, psychological, or psychiatric difficulties, a standardized behavioral checklist and validated measures of psychopathology and personality may also be warranted.

At times specialized scales of sexually abusive behavior are also used with the most frequent being the adolescent version of the Multiphasic Sex Inventory (Nichols & Molinder Assessment, Inc.), the juvenile version of the Sexual Adjustment Inventory (Lindeman, 2005), and the Adolescent Cognition Scale (Hunter, Becker, Kaplan, & Goodwin, 1991). All of these have limited research support and Fanniff and Becker (2006) described the Adolescent Cognition Scale as less than adequate. Knight and his colleagues (Knight, Prentky, & Cerce, 1994) reported on the development of the Multidimensional Assessment of Sex and Aggression which has undergone revisions for adolescents (Knight & Cerce, 1999). It is now commercially available as the Multidimensional Inventory of Development of Sex and Aggression (www.MIDSA.com). Theoretically, it covers many of the areas that appear relevant to the risk and needs of adolescents who engage in sexually abusive behavior and is a promising instrument. There are also a number of physiological assessment procedures such as measurement of penile tumescence, viewing time, and polygraph that are more controversial when used with adolescents, and these will be reviewed in a separate section.

For the last 10 years, there has been increased adoption of the risk/need/responsivity (RNR) framework to guide both treatment and assessment of youth who engage in sexually abusive behavior (CSOM, 2007; Murphy, Page, & Ettelson, 2005; Prescott, 2006). In the risk/need/responsivity model, risk refers to factors within the youth or in the youth's environment that are associated with increased risk of delinquent and/or sexual reoffending. The risk principle states that the intensity and intervention and level of supervision should be based on the youth's level of risk. High risk youth should receive the most intense treatment and most intense supervision, while youth with lower risk should receive less intense intervention and less supervision. The need principle refers to factors that can be changed and if changed have the potential to reduce the risk for future delinquent and/or sexual offending behavior. The need principle states that the majority of treatment needs to focus on those needs that have been established to have a direct link to reoffending. The responsivity principle has two components: one related to treatment itself, which is sometimes referred to as general responsivity principle which suggests that effective methods should be used, and the second is sometimes referred to as specific responsivity, which suggests that one assesses and addresses those factors that can be related to the youth's ability to benefit from treatment. Common responsivity issues include, among others, intellectual level, learning disabilities, severe psychiatric disorder, gender, religious affiliation, and cultural/ethnic issues/variables.

It is recognized that youth who engage in sexually abusive behavior and their families may experience a variety of problems that may not be directly linked to their offending. Youth and their caretakers may have significant psychiatric disorders, past trauma, or substance abuse problems which also need to be assessed and addressed for the youth's and families' overall well-being. These issues need to be assessed and addressed in treatment in addition to factors related to their specific offenses and their risk of reoffending.

Assessing Risk and Need in Youth Who Have Engaged in Sexually Abusive Behavior

The application of the RNR principal to the assessment and intervention with youth who engage in sexually abusive behavior requires assessment methods to identify risk and needs. Given the high rates of general delinquency in the adolescent sex offender population, general risk/need assessments should be part of a comprehensive evaluation. There are assessment tools available to predict general delinquent recidivism and violent recidivism such as the Youth Level of Service/Case Management Inventory (Hoge & Andrews, 2009) and the Structured Assessment of Violence Risk in Youth (Borum, Bartel, & Forth, 2006). These have been proven to have moderate validity (Olver, Stockdale, & Wormith, 2009), and there is preliminary evidence that if

such tools are used to guide interventions, there is a reduction in general reoffending (Vieira, Skilling, & Peterson-Badali, 2009).

There is also a need for assessment tools that specifically assess risk and needs related to sexual reoffending. The state of risk assessment in juveniles is still in the early developmental phase as compared to research with adult offenders (Beech, Fisher, & Thornton, 2003; Hanson & Morton-Bourgon, 2004, 2005; Mann et al., 2010), and there is limited data on dynamic risk factors.

There have been quantitative reviews of risk factors related to sexual reoffending in adolescents (Worling & Långström, 2003, 2006; Gerhold et al., 2007) and one meta-analysis (McCann & Lussier, 2008). Although there are some inconsistencies across studies, there is some support that risk and need factors for this population are those that appear to be related to the concept of sexual deviation (such as male victims, stranger victims, child victims, and previous sexual offenses) and those related to anti-sociality. McCann and Lussier grouped risk factors into a sexual deviant domain and an anti-sociality domain and found that each domain was significantly related to sexual offense recidivism. However, the effect sizes were small (e.g., only 0.11 and 0.10, respectively). Some studies with adolescents also indicate that adverse childhood experiences may be linked to sexual recidivism. For example, Carpentier and Proulx (2011) found parental abandonment and sexual victimization related to sexual recidivism. Being a victim of sexual abuse, however, is not found to be risk factor in all studies (Worling & Långström, 2003).

As one can see, it is still not clearly established what the most promising variables are for predicting reoffending in juveniles. One significant methodological problem is the low base rate of reoffending over short follow-up periods, meaning that in most studies there are low numbers of sexual reoffenses. Other methodological issues include the definition and measurement of recidivism, length of follow-up, and whether the youth are followed only in adolescence, only for charges as an adult or followed in both adolescence and into adulthood.

There have been a number of risk assessment instruments developed for adolescents based on the rather limited empirical data available on risk factors for this group.

Risk Assessment Instruments

In times of limited resources, accurate risk assessment allows for a more judicious and appropriate allocation of resources so that interventions are provided to youth based on risk and criminogenic needs. Generally, that means providing more comprehensive and intensive interventions for those youth who post the most risk for future offending and not providing unnecessary intervention for youth who are identified as at lower risk and lower need.

Risk assessment tools or measures utilize different means of combining empirically or theoretically supported risk factors. For youth who commit sexual offenses, the development of empirically validated risk assessment instruments has lagged relative to such activity regarding adult sexual offenders. The literature on risk factors for adolescent sexual offending is more limited than that for adults (e.g., McCann & Lussier, 2008; Worling & Långström, 2006). Fewer risk assessment instruments have been developed and, on the level of individual studies, the empirical results have been viewed as less impressive than those that have been created and studied for older sexual offenders.

Generally, in the literature concerning risk assessment, two types of risk assessment instruments have been proposed and studied: actuarial risk assessment instruments and structured professional judgment. First, following directly from research that identified static or historical characteristics of sex offenders (particularly meta-analyses), risk assessment instruments were developed largely through a so-called "actuarial" methodology; these actuarial risk assessment instruments can be considered as attempts to develop adjusted base rates for groups of sex offenders with particular numbers and types of easily measured risk factors. Actuarial methods are typically ones that rely on objectively identified factors associated with an outcome of interest; an actuarial scale specifies *which factors* are selected for examination, and the relative *"weight"* that factor has as part of the assessment of some outcome. Actuarial scales are statistical means of selecting and combining easily obtained information and examining the degree to which those particular variables are associated with some future outcome (e.g., predictive accuracy). For adult sexual offenders, starting in the mid-1990s, several actuarial scales were developed that were repeatedly demonstrated to show moderate predictive accuracy of sex offender recidivism; these actuarial instruments provide estimates of the degree of risk (probability) of a future sex offense for sex offenders with particular numbers or degree of risk factors (Doren, 2002; Hanson & Bussière, 1998; Quinsey, Harris, Rice, Cormier, & McCleskey, 2005). Different instruments rely on different "outcomes" to measure sex offender recidivism, ranging from convictions to arrests; other instruments rely on broader outcomes in an effort to address the dramatic underreporting of sexual offending.

In contrast to actuarial methods, measures of Structured Professional (Clinical) Judgment represent an explicit attempt to incorporate both empirical findings and clinical experience in making determinations of relative risk for sexual reoffending. Measures of structured professional judgment require evaluators to: (1) systematically consider a specified list of potential risk factors and (2) using a detailed manual for additional structure to rate the degree to which each factor may be

present (e.g., typically assess the degree to which there is no, some, or good evidence for the presence of a characteristic). On the basis of the "intensity," number of or interaction among risk factors, the evaluator determines if the individual is low, medium, or high risk. In addition, risk level per structured professional judgment can also be a function of additional risk factors or information not explicitly considered by the individual items of a particular instrument.

For adolescents who have engaged in sexually abusive behavior, there are two instruments that are considered structured professional judgment instruments: the Estimate of Risk of Adolescent Sex Offender Recidivism (ERASOR; Worling, 2004) and the Juvenile Sex Offender Assessment Protocol-II (JSOAP-II; Prentky & Righthand, 2003). There is one adolescent specific instrument that would be considered an actuarial instrument, which is the Juvenile Sex Offense Recidivism Risk Assessment II (JSORRAT-II; Epperson, Ralston, Fowers, DeWitt, & Gore, 2006). Also, there are a number of studies (Viljoen, Mordell, & Beneteau, 2012) that have applied the STATIC-99 (Hanson & Thornton, 1999) to juvenile populations, but many of the studies using the STATIC-99 with adolescents have not been peer-reviewed or published. In addition, the developers of the Sex Offender Risk Appraisal Guide (SORAG) (Quinsey, Harris, Rice, & Cormier, 2006) have noted that the development and validation samples have included some adolescents, and therefore they view it as a possible measure for adolescent offenders, although to our knowledge it has not been tested in an adolescent only population. In this review, we will focus primarily on those scales developed by adolescents and used widely with adolescents in the United States and Canada.

In the Unites States (McGrath, Cumming, Burchard, Zeoli, & Ellerby, 2010), in community programs and residential programs, the ERASOR is used in 53.1 % and 48.8 %, respectively, while the JSOAP-II is utilized in 61.1 % and 58.2 %, respectively, and the JSORRAT-II in 18.5 % and 18.1 %, respectively. Generally, almost all treatment programs in the USA report using at least one instrument (81.1 % of community programs and 76.5 % residential programs). In Canada, 60 % of programs for adolescents with sexually abusive behavior reportedly used the ERASOR, 26.7 % used the JSOAP-II, and 66.7 % used at least one of the instruments.

Actuarial Measures for Adolescent Sexual Offense Recidivism

The Juvenile Sex Offense Recidivism Risk Assessment Tool–II

The JSORRAT–II (Epperson et al., 2006) is currently the only *actuarial* tool designed for adolescents (ages 12–17) who have been detected for a sexual offense. Initially, it was developed on a sample of 636 youth adjudicated for a sexual offense in Utah between 1990 and 1992. The JSORRAT-II consists of 12 easily scored historical items including number of adjudications for sex offenses, prior sex offender treatment status, and any placement in special education. A manual specifies the criteria for rating these items. Initial reliability ratings for item agreement were quite high (ICC = 0.91). Although a summary of validity studies will be discussed in a separate section, some note will be made of the validation on the JSORRAT-II. Initially, the JSORRAT-II demonstrated very good predictive validity or accuracy (AUC = 0.89) in the Utah construction sample of an inclusive set of 636 juveniles (ages 11–17) adjudicated for a sexual offense in 1990–1992. However, in a cross-validation of 538 male juveniles (ages 11–17) adjudicated in Utah for a sexual offense in 1996–1997, the AUC was 0.65, showing more shrinkage than expected (Ralston & Epperson, 2007). The base rate for sex offense recidivism was 14 % in Utah. A subsequent cross-validation study in Iowa of a nearly exhaustive sample of 318 juveniles between 11 and 17 adjudicated for a sex offense also found an AUC of 0.65. However, the base rate in this sample was 7 % over a shorter follow-up period; in addition, JSOs in Iowa were also subject to registration and community notification. Preliminary findings suggested the measure was more effective in predicting recidivism which occurred during adolescence than adulthood. Although still a significant predictor, the shrinkage of the AUC in the second study suggested the need for cross-validation of instruments. Recently, Ralston, Epperson, and Edwards (2014) examined the predictive validity of the JSORRAT-II using an exhaustive sample of 11- to 17-year-old male juveniles who had committed a sexual offense between 2000 and 2006 in Iowa. Scoring reliability was quite high for total score. The validity of the measure in predicting sexual offender recidivism was 0.70; it did not predict nonsexual recidivism (e.g., general criminal recidivism). The instrument performed better for youth who were younger at the time of their index offense who had longer times at risk, although that result might be an artifact of shorter time at risk for youth who were older at the time of their most recent offense.

The JSORRAT–II has emerged as a promising option for professionals attempting to understand risk. Its items derive from careful data analysis and reflect findings from elsewhere in the research on youth who have sexually abused.

Structured Professional Judgment for Adolescent Sexual Recidivism

Juvenile Sex Offender Assessment Protocol–II

The Juvenile Sex Offender Assessment Protocol-II (JSOAP-II) "is a checklist whose purpose is to aid in the sys-

tematic review of risk factors that have been identified in the professional literature as being associated with sexual and criminal offending" (Prentky & Righthand, 2003). Originally, the scale consisted of 23 items that were rationally identified from the research literature on juvenile and other offenders. Later editions of the JSOAP-II were expanded to 26 and 28 items falling on four subscales: Sexual Drive/Sexual Preoccupation, Antisocial, Impulsive Behavior, Clinical Intervention, and Community Adjustment. The current version of the JSOAP-II, along with a scoring manual, is available from the website of the Center for Sex Offender Management at www.csom.org.

Prentky, Harris, Frizzell, and Righthand (2000) originally tested the first edition of the JSOAP on a sample of 96 male, inner-city adjudicated and non-adjudicated youth (ages 9–20), of whom 75 were followed up for 12 months. Internal consistency reliability ranged from 0.68 to 0.85 across the subscales. Later, a subsequent study examined a 26-item version of the JSOAP on 134 male sexual offenders (ages 7–20) from rural child welfare and correctional settings. This revised JSOAP showed similar internal consistency ratings to the original version (0.64–0.95) (Righthand et al., 2005). Factor analysis also identified a four-factor solution that was consistent with the four originally created scales, and the instrument was revised to the current 28-item scale.

Estimate of Risk of Adolescent Sex Offender Recidivism

The Estimate of Risk of Adolescent Sex Offender Recidivism (ERASOR 2.0) is "an empirically-guided checklist to assist clinicians to estimate short-term risk of a sexual reoffense for youth ages 12–18" (Worling, 2004, p. 1). Explicitly modeled on other structured professional judgment scales (particularly the Sexual Violence Risk-20 or SVR-20), the scale items consist of 16 dynamic and 9 static risk factors in five categories. The five categories are Sexual Interest, Attitudes and Behavior, Historical Sexual Assault, Psychosocial Functioning, and Family/Environmental Functioning and Treatment. Each of the 25 items is scored as absent, partially/possibly present, and present. As with other structured professional judgment instruments, the total score of the ERASOR can be used to make a determination of low, medium, or high risk.

Initially, Worling (2004) examined properties of the ERASOR with a sample of adjudicated male adolescents ($n=136$, ages 12–18) receiving treatment in community-based programs in Canada ($n=45$) or at a specialized residential treatment center in Minnesota (n–91). Initially, 28 trained masters or doctoral level professionals completed scale ratings after clinical assessments. Inter-rater reliability was acceptable for most scale items (average intra-class correlations coefficient was 0.60). Overall, inter-rater reliability for clinical risk estimates was excellent at 0.92. Internal consistency reliability for total score was 0.75.

Validity

Up until recently, there have been multiple individual studies of each of these instruments and if one read the existing individual studies, it would be difficult to draw firm conclusions due to their apparent variability in findings. However, a recent meta-analysis (Viljoen et al., 2012) of the JSOAP-II, ERASOR, JSORRAT-II, and STATIC-99 not only provides some clarity but also raises a number of questions. The authors were able to identify nine studies that assessed the relationship of scores of the JSOAP-II to sexual reoffending and seven to general reoffending. There were ten studies that investigated the relationship of the ERASOR to sexual reoffending and seven that looked at the relationship of the ERASOR to general offending. It should be noted that there were additional studies that looked at certain subscales for both the ERASOR and JSOAP-II. Viljoen and colleagues were able to identify seven studies of the JSORRAT-II and eight studies that looked at the total score of the STATIC-99 in adolescent populations. The AUCs for the four instruments were between 0.64 and 0.67 for sexual offending, and the JSOAP-II showed an AUC of 0.66 for predicting general reoffending while the ERASOR showed a 0.59 AUC for general reoffending. Data are not available from the JSORRAT-II or STATIC-99 on general offending in this population. All of these AUCs would be considered significant and would be what considered in moderate to low moderate range. Viljoen et al. also reported on the few studies that directly compared the instruments, and there were three studies that compared the JSOAP-II to the ERASOR and two studies that compared the JSOAP-II to the STATIC-99. In all cases, there was no significant difference in the predictive validity of the instruments.

It appears that across studies these instruments are better than chance in identifying recidivism. However, an important caveat is that there is significant variability between studies. Therefore, the results are not consistent across studies. Viljoen and colleagues attempted to analyze factors that could be moderators. Factors they investigated were setting (mental health or other type setting), whether youth were in a treatment program or not, publication bias (published or unpublished), allegiance effects (whether any of developers were authors), country where the studies were conducted (United States or others), sample size (greater or less than mean of 150), base rate of offending (greater or less than 10 %), length of follow-up (greater or less than 5 years), and

inter-rater reliability (strong inter-rater or no information). However, none of these factors helped explain the differences between studies. It should also be noted that compared to the adult risk assessment area, there are limited studies and their relatively small sample sizes make it difficult to find moderator effects. One study (Rajlic & Gretton, 2010) provides one possible factor that needs further investigation. They compared the JSOAP-II and ERASOR in two groups of offenders, one who had sex offenses only and one who had sex offenses and non-sex offenses. They found that these instruments were only predictive in the sex offenses only group.

Viljoen and colleagues also summarized data for individual subscales of the ERASOR and JSOAP-II. For the JSOAP-II, all subscales were significantly related to sexual reoffending, although sexual drive preoccupation was not related to general reoffending. For the ERASOR, only the psychosexual functioning and family environment scale were individually significant predictors of sexual offense recidivism. However, for both the JSOAP-II and ERASOR, many of the subscales have few items which would reduce the probability of the subscales on their own being stable predictor.

Summary

Research on risk assessment instruments for adolescents who engage in sexual behavior lags behind that of studies with adults. The meta-analysis of Viljoen et al. would suggest that these instruments perform better than chance but the issue of variability between studies suggests caution when using them clinically. The level of validity might suggest that the instruments could inform decision making on such things as intensity of supervision or intensity of treatment. However, they should be used carefully in decisions related to civil commitment or if an adolescent should be placed on a sex offender registry; that is, they should be used in the context of a comprehensive and individualized evaluation of a specific adolescent who has engaged in sexually abusive behavior. In addition, few studies provide actual recidivism rates for various risk levels and therefore when youth are classified as low, medium, or high risk that is not necessarily tied to specific percent of recidivism. In addition, recent perspectives regarding adult sexual offenders indicate that actual sexual offense recidivism rates appear to be associated with the level of Psychological Meaningful Risk Factors (PMRF; Mann et al., 2010) or dynamic risk factors: low, medium, or high rates of sexual offense recidivism will vary across samples based both on more static risk factors but also on the degree of risk factors external to the risk assessment instruments (e.g., PMFR; www.static99.org). As noted, there is limited information on dynamic risk factors for adolescent offenders which may impact the ability to accurately predict reoffending and as importantly to determine the most important treatment targets.

Physiological Measures

The physiological measures that have been used and are used with adolescents who engage in sexual behavior include penile plethysmography (PPG), viewing time measures (VTM), and the polygraph. McGrath et al.'s (2010) Safer Society Survey indicates that approximately 9 % of U. S. adolescent programs used PPG while approximately 20 % of such Canadian programs reported the use of PPG. Viewing time was used by approximately 34 % of US programs and 13 % of Canadian programs. Approximately, 38 % of US programs reported using either PPG or VTM, as compared to 26 % of Canadian programs. In contrast, polygraphy in some form is used in almost half of US programs; interestingly no Canadian programs reported use of the polygraph. McGrath et al.'s (2010) data clearly indicated that there has been a gradual decline in the use of penile plethysmography with youth in the United States, but a concomitant increase of the use of the polygraph. Viewing time has only been assessed in the last two surveys and has shown a slight increase in use from 25 % in 2002 to 31 % in the 2009 survey. Of these methods, the use of PPG and polygraph with adolescents has been the most controversial. It should be noted that for the PPG and the polygraph, there tends to be two objections, one being from a scientific standpoint and the second being from an ethical standpoint. All three of these methods will be briefly reviewed.

Penile Plethysmography

While the use of penile plethysmography, PPG, in adults has a long history, it is not without its controversies (Laws, 2009). It is a somewhat better accepted procedure with adult sexual offenders than with adolescents. As critics of the PPG have pointed out (Worling, Bookalam, & Litteljohn, 2012), the research literature related to PPG in adolescents is somewhat limited. The most consistent finding has been that adolescents who sexually abuse boys show greater arousal to child stimuli than those who victimize girls (Becker et al., 1989; Murphy et al., 2001; Seto, Lalumière, & Blanchard, 2000) and gender of victim may interact with history of sexual victimization (Becker et al., 1989; Murphy et al., 2001), although there have been exceptions (Hunter, Goodwin, & Becker, 1994). In addition, Seto, Murphy, Page, and Ennis (2003) also found in three separate data sets significant correlations between deviant sexual interest in the laboratory and the Screening Scale for Pedophilic Interest (SSPI; Seto & Lalumière, 2001). The SSPI has been found to relate to sexual arousal measures in adults and to

be predictive of offending in adults (Seto, Harris, Rice, & Barbaree, 2004). The SSPI is composed of items related to male victim, unrelated victim, multiple victims, and victims under 12. It should be noted that two of the samples had rather small sample sizes (45 and 67) while the third sample had a larger sample of 141. It should also be noted that each of the samples used different types of stimuli, one using films, one using slides, and one using audiotapes. The fact that deviant sexual interest has generally been limited to those with male victims has been criticized as reflecting a weakness of the assessment (Worling, 2012). However, it is notable that most of the risk assessment measures developed for adolescents include male victims as one of the risk factors.

There have also been studies on the ability of sexual arousal as measured by the PPG to predict recidivism (Clift, Gretton, & Rajlic, 2007; Clift, Rajlic, & Gretton, 2009; Gretton, McBride, Hare, O'Shaughnessy, & Kumka, 2001; Rice, Harris, Lang, & Chaplin, 2012). In the first studies by Gretton and colleagues in 2001, they found no relationship between pretreatment PPG measures and recidivism. They did find an interaction between PPG measures and psychopathy with the group high both in deviant arousal per PPG and psychopathy showing the highest rate of violent crimes overall (but not sex offending specifically). In the second study in 2007, they again found no association between pretreatment deviant indexes and recidivism but did find four deviant indices posttreatment (that represented arousal to stimuli that depicted forced and non-forced sexual interactions with male and female children) which were predictive. In the third study, in 2009, they again found a relationship between posttreatment arousal to male and female children and recidivism. They also found a relationship between inability to suppress arousal to male and female children at posttreatment to be related to increased recidivism. However, it should be noted that these appear to be overlapping data sets and therefore cannot be considered independent replications.

Rice et al. (2012) found that a child preference index on the PPG predicted both violent (ROC = 0.71) and sexual recidivism among adolescents (ROC = 0.73). They also found that a history of prior sexual abuse was also related to the child preference index.

Worling (2012) has provided a very thoughtful critique of the use of PPG with adolescents. As noted above, he raised two issues, one being the scientific basis for its use and the other more ethical. One of his criticisms is that the PPG is supposed to be an objective measure of sexual interest but in some studies has been found to be influenced by such factors as adolescent's age (Kaemingk, Koselka, Becker, & Kaplan, 1995), racial background (Murphy et al., 2001), and history of sexual abuse as outlined above. They also noted that variables that should statistically correlate with sexual arousal such as number of victims and force are not reliably correlated with deviant arousal in adolescents (Becker, Kaplan, & Kavoussi, 1998; Hunter et al., 1994). Although Kaemingk et al. (1995) did find age of victim related to PPG, two other studies (Murphy et al., 2001; Seto et al., 2003) did not find a relationship with age. The finding of Murphy et al. (2001) on racial background being related to arousal measures was a finding that African American youth tended to show lower arousal across stimuli. However, it should be noted that the audiotapes used in that study were recorded by a Caucasian and in the area where the study was conducted it is highly likely that the African American youth would have identified the voice as Caucasian which may have impacted arousal. Within the field, there needs to be more attention to cultural and racial factors including in our theories, assessments, and treatment. For example, Miner et al. (2010) also identified race as a factor in his study on attachment style, interpersonal involvement, and hypersexuality in adolescents, but this study did not involve arousal measures.

The finding that pedophilic interest as measured in the laboratory may be related to history of being sexually abused may actually be supportive of the construct validity of these measures. Many of the current theoretical models (as described in the etiology section) such as those by Knight, Malamuth, and Hunter suggest that one of the pathways to sexual offending is through a sexual pathway related to being a victim of child sexual abuse. To the extent that this model is correct, then one would expect higher levels of deviant sexual interest in those youthful offenders who have been sexually abused.

Worling also points out that there is research to suggest that 50 % of adolescents who denied their sexual offense showed low arousal to all stimuli (what is termed "flat liners," e.g., Becker et al., 1992). This finding is actually consistent with the adult literature and is a clear limitation of PPG measures. Freund and Blanchard (1989) found that the sensitivity of the PPG was low in identifying pedophilia in adult sex offender non-admitters. Thus, the lack of manifest sexual arousal in the laboratory setting provides little information in decision making.

Worling has also raised some ethical issues which need to be strongly considered in the use of PPG. Concerns include the potential iatrogenic effect of exposing youth to deviant sexual activities in the context of an adolescent still developing sexual identity. As Worling noted, this possibility has never been investigated but requires careful consideration. At the same time, while data are limited, there are some emerging patterns from research suggesting some construct validity and predictive validity. However, there are few studies of the use of the PPG with adolescents and use with adolescents should be considered carefully and ethical issues should be weighed against possible benefits in particular cases.

Polygraph

Polygraph testing has become one of the most frequently used assessment methods and procedures with adult offenders and increasingly with adolescent offenders (McGrath et al., 2010). Generally, several rationales exist for using the polygraph with individuals who have engaged in sexually abusive behavior; research suggests that it helps to identify additional victims, provides more details about the pattern of offending, can improve the monitoring of adherence to risk/safety plans (and therefore can be used to enhance supervision), and assists in the identification of treatment targets and in monitoring ongoing risk (English, Jones, Pasini-Hill, Patrick, & Cooley-Towell, 2000). For adults, there is research support that polygraphs lead to greater admissions, both in terms of number of victims and range of offending (Ahlmeyer, Heil, McKee, & English, 2000; Heil, Ahlmeyer, & Simons, 2003). However, whether such information leads to better treatment planning, better management, and a concomitant decrease in recidivism has yet to be fully determined.

Rosky (Online First version, August, 2012), in a review of polygraph testing, questions the overall accuracy of the polygraph and whether it leads to improvement in treatment planning and prevention of reoffending. The overall accuracy of the polygraph to assess deception has been questioned by the detailed review by the Council (2003). The most well-controlled study in adults on whether polygraphy impacts reoffending (McGrath, Cummings, Hoke, & Bonn-Miller, 2007) did not find that the use of the polygraph had an impact on future sexual offending. They did find a difference between groups on new violent offenses (2.9 % for those receiving a polygraph and 11.5 % for those who did not), but this was based on three violent reoffenses in the polygraph group and 12 in the no polygraph group. Given that there were no differences for offenses or violations for just sexual, sexual, and violent combined, or nonsexual/nonviolent offenses, the finding could be considered spurious.

When one turns to adolescent offenders, there is even less data on the utility of the polygraph. In a very early study by Emerick and Dutton (1993), they found the same pattern that has been observed with adults in terms of greater admissions of sexual offending. There are no studies that we know of that have looked at the impact of the use of polygraph with adolescents on reoffense rates. One study (Arsdale, Shaw, Miller, & Parent, 2012) presented data that they felt suggested that the polygraph provided information that was helpful in the treatment of adolescents who have engaged in sexually abusive behavior. In addition to the youth disclosing more victims and types of victims, youth also reported a greater amount of peer-related sexual activity and were more likely to disclose that they were themselves victims of abuse. The authors felt that these kinds of disclosures helped in treatment, especially addressing issues such as personal abuse. It is not clear, however, how these disclosures actually changed the course or outcome of treatment.

As with the PPG, there have been concerns raised in using the polygraph with adolescents (Chaffin, 2011; Craig & Molder, 2003; Prescott, 2012). Although these critiques have focused somewhat on the available data (which are even more lacking in adolescents than the PPG), they have also focused on ethical concerns. Chaffin (2011) suggested that the use of polygraphs in treatment effectively leads to mental health therapists being involved in an involuntary interrogation of minors. Even though the mental health professional may not administer the polygraph, it is required in some programs and therefore places the therapist in what could be considered a dual role of representing the client and the community. Prescott (2012) has argued that requiring adolescents to be polygraphed may set up an adversarial relationship between the therapist and the youth, which could be counter to the importance of therapeutic alliance in behavioral change. These observations need to be considered; thought and research should be given to whether the use of polygraph has a negative impact on the therapeutic relationship and/or actually contributes to treatment planning and positive outcomes.

Viewing Time

One of the newest approaches designed to assess sexual interest is the use of viewing time. Viewing time basically measures the time a subject spends viewing various stimuli; the underlying theory is that a person will look longer at a stimuli he/she finds sexually attractive than one he/she does not find sexually attractive. Research has shown the viewing time in adult samples correlated with self-reports of sexual arousal [see Worling (2012) for review] and shows some concordance with PPG results (Abel, Huffman, Warberg, & Holland, 1998; Gray & Plaud, 2005; Letourneau, 2002). The viewing time assessment most frequently used is Abel's Sexual Assessment for Sexual Interest (Abel, 2007). However, its use with adolescents has been limited. Abel et al. (2004), in a study of over 1,700 adolescents, found that males who offended against children viewed slides of children longer than males who had not offended against children and that viewing time was correlated with number of victims and number of acts of sexual abuse. It should be noted that those who did not offend against children were not from a non-offender population but were youth with other types of sexual offending behavior. The second type of viewing time measure, the Affinity (Glasgow, 2007), was investigated by Worling (2006). This study involved 78 adolescent males, and it was found that the viewing time correlated with self-reported rating of sexual attractiveness across most stimulus categories and could differentiate adolescents who had offended against one male child or against male children exclusively from offenders with peer/adult victims.

These findings are consistent with those for the PPG. To date, there is very limited data on viewing time with adolescents who have engaged in sexually abusive behavior. However, the procedure appears less controversial and is seen by some as an alternative to PPG. It has yet to be determined if the procedure will prove valuable in identifying treatment targets and/or be related to outcome. There have been fewer ethical concerns raised in the literature regarding viewing time measures as compared to PPG or Polygraph. However, like the PPG, there is no data on how nonsexual offenders respond.

Treatment

This chapter is not designed to provide a comprehensive review of treatment considerations for adolescent sex offenders, but rather the intent is to provide an overview of core components and considerations.

Historical Perspective

Treatment of adolescents who have engaged in sexually abusive behavior has evolved significantly since the early days of the field. Despite the growing data that adolescents accounted for a significant proportion of sex offenses, initially those involved faced the challenge of getting systems to take the issue/problem seriously. At the time treatment approaches were being formulated for this group of youth, there was a lack of research and knowledge to guide these efforts (Chaffin & Bonner, 1998). Not unexpectedly, the field turned to the adult field and borrowed from their approaches and models as this was perceived as at least providing some direction in addressing the serious issue of adolescents' sexually abusive behaviors. The adolescent field has since moved away from some of the early beliefs and approaches as research has informed practice.

Typically, reviews about the treatment of sexually abusive youth acknowledge or critique the early application of adult models to adolescents (Chaffin, 2006; Dwyer & Letourneau, 2011; Thakker, Ward, & Tidmarsh, 2006). As noted the field was without research initially. While there have been significant changes in our approach to working with adolescents, at times reflecting on where we started and how we got to where we are today serves as a reminder of the importance of continued research and staying current with the relevant literature as this is an evolving field.

Early on it was believed that adolescents who engaged in sexually abusive behavior were indeed similar to adult sex offenders; it was assumed that they had deviant sexual interests, were high risk, and needed long-term intensive treatment often in a residential setting due to their chronic condition that would require life-long management. The treatment model was a group sex offender specific cognitive behavioral therapy model (Chaffin, 2006) with an emphasis on full disclosure of offense patterns and focus on deviant sexual interest and attitudes supportive of offending and increasing victim empathy. The relapse prevention framework and cycle of abuse were typically core components of treatment programs. Treatment was also often confrontational in nature and there was a lack of recognition of developmental differences of adolescents.

Research and literature have shown that these initial beliefs and assumptions are not supported. We now know that adolescents who engage in sexually abusive behavior are a heterogeneous group with differing levels of risk, types of need, and varied responsivity factors. The majority of these youth do not require long-term intensive treatment and are appropriate for treatment in the community. Deviant sexual interest was a main focus early on, but research shows that only a small percentage of adolescents have deviant arousal patterns similar to adult offenders. The early style of confrontation in sex offender treatment for youth is now recognized as not being helpful with adults or adolescents.

Historically, relapse prevention and "cycle" approaches heavily influenced work with adolescents who had engaged in sexually abusive behavior. However, in general there is a lack of evidence for the traditional relapse prevention framework and approaches that suggest a single pathway to offending. Research shows that there are different causes and varied trajectory pathways for youth who engage in sexually abusive behavior. In turn, these findings support the need for a variety of approaches in working with these youth. In addition, there has also been an increased awareness of the developmental differences between adolescents and adults who commit sexual offenses, and more providers are recognizing the need to be well versed in child/adolescent development.

Overview

Effective treatment of sexually abusive youth is grounded in the research and literature relevant to this population. This encompasses the areas of child/adolescent development, juvenile delinquency, and sexually abusive youth. The knowledge base about adolescents who have engaged in sexually abusive behavior has grown significantly and provides information about some evidence-based practices, but to a higher degree provides information about evidence informed and evidence supported practices and approaches.

Current data supports that skills-based, cognitive behavioral interventions that focus on dynamic risk factors take socio-ecological factors into consideration, involve the family, and promote a therapeutic relationship that are likely the most effective when working with sexually abusive youth and general delinquent youth. There is emerging support in quasi-experimental studies that treatment can be effective with adolescents who have engaged in sexually abusive behavior (Reitzel & Carbonell, 2006; Worling & Cruwen, 2000; Worling et al., 2010). While there have been randomized controlled trials of Multi-Systemic Therapy that support treatment effectiveness with sexually abusive youth (Borduin, Henggeler, Blaske, & Stein, 1990; Borduin, Schaeffer, & Heiblum, 2009; Letourneau, Hengler, Bourdin et al. 2009), there have been few such trials involving other types of treatment.

Risk-Need-Responsivity and Treatment

As referenced in the Assessment Section, over the last decade there has been an increase in the utilization of the risk-need-responsivity principles as a framework for work with this population. The risk principle identifies who to focus on as it examines risk, the need principle informs what to focus on related to needs linked to reoffending, and the responsivity principle looks at how to approach the youth, his/her family, and serves as a reminder to utilize effective methods and take into consideration factors that impact the youth and his/her family's response to treatment. Protective factors are also taken into consideration in the treatment of sexually abusive youth. Kirby and Frazer (1997) define protective factors as "the internal and external forces that help children resist or ameliorate risk." Protective factors can mitigate risk and be built on as strengths in treatment and case planning.

Questions to be answered from assessment related to risk include the intensity of treatment and level structure and supervision needed. Intensity of services can range from outpatient to specialized residential programming with structure and security spanning the continuum from home placement to a correctional facility. While the majority of these youth can be served with an outpatient level of treatment intensity in the community, there are some youth who are in need of more intensive and extended services and/or may require a more structured and/or secure environment. The assessment of the individual youth's level of risk for sex offending, general delinquency and violent behavior, mental health needs, and the youth's and family's strengths should collectively guide decisions related to intensity of services and the degree of structure and supervision needed by the youth.

In short, the field has moved away from the early one size fits all response to these youth. Adolescents who engage in sexually abusive behavior are a diverse group with varying needs. While it is important to focus on factors relevant to both sexual reoffending and general reoffending, it is also important to remember that these youth and their families can present with a variety of issues. Many youth also present with other issues including: trauma, victimization, and comorbid psychiatric issues that need to be addressed. The youth and their families also present with a number of strengths and these need to be acknowledged and built on in treatment.

One approach to balancing treatment focus is to view the needs as varying across three major dimensions: sexually abusive behavior, general delinquency or violence, and general mental health needs (Murphy et al., 2005); there are factors such as family functioning, impulsivity, and social competency that can cut across all three dimensions. Youth can be at different points on each of these continuum, and assessment can help guide the focus of treatment.

While not all youth present with the same dynamic risk factors and needs, the following is a summary of what is currently thought to be the most relevant dynamic risk factors to address in treatment with adolescents who sexually abuse.

- Attitudes and Justifications Supportive of Offending
- Emotional Management
- Social Competence/Relationship Skills
- Healthy Sexuality
- Ability to Establish Peer Relationships
- General Self-Management Skills
- Family Education/Functioning
- Sexual Deviation or Sexual Preoccupation (if applicable)
- Development of Positive Life Goals
- Individualized Issues as Needed

Given that adolescents who sexually abuse are more likely to re-offend nonsexually than sexually, it is important to recognize that there are several evidence-based programs for youth with juvenile delinquency issues. Meta-analytic work (Lipsey, 2009) supports the effectiveness of programs that are skill-based and cognitive behavioral in reducing reoffending in youth engaged in general delinquent behavior. Aggression Replacement Training is recognized by the Office of Juvenile Justice and Delinquency Prevention (OJJDP) as a Model Program. The program focuses on interpersonal skills, anger control, and promotes values that respect others.

Further, youth who engage in sexually abusive behavior do not live in a vacuum and their behavior is impacted by a number of systems including family, peers, school, and community. Treatment needs to recognize both the positive and negative impact the systems have, and can have, on the youth. As previously reviewed, factors within the youth's environment such as use of leisure time, peer selection, and school have been shown to be important factors impacting youth and his/her risk for general re-offending. Interventions

that fail to focus on the socio-ecological components and instead focus only on the youth are less effective. Socio-ecological models of intervention include Multi-Systemic Therapy and Functional Family Therapy, both of which have been identified as a Blueprint program for delinquency/criminal behavior by the University of Colorado's Center for the Study and Prevention of Violence.

Specific to socio-ecological models, families are a central aspect of the lives of adolescents and as such have a major role in the treatment of sexually abusive youth.

The importance of the family involvement is supported by the literature (Borduin, Schaeffer, & Heiblum, 2009; Letourneau et al., 2009). Like the individual youth, families also vary in regard to their strengths and needs, and treatment is adapted to the situation of the particular family. Efforts need to be made to directly involve the family of the abusive youth in treatment unless this is contraindicated due to abuse, neglect, or other significant issues.

Application of the responsivity principle can directly impact the effectiveness of treatment of sexually abusive youth through the use of effective intervention for the problem, cognitive behavior treatment and social learning model, and modifying how interventions take into consideration individual and family factors, including bio-social factors, learning style, motivation, as well as strengths and protective factors.

While the responsivity principle is important in the treatment of any sexually abusive youth, it is of specific importance when working with subpopulations such as adolescent females, youth with developmental disabilities, youth exhibiting trauma symptoms, and youth with autism spectrum diagnosis. While there has been a substantial increase in research related to sexually abusive youth, research specific to subpopulations is limited and professionals treating subpopulations can gain helpful information from areas of relevant literature such as gender responsive treatment, developmental disabilities, autism, trauma, learning, and education. Treatment and interventions need to be developed or adjusted and adapted to meet the individual differences of the youth in these subpopulations.

Approach Versus Avoidance

An increasingly common theme in the treatment field involves moving away from relying on avoidance goals and promoting approach goals. Change is more likely when the person is working towards a positive, or approach, goal rather than the goal being restrictive in nature (Ward & Stewart, 2003). Part of the criticism of the traditional relapse prevention model is its reliance on avoidance-based strategies for managing risk situations. Mann, Webster, Schofield, and Marshall (2004) proposed that the strong avoidance focus may be related to why some offenders resist or rebel against relapse prevention interventions. The Good Lives Model is described as a strength-based perspective concerned with promoting offenders' goals while managing their risk (Ward & Stewart, 2003) with a goal of assisting the offender in understanding their offense pattern and to effectively cope with situations and psychological factors that increase their risk (Ward & Hudson, 2000). The Old Me/New Me approach (Haaven, 2006; Haaven & Coleman, 2000) has a long history of being used with adult sex offenders with developmental disabilities as well as being applied to other sex offenders and adolescents who sexually abuse. This approach involves changing dysfunctional behavior through skills building, identification of pro-social activities, and taking responsibility with an emphasis on what the person will do rather than on what they will not do. The focus is on setting positive goals involving approach behavior to meet needs and function as a New Me. A focus on approach changes does not negate the reality that there will be some avoidance aspects in goals for the youth. Treatment should strive for a balance as addressing risk sometimes means avoidance, but also means incorporation of approach goals and positive life goals that promote healthy living. Balanced treatment of the whole youth is consistent with the goal of preventing sexual abuse in that this approach supports the youth reaching their maximum potential for a healthy, fulfilled, non-abusive life.

Engagement, Motivation, and Therapeutic Relationship

Engagement and motivation are aspects of treatment that have received more focus in recent years and can be viewed as responsivity factors. Another aspect of treatment that has received more focus is the role of engagement and motivation. Treatment is viewed as a collaboration between the abusive youth, his/her family, and the therapist (Shingler & Mann, 2006). Motivational interviewing-based philosophy and techniques are more frequently incorporated into treatment, and some clinicians have adapted the transtheoretical model of change (Prochaska, Norcross, & Diclemente, 1994) into their approaches. Rather than a youth being viewed as "resistant," he/she is viewed through the lens of the stages of change: pre-contemplation, contemplation, preparedness, action, and maintenance. This approach in turn supports the development of therapy goals and interventions that view change as a process and assist the youth and his/her family through the stages of change.

The role of the therapeutic relationship is often a focus in general treatment literature and has the same importance in

work with sexually abusive youth. With adult sexual offenders, Marshall (2005) showed that a therapist style that was direct, warm, and empathic and showed concern for the welfare of the offender resulted in a higher level of change in dynamic risk factors than a style not embracing these qualities. Similarly, there is clear support for the value of the therapeutic relationship/therapeutic alliance in treatment of youth and families (Karver, Handelsman, Fields, & Bickman, 2006; McLeod, 2011), and this appears to be applicable in working with youth with general delinquent behavior (Florsheim, Shotorbani, Guest-Warnick, Barratt, & Hwand, 2000) and sexually abusive youth (Smallbone, Crissman, & Rayment-McHugh, 2009). It appears that treatment in which the youth and his/her family are treated with respect and that conveys hope is most effective, while treatment that incorporates a harsh, confrontational style or approach will be least effective.

Group Versus Individual

There is no evidence suggesting that group treatment with adolescents who engage in sexually abusive behavior is any more or less effective than individual treatment. The benefits of group treatment include youth feeling more comfortable discussing their behavior among other youth with similar problems and being more willing to hear feedback from a peer. In addition, the group setting provides opportunities to practice social skills and is more economical than individual or family therapy. However, there are also areas of caution associated with group treatment including concerns that youth in the group setting may influence each other in negative ways especially with this being more concerning in groups where high-risk and low-risk offenders are mixed together (Dodge, 2008). While the nature of individual therapy does not allow for the pluses of the group format, and is more expensive, it also has its advantages in that it removes the potential of negative influence from peers and is focused on only one client which allows for easier adaptation of approaches and interventions specific to the individual.

Summary

Treatment has changed significantly since the early days of the field. There is a concerted effort and focus on incorporating research and relevant literature into treatment and therapeutic approaches and interventions, and the increased application of the risk-need-responsivity framework supports evidence-based practices. Research will continue to increase our knowledge of adolescents who have sexually abused and will guide our treatment and interventions.

Public Policy

Public policies impacting adolescents who have engaged in sexually abusive behavior have been the focus of significant discussion in the field over the last several years. Much of the discussion has been related to efforts in the United States to reduce sex offending through legislation focusing on community notification, residency restrictions, and registration. The United States' Federal government and state governments have enacted public policies related to the management of sex offenders since the early 1990s. While the intent of the legislation is to increase community safety with a focus on the management of sex offenders, such policies have not been shown to be effective with adults (Levenson & D'Amora, 2007) and policies designed for adults are being applied to adolescents despite the significant differences between juvenile sex offenders and adult sex offenders (Miner, 2007).

Pittman and Nguyen (2011) noted that 35 states had laws that required juveniles who had been adjudicated for sex crimes to register with law enforcement, some with life-long registration, and 18 of the states disclosed the youth's private information to the public. At times, juveniles adjudicated on sex offenses are subject to residency restrictions that negate them living near places where children may gather including parks and schools. Sanctions that involve labeling, registration, and notification are viewed as having negative impact on the youth and his/her family. Such sanctions can result in the youth being stigmatized and rejected by others which impact their peer groups and some youth adjudicated on sex offenses and required to register have been limited or prohibited from involvement in activities that are viewed as part of normal teenage life and support healthy development (ATSA, 2012; Miner, 2007).

While much of the discussion has centered on the United States and its policies, the issue of application of adult policies to juveniles is a universal concern. The application of adult sanctions to juveniles is in part due to misinformation and assumptions about adolescents who have engaged in sexually abusive behavior and such sanctions are viewed as being inappropriate and ineffective and may be harmful (Letourneau & Miner, 2005; Zimring, 2004). Community notification with juveniles has not been shown to be effective (Caldwell, Ziemke, & Vitacco, 2008; Letourneau & Armstrong, 2008; Letourneau, Bandyopadhyay, Sinha, & Armstrong, 2009) but rather is viewed as having a negative impact. Miner (2007) noted that the culmination of the impact of restrictions (rejection by others, impact on peer groups, decreased participation in pro-social activities, decreased involvement in schools and churches) may actually worsen the situation by increasing risk for offending, rather than achieving the goal of preventing sexual abuse.

In addition to the above-mentioned public policies, serious concern has been raised about children as young as 6 years of age being prosecuted on sex offenses, the process of juveniles being waived to adult court to face sex offense charges, and the issue of civil commitment of juveniles.

Application of adult sanctions and policies to adolescents raises serious concerns for the youth and society; policies and management strategies need to take into account what is actually known about youth engaging in sexually abusive behavior. Ensuring that decisions about juveniles who have engaged in sexually abusive behavior recognizes that rehabilitative efforts are effective with most youth (Greenwood, 2008: Lipsey, 2009) and takes into account what is known about sexually abusive youth as well as the individual youth's risk and need provides a foundation for effective practice and policy. Such public policy issues relating to adolescents who have engaged in sexually abusive behavior are important issues that have been and will continue to be addressed within the field.

Conclusion

The field working with adolescents who have engaged in sexually abusive behavior has seen many changes, especially during the last decade. An increased base of knowledge about this group of youth exists that is rooted in research and relevant literature. Risk, need, and responsivity principles are recognized as a framework for working with this population, and the knowledge base has supported the development of evidence-based, evidence-supported, and evidence-informed practices and approaches. The developmental characteristics and individualized needs of the youth are recognized and impact our work. Gains have been made in assessment and evaluation, including ongoing research of risk assessment tools. Studies have shown that treatment of sexually abusive youth can be effective, and research has provided insight into possible developmental pathways to offending and different classifications of youth engaging in sexually abusive behavior. States and other jurisdictions have developed practice guidelines or protocols specific to adolescents rather than relying on adult focused guidelines. The Association for the Treatment of Sexual Abusers is currently developing practice guidelines for adolescents who have engaged in sexually abusive behavior and in October 2012 updated their policy statement related to this population.

Many advances have been made regarding the understanding, assessment, and treatment of adolescents who have engaged in sexually abusive behavior. However, more research across these domains is needed to support continued advancement in the field. High quality studies of treatment effectiveness, continued research to increase understanding of both static and dynamic risk factors, and longitudinal studies to help identify targets for prevention efforts are needed. The field continues to move forward in its efforts towards evidence-based assessment and treatment and research informed public policy for adolescents who have engaged in sexually abusive youth.

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Female Sexual Offenders: An Overview

Franca Cortoni and Theresa A. Gannon

Female Sexual Offenders

Women are different from men. In comparison to men, women commit considerably less crimes and they diverge in the paths that brought them to the attention of the criminal justice system. Women also diverge in their responses to custody and community supervision, likely due to their lower risk of reoffending and the differing nature of their risk and needs (Blanchette & Brown, 2006). In the sexual offending field, like in the general offending field, gender matters. Although in its infancy, the emerging empirical information on women who sexually offend indicate that a blanket application of research knowledge based on *male* sexual offenders is not a viable option. As we will see in this chapter, while men and women appear to share some characteristics, important differences in risk of recidivism and factors related to their sexually abusive behavior indicate that a *gender-informed* as opposed to a *gender-neutral* approach to the assessment and treatment of female sexual offenders is warranted. The term "gender-neutral" refers to characteristics that are linked to the criminal behavior that are equally applicable to men and women. The term "gender-informed" refers to factors unique to women offenders. This chapter will provide a two-part review of the current knowledge on female sexual offenders, highlighting similarities and differences between female and male sexual offenders. The first part will review current theoretical and empirical knowledge on female sexual offenders, including prevalence, sociodemographic features, developmental history, and offense characteristics. Within this context, typologies of female sexual offenders will be described. The second part will discuss recidivism rates of female sexual offenders, risk factors, and current best practices in the treatment of these women.

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Prevalence and Incidence of Female Sexual Offending

Both prevalence and incidence statistics are required in order to understand the scope of female-perpetrated sexual abuse. *Prevalence* statistics provide overall estimates of the numbers of individuals who self-report at least one occurrence of sexual victimization over a fixed time period. *Incidence* statistics provide officially recorded crime figures documented over a fixed time period (typically one year).

In a comprehensive study focusing on sexual abuse prevalence, Finkelhor, Hotaling, Lewis, and Smith (1990) interviewed US men ($n=1{,}145$) and women ($n=1{,}481$) via telephone. Previous sexual abuse was disclosed by 16 % of men ($n=169$) and 27 % of women ($n=416$), the majority of which was reported as being male-perpetrated. Nevertheless, 17 % of the abused men reported having been abused by a female. Interestingly, however, only 1 % of abused females reported having been abused by a female. More recent research conducted in the UK (NSPCC, 2007) has also shown that, for children who report sexual abuse via confidential phone line, and identify the gender of their perpetrator, 5 % of girls and 44 % of boys identify the perpetrator of their abuse as female. Finally, Adshead, Howett, and Mason (1994) performed an overview of sexual abuse prevalence studies conducted between 1979 and 1990. The studies reviewed focused on a number of participants (e.g., convicted male rapists, Groth & Burgess, 1979; mixed gender college students and prisoners Condy, Templer, Brown, & Veaco, 1987). Perhaps unsurprisingly, female-perpetrator prevalence varied extensively across studies ranging from 0.5 % (reported by female college students) to 46 % (reported by male prisoners).

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An important US source of incidence statistics is the FBI's Uniform Crime Reporting Program (UCR) which reports national arrest figures. Recent UCR releases document 3,167 arrests of adult females for sexual offenses in 2005 (excluding forcible rape and prostitution). Clearly, however, these figures on *arrests* do not necessarily provide professionals with key information concerning the *numbers* of females contributing to this arrest data. The National Crime Victimization Survey of the US Department of Justice provides data from US residents aged 12 years and above about their crime experiences. For 2005, these data show that 2.2 % of sexual victimizations appear to have been perpetrated by an unaccompanied female, while 23.4 % were estimated as having been perpetrated by a female in the presence of a male. While this survey is less dependent on official reports, that notoriously underestimate instances of abuse, this survey does not provide detailed information concerning the *types* of individuals who fall victim to female sexual offenders (i.e., child or adult).

Using data obtained from a 1998 Health Canada national survey of child maltreatment cases investigated by child welfare workers, Peter (2009) examined the prevalence of female sexual victimization by women among 345 cases of child sexual abuse and found that women were responsible for 10.7 % ($n=37$) of the reported sexual abuse. When rates of victimization by women were split by the gender of the victims, the data showed that the female abusers were responsible for the sexual abuse of 9.3 % of the female victims and 14.1 % of the male victims. Peter (2009) was also able to examine the specific sexual acts committed by women. She found that less than five cases involved penetration of any kind or oral genital contact, although 19 % had attempted such behaviors. Half the women had engaged in touching/fondling of genitals, while an additional 16 % exposed their genitals to the children for sexual purposes. In contrast, while half the male offenders had engaged in touching of genitals, 16 % had engaged in penetration and/or oral genital contacts, and an additional 32 % had attempted such behaviors.

Fromuth and Conn (1997) conducted a particularly novel study in which 546 female students were asked to self-report previous sexual practices involving young children. Fromuth and Conn discovered that 4 % of female students ($n=22$) self-reported sexually abusive activities with young children. It is noted, however, that the majority of these sexual activities were reported as having taken place when respondents were children themselves (i.e., 10–14 years), and so it is unclear how many of these sexual activities were part and parcel of normal childhood sexual explorations.

In efforts to provide more systematic information about the prevalence of female sexual offenders, Cortoni and Hanson (2005; Cortoni, Hanson, & Coache, 2009) estimated the proportion of sexual offenders who are women from two general sources of information. The first source of information was official police or court reports that detailed the gender of the offender. The second source of information was victimization surveys. For both sources, information was available for North America (Canada and the USA), Australasia (Australia and New Zealand), and Europe (England and Wales). Results from the updated 2009 review were consistent with the earlier 2005 findings. Based on official records, the proportion of all sexual offenders who were female ranged from 0.6 % in New Zealand to 8.7 % in the USA. When these numbers were averaged across all countries in the study, women constituted approximately 4.6 % of all sexual offenders. It is worth noting, however, that the types of offenses constituting female-perpetrated sexual abuse vary across countries, as does the original *source* of the statistics. When victimization studies were examined, the proportion of sexual offenders who were female, as reported by victims, ranged from 3.1 % for New Zealand to 7.0 % for Australia. Across the various victimization studies, women constituted an average 4.8 % of all sexual offenders.

Interestingly, official reports and results from victimization surveys were remarkably consistent with each other and showed that women are responsible for 4 to 5 % of all sexual offenses. Based on these international data, Cortoni, Hanson, and Coache (2009) concluded that official reports and victimization surveys, on average, indicate a ratio of female to male sexual perpetrators of 1:20. Using data from the USA in 2002, the only country and year for which direct comparisons between official rates and victimization reports were possible, Cortoni and Hanson (2005) noted differential rates of police arrests according to the gender of the offender in relation to victimization survey results. Specifically, 34 % of the sexual offenses committed by men resulted in police arrest, whereas 57 % of the sexual offenses committed by women resulted in police arrest. These findings suggest that further research is needed to understand the personal and criminal justice responses to victimization by female offenders versus male sexual offenders.

In summary, the full extent of female-perpetrated abuse is very difficult to estimate, and the various prevalence and incidence figures that we have reported appear to fluctuate greatly according to the varying methods and samples used. However, various researchers have suggested that female-perpetrated sexual abuse is likely to be more underreported than male-perpetrated abuse due to strong sociocultural denial and lack of knowledge regarding female-perpetrated sexual abuse (Denov, 2004; Giguere & Bumby, 2007; Hetherton, 1999; Longdon, 1993; Robinson, 1998). As yet, it is unclear exactly if and how such issues affect prevalence and incidence estimates relative to those provided for male sexual offenders. However, even with the estimated ratio of

1:20 of female vs. male-perpetrated abuse, this estimate equates to sizeable numbers of victims and offenders in need of clinical intervention.

Characteristics

Research suggests that female sexual offenders—like any group of offenders—represent a diverse group of individuals with heterogeneous treatment needs (Adshead et al., 1994; Gannon, Rose, & Ward, 2008; Miccio-Fonseca, 2000; Sandler & Freeman, 2007; Vandiver & Kercher, 2004). Nevertheless, as will become apparent later in this chapter, the majority of research efforts have focused not on the treatment needs of female sexual offenders but more on socio-demographic and offense characteristics relevant for typological classification of female sexual offenders. In the following section, we outline current evidence regarding the socio-demographic, developmental, and offense features of female sexual offenders. Given the biases that we have raised concerning the potential extent of underreporting surrounding female-perpetrated sexual abuse, caution should be taken when interpreting information pertaining to female sexual offenders' core characteristics. Just like with male sexual offenders, such characteristics are only relevant for those female sexual offenders who have already come to the attention of the criminal justice system.

Socio-Demographic Features

Some researchers have reported findings suggesting that female sexual offenders are generally younger than their male counterparts (Faller, 1987, 1995). For example, Faller (1987) found that, relative to a clinical sample of male child sexual offenders, female child sexual offenders were significantly younger (26.1 years versus 35.8 years, respectively). It is unclear why apprehended females would be younger in age relative to males but one explanation is that females—who are more likely to co-offend—are coerced into their offending by older and more experienced males (see Faller, 1987). In terms of ethnic origins, apprehended female sexual offenders—similarly to male sexual offenders—are generally reported as being Caucasian (Faller, 1987, 1995; Lewis & Stanley, 2000; Vandiver, 2006; Vandiver & Kercher, 2004). Research evidence suggests that female sexual offenders generally hold few educational or vocational qualifications (Matravers, 2005; Nathan & Ward, 2001; Tardif, Auclair, Jacob, & Carpentier, 2005), fit within low or middle socio-economic status categories (Lewis & Stanley, 2000; Travin, Cullen, & Protter, 1990), and are significantly less financially secure than their male counterparts (Allen, 1991).

Developmental Features

Female sexual offenders, like male sexual offenders, appear to experience adverse developmental experiences characterized by physical, sexual, or emotional abuse and neglect (Fromuth & Conn, 1997; Gannon et al., 2008; Green & Kaplan, 1994; Hislop, 2001; Lewis & Stanley, 2000; McCarty, 1986; Nathan & Ward, 2001). For example, Gannon et al. (2008) found that half of their sample of UK females apprehended for sexual offenses ($n = 11$) reported *multiple* abusive experiences in childhood (e.g., sexual *and* physical abuse or physical *and* emotional abuse). Similarly, Lewis and Stanley (2000) found that 80 % of females charged with sexual assault ($n = 12$) reported past sexual abuse experiences, typically perpetrated by a caregiver. Research suggests that female sexual offenders experience abuse that is both more frequent and severe than that reported by male sexual offenders (Allen, 1991; Mathews, Hunter, & Vuz, 1997; Pothast & Allen, 1994). It is unclear, however, how such abusive experiences lead females to sexually offend. Recent research suggests that female sexual offenders—relative to female offender controls—show a strong tendency to view adult males as dangerous (Gannon & Rose, 2009). It is possible that early abusive experiences at the hands of males may play a role in the development of passive and dependent personality traits that leave such women vulnerable to potential coercion and grooming from male sexual offenders. Of course, there are many etiological pathways that require exploration concerning the association between childhood abuse and sexual abuse perpetrated by adult females.

Other Associated Features

Unsurprisingly given the severe developmental adversities experienced by female sexual offenders, many researchers have reported that female sexual offenders exhibit emotional dependency and passivity (Green & Kaplan, 1994; Hislop, 2001), low self-esteem (Hunter & Mathews, 1997; Mathews, Matthews, & Speltz, 1989), inadequate social skills (Hislop, 2001), poor self-identity (Green & Kaplan, 1994; Hislop, 2001; Mathews et al., 1989), and fear of men (Beech, Parrett, Ward, & Fisher, 2009; Gannon, Hoare, Rose, & Parrett, 2012; Gannon & Rose, 2009). Research also suggests that female sexual offenders have a high rate of mental health disturbances in the form of depression, bipolar disorder, schizophrenia, or personality disorder (Faller, 1995; Green & Kaplan, 1994; O'Connor, 1987; Tardif et al., 2005). However, the association between mental illness and female sexual offending is a contentious issue since (1) it is likely that only the most pathological female sexual offenders are apprehended by the authorities, and (2) current study sampling

techniques (i.e., lack of suitable comparison groups or inappropriate recruitment methods) make it impossible to come to valid conclusions about the true relationship between mental illness and female sexual offending.

Offending Characteristics

Perhaps the most noteworthy feature of female sexual offenders, particularly those who target children, compared to their male counterparts, is their propensity to offend in the company of a co-offender (Grayston & De Luca, 1999; Green & Kaplan, 1994; Matravers, 2005; Nathan & Ward, 2001; Vandiver, 2006). Typically, females who co-offend do so with a male partner (Lewis & Stanley, 2000; Vandiver, 2006), although female co-offenders are also found. For example, in her comparison of solo ($N=123$) and co-offenders ($N=104$), Vandiver (2006) found that while 71 % had male co-offenders, another 21 % ($n=22$) had both male and female co-offenders, and 8 % ($n=8$) had sexually offended only in company of other females. Females who have co-offenders may offend of their own volition alongside the co-offender, or they may offend in the context of considerable coercion and physical threats of violence (Gannon et al., 2008; Vandiver, 2006).

Similarly to male sexual offenders, females who sexually abuse usually know their victims (Faller, 1995; Kercher & McShane, 1984; Vandiver & Kercher, 2004; Vandiver & Walker, 2002). For example, females who abuse children typically hold caregiver responsibilities towards that child (e.g., mothers, relatives, or babysitters; Faller, 1987, 1995; Lewis & Stanley, 2000; Vandiver & Walker, 2002). Females who sexually abuse children are also likely to target younger children than their male counterparts (Faller, 1987; Rudin, Zalweski, & Bodmer-Turner, 1995). For example, Faller (1987) found that nearly two-thirds (or 60.3 %) of female child sexual offenders' victims were below the age of 6 years. Comparable figures for male child sexual offenders were just 48 %. Although results vary according to studies, it appears that solo offenders tend to assault a greater proportion of males, while those with male co-offenders tend to have more female victims (e.g., Vandiver, 2006). In terms of physical force and aggression used in the commission of the offense, some researchers have argued that females are less physically aggressive than males (see Grayston & De Luca, 1999). However, other researchers have not supported this contention (Mathews et al., 1997).

Typologies of Female Sexual Offenders

There is very little research or theory available to aid professionals entrusted with the task of rehabilitating female sexual offenders. Because of this, professionals have focused their attention on developing typologies that attempt to reduce the confusing heterogeneity of female sexual offenders into more manageable subcategories (Adshead et al., 1994; Faller, 1987; Hines & Finkelhor, 2007; Mathews et al., 1989; Matthews, Mathews, & Speltz, 1991; Nathan & Ward, 2001; Sandler & Freeman, 2007; Syed & Williams, 1996; Vandiver & Kercher, 2004). Such typologies are typically based on offense, offender, or victim characteristics, and/or attendant hypothesized motivational factors.

Ruth Mathews and her colleagues (1989, 1991) were the first researchers to document a typological description of female sexual offenders. Using qualitative and quantitative information (e.g., interview and questionnaire data), Mathews et al. (1989) subdivided 16 female sexual offenders into three main categories according to the hypothesized fundamental motivators driving their sexual offenses. These categories described female sexual offenders as either being *predisposed and intergenerational* (i.e., females with previous sexual abuse experiences who independently replicate this abuse as adults), *teacher/lover* (i.e., females who abuse adolescents and seemingly view this abuse as an adult like relationship or "affair"), and *male-coerced* (i.e., passive or dependant females who abuse children under direct coercion, pressure, or threats from a male co-offender). It should be noted that previous to this typology, Mathews (1987, as cited in Mathews et al., 1989) highlighted the important distinction to be made between women who are pressured into abusing children (as described by the coerced type) and those who play a more active or equal role in the abuse, yet abuse in the company of a man (*male-accompanied* female sexual offenders).

Since presentation of this basic typological distinction of female sexual offenders, researchers have suggested various refinements and additions to this original typology (e.g., Hines & Finkelhor, 2007; Nathan & Ward, 2001) or have presented very similar typologies (Adshead et al., 1994). However, the majority of these stem from clinical observations or experiences and there are few empirical validation efforts.

In one Canadian validation study, Syed and Williams (1996) examined the fit between Mathews et al. (1989) typology and the file profiles of 19 female child sexual offenders. Because some file information was inadequate for making definitive classifications only 11 final classifications were made, the majority of which fell into the *male coerced* subcategory ($n=9$). However, Syed and Williams observed that many of these females ($n=5$) played a key or lead role in the sexually abusive behavior; seemingly supporting the earlier *coerced* versus *accompanied* distinction proposed by Mathews (1987 - cited in Mathews et al. 1989). Thus, Syed and Williams' work highlighted the need to carefully examine the underlying motives and characteristics of females who sexually abuse in the company of males.

A more robust approach to the typological classification of female sexual offenders was recently conducted by

Vandiver and Kercher (2004). Using the offender and victim profiles of all registered female sexual offenders in Texas over a 7-year period ($n=471$),[1] Vandiver and Kercher conducted a combination of loglinear modeling and cluster analyses to reveal six subtypes of female sexual offenders. The largest group discovered were labeled *heterosexual nurturers* ($n=146$) who appeared similar to the teacher-lover females identified by Mathews et al. (1989). The *noncriminal homosexual offenders* ($n=114$) represented females with little criminal history who tended to target female children. The *female sexual predators* ($n=112$) tended to target male children and were notably "criminal" relative to other subtypes. The *young adult child exploiters* ($n=50$) tended to target extremely young victims—sometimes family members—of either sex. The *homosexual criminal* subtype ($n=22$) tended to have generally criminal profiles, and offended against females, often in an attempt to profit financially (e.g., forced prostitution). Finally, *aggressive homosexual offenders* ($n=17$) represented the smallest group of women who were most likely to target adult female victims.

Vandiver and Kercher (2004) have provided professionals with one of the most convincing empirically based typological classification of female sexual offenders to date. However, one key limitation of their study is the fact that they were unable to acquire co-offender information for the female sexual offenders that they classified. In other words, it is unclear how many of the females categorized acted alone or in the company of males. Another key limitation is the inclusion of prostitution-related offenses such as forcing someone into prostitution as "sexual offenses" (an artifact of the State of Texas registration law, but common to many American states [Jeff Sandler, personal communication, June 11, 2009]), therefore blurring the definition of what constitutes "sexual offending" among women.

Sandler and Freeman (2007) recently attempted a replication of Vandiver and Kercher's findings using a sample of New York registered female sexual offenders ($n=390$) similar on core age, race, and victim age variables. Victim sex did, however, differ across the samples. It should also be noted that Vandiver and Kercher's offenders targeted nearly equivalent amounts of male and female victims. However, Sandler and Freeman's sample showed a preponderance of male victims. Thus, it was not possible to entirely replicate the characteristics of Vandiver and Kercher's sample, and missing data regarding victim–offender associations compounded this issue further. Statistical analyses similar to that used by Vandiver and Kercher indicated six subtypes of female sexual offender (two of which appeared similar to Vandiver and Kercher's original clusters). The largest group discovered were *criminally limited hebephiles* ($n=158$) who exhibited features similar to Vandiver and Kercher's heterosexual nurturers. The second largest group discovered were *criminally prone hebephiles* ($n=105$) who were similar to criminally limited hebephiles but—as the name suggests—were generally more criminal. *Young adult child molesters* ($n=27$) were the only other group who appeared similar to Vandiver and Kercher's typology. These females exhibited characteristics similar to young adult child exploiters since they tended to target very young children. The fourth largest cluster found were labeled *high risk chronic offenders* ($n=25$) since they exhibited considerable levels of arrests for sexual or nonsexual offenses. The next largest cluster—*older non-habitual offenders ($n=20$)* were the oldest group of offenders who showed relatively few criminal tendencies outside of their sexual offending. Finally, a small *homosexual child molester* cluster was noted ($n=11$) who showed a marked tendency to target females, yet were characterized by relatively crime free backgrounds similar to that displayed by the *non-habitual offenders*.

A major limitation of Sandler and Freeman's (2007) study, similarly to Vandiver and Kercher's (2004), is the lack of available information concerning co-offenders. The absence of this information significantly limits the usefulness of this taxonomy for providing guidance on the types of treatments required for specific types of female sexual offender. It is also possible that inclusion of co-offender influences as a variable would have impacted on and altered the final cluster groupings.

In summary, the typological classification systems that we have described offer professionals who work with female sexual offenders a very broad view of the main categories of females who sexually abuse [i.e., females who target adolescents, females who offend in the company of males (at times coerced, at other times not), females who target prepubescent children, and females who sexually offend in the context of a diverse criminal career]. However, such typological classifications offer professionals little in the way of specific guidance for the assessment and treatment of these women.

Theoretical Developments

Unfortunately, there are no comprehensive multifactorial theories available to explain the etiology of female-perpetrated sexual abuse. It is unclear exactly why existing theory relating to female sexual offenders is so underdeveloped. Presumably, theory development has been significantly obstructed by a lack of rigorous empirical research conducted with female sexual offenders. Thus, professionals' knowledge of why females sexually offend and of their associated treatment needs lags significantly behind professionals' knowledge of male sexual offenders. Recently, Gannon and colleagues (Gannon et al., 2008; Gannon, Rose, & Ward, 2010) sought to rectify this situation via

[1] Including offenders with child and/or adult victims.

construction of an *offense chain theory* of female sexual offending. Offense chain theory, put simply, involves developing a detailed theoretical description of the sequence of events leading up to a sexual offense using offenders' offense narratives (i.e., inductive theory development using qualitative data analysis). This method has been used successfully with male sexual offenders, and is particularly useful for highlighting not only *how* and *why* the offense process unfolds but also particular *patterns* of sexual offending relevant for relapse prevention work (see Ward, Louden, Hudson, & Marshall, 1995).

Gannon et al. (2008) developed an offense chain model—the Descriptive Model of the Offense Process for Female Sexual Offenders (or DMFSO)—from the offense narratives of 22 UK female sexual offenders who had offended against children and/or adults. The resultant DMFSO shows the lifetime sequence of contextual, behavioral, cognitive, and affective events that facilitate and maintain female-perpetrated sexual abuse. Following DMFSO development, two raters independently examined each female offender's progression throughout the model to identify any specific patterns or evidence of offender subtypes who progressed through the model via distinct pathways. Gannon et al. found evidence that female sexual offenders followed one of two main pathways. *Directed-Avoidant* females were typically child sexual abusers who were characterized by sexual offense avoidance and negative affect; they offended either out of extreme fear for their lives or because they wanted to obtain intimacy with their male co-offender. These females were often oblivious to, or passive to, the early planning of child sexual abuse initiated by the male co-offender. *Explicit-Approach* females, on the other hand, were either child or adult abusers and appeared to explicitly plan their offense in order to achieve various goals (e.g., sexual gratification, intimacy with victim, financial reward). These females experienced positive affect (e.g., excitement) in anticipation of their offense. Gannon et al. (2008) also noted tentative evidence for an *Implicit-Disorganized* female subtype who offended against either children or adults and appeared to be characterized by little organized planning and sudden and disorganized offending associated with either negative or positive affect.

A core strength of the DMFSO lies in its potential to account for various subtypes of female sexual offender without grouping females according to simplistic motivational themes or victim characteristics. Thus, there is some potential for the DMFSO to guide not only relapse prevention work with offenders but also the formulation of key treatment plans for each subtype of offender. Nevertheless, this model has been constructed from the experiences of very few UK female sexual offenders and requires further external validation before any of the identified subtypes can be examined in more detail.

Assessment of Female Sexual Offenders

Recidivism Rates Among Female Sexual Offenders

While tremendous advances have taken place in understanding the recidivism rates of male sexual offenders (e.g., Hanson & Morton-Bourgon, 2005), similar knowledge is only starting to accumulate for female sexual offenders. In an initial review of the recidivism rates of 380 female sexual offenders, Cortoni and Hanson (2005) found a sexual recidivism rate of 1 % with a 5-year follow-up period. As with male sexual offenders, female sexual offenders also demonstrated other types of re-offending. Specifically, 6 % of the women had committed a new violent (including sexual) offense and 20 % had committed a new crime. The number of female offenders included in that review, however, was small and a number of large sample studies have appeared since that review was completed. As well, Cortoni and Hanson (2005) did not provide a meta-analytic summary of recidivism rates; it was therefore impossible to know whether the variability across studies was significant. Consequently, Cortoni, Hanson, and Coache (2010) conducted an updated meta-analytic review of the recidivism rates of female sexual offenders.

Cortoni et al. (2010) analzsed the results from a total of 10 recidivism studies with an aggregated total number of 2,490 female sexual offenders. These studies included two published papers, four conference presentations, one government report, and three official sources of recidivism data. The average follow-up time was 6.5 years. Recidivism was defined as being charged, convicted, or incarcerated for a new offense. Sexual recidivism included a new charge, conviction, or reincarceration for a sexual offense. Violent recidivism was defined as a new violent charge, conviction, or incarceration for a new violent offense (including sexual offenses). Any recidivism was defined as any new charge, conviction, or incarceration, all categories confounded. Consequently, and consistent with research on the recidivism rates of male sexual offenders, the categories of recidivism were cumulative rather than mutually exclusive.

The analyses revealed more variability across studies than expected by chance, with one study identified as the outlier (Vandiver, 2007). The finding that Vandiver's (2007) study was a consistent outlier in the analyses of sexual recidivism rates is not surprising. In her study, Vandiver counted as sexual recidivism any offense that led to the registration of the woman as a sexual offender, as defined by the State of Texas (D. Vandiver, personal communication, October 14, 2008). As a result, sexual recidivism in Vandiver's study included behaviors that are not typically counted as sexual offenses in the male sexual offender

recidivism studies (e.g., compelling prostitution; kidnapping; court or board ordered registration), thereby likely artificially inflating the rate of sexual recidivism among the female sexual offenders. For example, although the female sexual offenders had sexual recidivism rates virtually identical as the male sexual offenders in the study (10.8 % vs. 11.4 %; an anomaly by itself since research consistently shows that *all* women offenders have lower rates of recidivism than males; Blanchette & Brown, 2006), only the female offenders had offenses related to prostitution. It is also possible that the recidivism rates in the Vandiver study included instances of pseudo-recidivism (Harris, Phenix, Hanson, & Thornton, 2003). Pseudo-recidivism occurs when a currently convicted offender receives new additional sexual offenses convictions but for offenses that temporally took place before the current offenses (Harris et al., 2003).

Given the variability among studies created by the Vandiver (2007) study, Cortoni et al. (2010) analyzed the recidivism rates of female sexual offenders with and without the results from Vandiver. When data were analyzed with the Vandiver study, the weighted observed sexual recidivism rate for all 10 studies was 3.2 % and fixed and random effects analyses showed aggregated estimates of sexual recidivism ranging from 1.2 % to 2.4 %. The rate of any violent recidivism (including sexual) was 6.5 % and fixed and random effects analyses showed aggregated estimates of violent recidivism ranging from 4.4 % to 7.6 %. Finally, the rate of any recidivism (including violent and sexual) across all studies was 24.5 %. Fixed and random effects estimates of any recidivism ranged between 22 % and 24 %. However, when the data were reanalyzed without the Vandiver study, the variability across studies disappeared and the aggregated estimates of recidivism dropped significantly. Specifically, weighted averages computed without the Vandiver study showed a sexual recidivism rate of 1.3 %. Violent recidivism was 4.3 % and the rate of any recidivism was 20 %.

The recidivism rates of female sexual offenders need to be put in context of those of males. Meta-analyses of large samples of male sexual offenders show that the 5-year recidivism rates for male sexual offenders are 13–14 % for sexual crimes, 25 % for any violent crime (including sexual offending), and 36–37 % for any new crime (Hanson & Bussière, 1998; Hanson & Morton-Bourgon, 2005). Not surprisingly, Cortoni and Hanson (2005) noted in their earlier review that the differences between the recidivism rates for the male and female sexual offenders were statistically significant for all types of recidivism, confirming that female sexual offenders have much lower rates of all types of recidivism than male sexual offenders. Their updated meta-analytical review confirmed that the rates of all types of recidivism among female sexual offenders are indeed significantly lower than those of males.

Assessing Risk of Recidivism

Static Risk Factors

Just like with male offenders, the assessment of risk among female sexual offenders needs to take into consideration both static and dynamic risk factors. Among male offenders, static risk factors for general and violent (nonsexual) recidivism include being at a younger age, being single, and having a history of lifestyle instability, rule violations, and prior criminal history (Andrews & Bonta, 2007; Hanson & Morton-Bourgon, 2005). Static factors specifically related to sexual recidivism include prior sexual offenses and having male, stranger, and/or unrelated victims (Hanson & Thornton, 2000).

Despite the low recidivism rates among female sexual offenders, the recidivism research on these women now contains sufficiently large numbers to permit tentative conclusions about some of their static risk factors. First, just like with males, research with female sexual offenders suggests that a prior criminal history is also indicative of a *higher* risk of recidivism among women. In her follow-up of 471 women, Vandiver (2007) found that the number of prior convictions for any type of offense predicted rearrest for new general and violent offenses. Vandiver could not, however, establish any factor that specifically predicted new sexual offenses among the women in her sample.

Freeman and Sandler (2008a) also established a number of characteristics that differentiated women who committed new crimes from those who did not. In their study of 390 female sexual offenders registered in the State of New York, Freeman and Sandler (2008a) noted that as with the Vandiver (2007) study, a prior criminal history was related to recidivism. Specifically, the number of prior drug offense arrests; the number of prior violent offense arrests; the number of prior incarceration terms; and being younger at arrest for the index sexual offense were related to a rearrest for new general (i.e., nonsexual and nonviolent) offenses. In addition though, Freeman and Sandler (2008b) found that a high risk (as assessed by the New York State risk assessment system), the number of prior arrests for sexual offenses, and interestingly, the number of prior child abuse offenses (of any type) were specifically related to sexual recidivism among the women in their sample.

The finding that prior criminal history is related to future recidivism among female sexual offenders is not surprising. This finding holds true for all types of offenders, whether males or females (Andrews & Bonta, 2007; Blanchette & Brown, 2006). The finding by Freeman and Sandler (2008b) that prior child abuse (nonsexual) offenses were related to sexual recidivism appears, however, unique to women. Perhaps because women tend to be the primary caregivers, they are more likely than men to come to the attention of the criminal justice system for nonsexual abuse of children.

Alternatively, it could be that the sexual abuse of children, for these women, is part of a broader pattern of abuse against children. Future research should investigate this specific question as it may provide some clues about the factors that lead to sexual molestation by women.

A final, albeit extremely limited, interesting finding comes from Williams and Nicholaichuk (2001)'s follow-up of 61 female sexual offenders incarcerated in Canada between 1972 and 1998. In their detailed analysis, these authors found that the two sexual recidivists in their study were the only ones who had exclusively engaged in solo offending. This particular finding is noteworthy and may serve as an important risk marker for sexual recidivism among women, but it requires additional validation. Unfortunately, the presence of a co-offender did not appear to have been explicitly examined by Vandiver (2007) or Freeman and Sandler (2008a), rendering any direct comparison of this factor among these different samples difficult. Future research should attend to this issue.

Dynamic Risk Factors

Dynamic risk factors are those aspects of the offender that are amenable to change and that are directly related to the offending behavior (Hanson, 2006). Although dynamic risk factors are very well established for male sexual offenders, the situation is completely different for females who have sexually offended. To date, no research has established the dynamic risk factors related to recidivism, sexual or otherwise, among these women. Consequently, at this point, the assessment of risk of *sexual* recidivism among women can only be based on the elements that appear common among female sexual offenders and that are revealed through the examination of the offending patterns of these women. Clinical research suggests that relationship problems, attitudes, and cognitions that support the offending behavior, the use of sex to regulate emotional states, and emotional dysregulation problems are common among female sexual offenders (Eldridge & Saradjian, 2000; Grayston & De Luca, 1999; Nathan & Ward, 2002). Sexual gratification, a desire for intimacy (with either a victim or a codefendant), or instrumental goals such as revenge or humiliation are also associated with female sexual offending (Gannon et al., 2008). Finally, as female sexual offenders, just like their male counterparts, also engage in other criminal behavior, factors such as the presence and extent of antisocial attitudes, antisocial associates, and substance abuse as a precursor to the offending behavior should also be considered in the assessment (Ford & Cortoni, 2008).

Problematic relationships appear particularly relevant for female sexual offenders. As discussed earlier in this chapter, an element unique to female sexual offenders is the frequent presence of a co-offender. Of the women who have a co-offender, a subgroup is clearly identified as having been coerced into the offending, typically by a male, while another subgroup of offenders co-offend willingly. In addition, some women will actually be the initiators of the offending behavior or co-offend with another woman. From these findings, the role of the co-offender needs to be carefully assessed to determine the full extent of the woman's willingness to participate in the abuse. Different issues are likely to emerge if the woman was coerced into the abuse, as opposed to being a willing participant or an initiator. For example, a coerced offender may demonstrate significant deficits in assertiveness and an exaggerated dependence on her co-offender. In addition, women with co-offenders may hold gender-specific cognitions, likely related to their own experiences as well as social-cultural norms, which view men as entitled to control others (Gannon, Hoare et al., in press). In the context of the assessment, an in-depth examination of the elements that motivated the offender to co-offend and her current views of the offending behavior will be enlightening.

An interesting finding from Wijkman and Bijleveld (2008) bears discussion. These authors coded all recorded sexual offenses in the history of a subset of female sexual offenders in the Netherlands ($N = 111$). Using Cox regression analyses, they found that the presence of a prior violent partner, a history of having been physically abused, and having been bullied while at school were related to the number of sexual offenses committed by these women. Similarly, in their examination of the offense process of female sexual offenders, Gannon et al. (2008) found that practical and emotional support from family and friends were lacking in all cases, and that they were frequent victims of domestic violence. These elements, taken together, suggest that the presence of intimacy deficits and problematic relationships are important aspects to sexual offending by women.

Research results suggest that the nature of problematic relationships may be quite different for female sexual offenders in contrast to males. Among male sexual offenders, intimacy deficits tend to manifest themselves through some form of emotional identification with children, instability in his current intimate relationship, hostility toward women, general social rejection/loneliness, and a general lack of concern for others (Hanson, Harris, Scott, & Helmus, 2007). In contrast, female sexual offenders appear to exhibit a pattern of relationships characterized by abuse on the part of the partner (Gannon et al., 2008; Wijkman & Bijleveld, 2008) as well as excessive dependence or over-reliance on the men in their lives (Eldridge & Saradjian, 2000; Grayston & De Luca, 1999; Matthews, 1993). Perhaps this finding is not surprising given that female sexual offenders tend to have much more extensive histories of sexual victimization themselves in comparison to other offender populations (Johansson-Love & Fremouw, 2006). The accumulation of findings on the relationship problems of female sexual offenders indicate that not only are the presence and dynamics of the relationship with the co-offender important components of the evaluation

of female sexual offenders but also the general quality of their social and familial support.

As mentioned above, a victimization history is likely related to relationship problems. In contrast to males, past victimization is related to future recidivism among general female offenders (Blanchette & Brown, 2006). Among female sexual offenders, a past history of physical, emotional, or sexual victimization may therefore be linked to the woman's sexually offending behavior. If sexual victimization is present, it is important, however, to not assume it is the cause of her sexual offenses. Research has shown that only a proportion of female sexual offenders were themselves sexually victimized (e.g., Wiegel, Abel, & Jordan, 2003), and it is highly unlikely that victimization is the main reason why the woman chose to sexually abuse. Rather, a history of past victimization (sexual or otherwise) is more likely to be related to the offending behavior via dysfunctional patterns of relating to others, as well as patterns of coping, that the woman developed as a result of the victimization (Ford & Cortoni, 2008).

Compared to their rates of sexual recidivism, female sexual offenders have much higher rates of nonsexual recidivism. Although research is required to investigate this issue further, it is likely that female sexual offenders also demonstrate characteristics linked to offending among female offenders in general. These characteristics include antisocial attitudes and associates, substance abuse as precursor to offending, and emotional dyscontrol (Blanchette, 2001). Some women who engage in sexually deviant behavior do present with egocentric or antisocial features (Grayston & De Luca, 1999; Nathan & Ward, 2002), indicating that for at least a portion of female sexual offenders, the antisociality factor commonly found among male sexual offenders is also present. The extent to which antisociality plays a role in sexual offending among women, however, remains an open question.

A Final Note on the Risk Assessment of Female Sexual Offenders

The lower recidivism rates of female sexual offenders have, to date, precluded the development of risk assessment tools specifically for these women. Due to the lack of knowledge on female sexual offenders, many jurisdictions have adopted risk tools for male sexual offenders (e.g., Static-99, Hanson & Thornton, 2000) to assess female sexual offenders. Because tools for male sexual offenders have not been validated for women, using these tools to assess risk of recidivism among female sexual offenders is inappropriate. Instead, since general (i.e., nonsexual) recidivism is much more common among female sexual offenders than sexual recidivism, evaluators should consider the use of tools validated to assess risk of general and violent (nonsexual) recidivism among female offenders (e.g., LSI-R, Andrews & Bonta, 1995).

The use of general risk assessment tools, however, require an understanding of the research on risk factors and recidivism among female offenders in general; as noted earlier, these issues differ according to the gender of the offender (e.g., Blanchette & Brown, 2006; Folsom & Atkinson, 2007; Holtfreter & Cupp, 2007; Manchak, Skeem, Douglas, & Siranosian, 2009). Until sufficient knowledge has accumulated to permit the development of appropriate risk assessment tools specifically for female sexual offenders, the approach to their assessment should consists of a combination of a risk tool validated for women to assess their general risk of recidivism and an empirically guided clinical judgment of the extent and combination of the specific factors related to the sexual offending behavior to separately assess potential likelihood of *sexual* recidivism. Psychometric tools such as the Clarke Sexual History Questionnaire (Paitich, Langevin, Freeman, Mann, & Handy, 1977) and the adult female form of the Multiphasic Sex Inventory II (MSI-II) (Nichols & Molinder, 1994) may be useful adjuncts to this assessment. Should evaluators choose to use such tools, however, they would need to be cognizant of their limits: these were developed and validated mostly on male sexual offenders; very little female norms are available (Ford & Cortoni, 2008). Ultimately, regardless of the method used to assess risk in female sexual offenders, evaluators would do well to always remember that the base rate of sexual recidivism among women is extremely low. Therefore, they should carefully frame their reporting of risk levels within that context (see Babchishin & Hanson, 2009 for recommendations on this issue).

Treatment of Female Sexual Offenders

Treatment

Until we gain a better empirical understanding of the factors that explain sexual abuse by women, treatment efforts remain tentative in that we do not know whether current treatment practices truly address the relevant elements that led to the sexually abusive behavior. Overall, the main goals of treatment should be to address the factors related to the offending, understand the needs that are fulfilled by the sexually abusive behavior, and to develop alternate positive ways to meet those needs. Generally, treatment should focus on five broad areas that include cognitive and emotional processes; intimacy and relationship issues; sexual dynamics; and social functioning (see Denov and Cortoni (2006) and Ford and Cortoni (2008) for in-depth discussions of these issues). The specific work in treatment, however, will be guided by the woman's individual problems within those areas.

To date, a number of approaches have been suggested and a number of treatment programs developed for the treatment of

female sexual offenders (e.g., Correctional Service Canada, 2001; Eldridge & Saradjian, 2000; Steen, 2006). Typically, these approaches adopt a cognitive-behavioral orientation and tend to follow the typical design for the treatment of men. For example, denial and minimization of the offending behavior; distorted cognitions about the sexual offenses; attitudes that condone sexual abuse; intimacy deficits; and the use of sex to regulate emotional states or to fulfil dependence or intimacy needs (Eldridge & Saradjian, 2000), and the development of an offense chain and relapse prevention plan (Steen, 2006) are commonly found in these approaches.

The problem with offering treatment to women based on male models is that it fails to consider how at least some of the elements related to sexual offending are different for women. For example, common to both male and female sexual offenders are denial and minimization of the offending behavior. After female sexual offenders acknowledge their sexual offending behavior, however, they tend to show much less minimization of their behavior than males (Matthews, 1993). Another example of these differences is the presence of a co-offender, a factor not typically found in men. Further, the patterns of cognitive distortions of women with a co-offender are different. For example, many women who co-offended with their partner tend to wrongly take responsibility for the deviant behavior of their offending partners (Matthews, 1993), or even maintain outright denial of the behavior if they are still romantically involved with him (Ford & Cortoni, 2008). Finally, while male sexual offenders tend to disregard the importance of relationships, female sexual offenders instead tend to give them an exaggerated importance, often due to their dependency issues (Eldridge & Saradjian, 2000).

The broad application of male models to the treatment of women means that gender-specific issues are also neglected in treatment. This is particularly relevant when female sexual offenders are required to attend mixed gender treatment groups: women with previous trauma histories, often at the hand of males (Gannon et al., 2008), may find it traumatic to be in treatment with male abusers and may not feel safe to share their innermost thoughts with them. In the general criminological literature, it is generally recognized that the treatment of female offenders needs to take into account women's specific communication styles and relational issues (Blanchette & Brown, 2006; Young, 1993). For example, contrary to popular beliefs, in groups, men talk more and interrupt more than women (DeLange, 1995). Further, men and women tend to listen for different things: men listen for the "bottom line" in order to take action; women listen for details (DeLange, 1995). As another example of differences between men and women, while all offenders require community support, in contrast to men, women tend to be in more need of extensive supportive social networks as these are an important part of their ability to deal with stress (Rumgay, 2004). Similarly, women typically require more extensive support to improve their general community functioning, particularly when the focus is on their ability to develop and maintain a more stable life with less dependence on others.

Conclusion

This chapter has reviewed our current knowledge on female sexual offenders. There is yet much to be learned about women who engage in sexually offending behavior. While the true prevalence of female sexual offending is difficult to ascertain, it is clear that they commit only a fraction of all sexual offenses. Nevertheless, attention must be paid to this population as the effects on victims are just as pervasive as they are for those who are victimized by men (Denov & Cortoni, 2006). Much work remains to be done to better understand the etiological factors that are related to sexual offending among women.

As seen in this chapter, research has now shown quite clearly that female sexual offenders have much lower rates of any types of offending and tend to re-offend sexually or otherwise at much lower rates than males. Further, while a prior criminal history is related to general recidivism among female sexual offenders, a number of risk factors related to recidivism in male sexual offenders have not be found in women, rendering the use of assessment tools validated for males invalid for women. Although female sexual offenders do appear to share some of the same characteristics as male offenders, some important differences must be taken into account when assessing and treating women offenders. Among others, a large portion of women who sexually abuse do so in company of a co-offender, typically a male. Consequently, the context in which the offenses took place in interaction with the woman's life needs to be examined. Women's lives and their societal experiences differ from those of men and their experiences will influence both their criminal behavior and their rehabilitation (Blanchette & Brown, 2006). Given these differences, it is clear that current knowledge on male sexual offenders cannot simply be extended to female sexual offenders and that much research is yet required to improve our understanding of why women engage in sexually offending behavior.

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Part II

Assessment and Risk Appraisal of Sexual Offenders

Assessment, Diagnosis, and Risk Management of Sexual Offenders with Intellectual Disabilities

Gerry D. Blasingame

Persons with intellectual disabilities represent a unique and important subgroup of sexual offenders. There is evidence that such individuals commit sexual offenses at rates higher than sex offenders without intellectual disadvantage or delay. Available research indicates that there are both important similarities and differences between the sex offender with intellectual disability and other neurotypical sex offenders. As a result, there can be complex issues associated with assessment, diagnosis, and risk management with persons with intellectual disabilities who have sexually offended. The purpose of this chapter is to discuss characteristics associated with intellectual disabilities and those who have sexually offended, address modifications needed in the assessment process including adapting interviewing and testing techniques and procedures selected for lower cognitive levels of functioning. In addition, issues related to comorbid psychiatric and psychological conditions and, more broadly, diagnostic challenges are addressed. The applications of actuarial risk assessment, as well as other approaches to risk assessment, are considered relative to offenders with intellectual disabilities. Finally, evidence-based interventions are considered, including both those designed to assist the offender-client in reducing his own risk and interventions to assist persons in the offenders' "risk management circle."

A primary area of concern for evaluators and treatment providers working with sexual offenders who have intellectual or other developmental disabilities is that of risk of reoffense. Evaluators are also concerned with other forms of aggression, mental health diagnosis, and treatment planning. Evaluating sexual offenders typically entails evaluating the degree of risk of *what behavior* occurring under *what circumstances* or contexts. Evaluators attempt to discern what the individual's needs are and how those relate to his potential for reoffense. Finally, evaluators also look into how to implement treatment and supervision in order to gain the maximum therapeutic benefit for both the individual being treated and the people in the individuals' proximity.

Unfortunately, no singular characteristic or trait is so strongly correlated with reoffense that it alone can be relied upon to ascertain an individual person's risk of sexual reoffense (Hanson & Morton-Bourgon, 2007). This makes comprehensive, holistic assessments necessary (Beech, Fisher, & Thornton, 2003; Blasingame, 2005). This is true for neurotypical as well as intellectually disabled sexual offenders.

Definitions and Characteristics Associated with Sexual Offenders with Intellectual Disabilities

Researchers unfortunately do not always use the same criteria or definition of intellectual disability or cognitive impairment. Some studies include individuals with full-scale IQs up to 80, while other studies do not (Crocker, Cote, Toupin, & St-Onge, 2007; Lindsay, Hastings, Griffiths, & Hayes, 2007). It is commonly understood that two individuals with the same FSIQ score will have different strengths and weaknesses. Clinicians often take liberties regarding which clients they describe as developmentally or learning disabled. This affects how they manage treatment planning for various individuals, based on the effects of chronic mental illnesses, general learning disabilities, borderline intellectual functioning, and illiteracy. However, with these diverse levels of cognitive abilities in different studies, it makes it difficult to compare various studies and findings.

For the purposes of this chapter, persons whose full-scale intellectual quotient (FSIQ) is 70 or below are considered to be intellectually disabled and those whose FSIQ is 71–84 are characterized by "borderline" intellectual functioning (APA, 2000). Borderline intellectual functioning implies the person is on the border between normal cognitive functioning and

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mental retardation. Many persons with borderline intellectual functioning appear to function in the normal range in some skill areas or may present as if they understand an evaluator's vocabulary or meanings of words that they actually don't understand. Upon further questioning, however, individuals with borderline intellectual functioning often demonstrate a lack of understanding and a tendency to acquiesce as if they understand when they do not. This may undermine assessment accuracy if not attended to or if measurement tools used do not consider this. Evaluators often recognize that many individuals whose FSIQ is between 71 and 84 would more readily benefit from assessment and treatment approaches similar to those commonly used for persons with intellectual disabilities.

By definition, intellectual disabilities (previously known as mental retardation in the USA and often referred to as learning disabled in the UK) have their onset before the age of 18 (APA, 2000). They have ongoing, lifelong effects on the individual. Having cognitive functioning two standard deviations below the mean of the population as well as functional impairment in two or more adaptive skills domains is an element of the formal APA diagnostic criteria.

Intellectual disabilities are themselves heterogeneous conditions. Two primary pathways are commonly identified as influential in development or appearance of intellectual disability. One is related to low functioning cultural-familial upbringings; the other is based on genetic and/or organic contributions (APA, 2000; Dykens, Hodapp, & Finucane, 2000; Holland, 2004). The impairing contributions from the genetic and organic etiologies undermine development of cognitive and social competencies, among others. Behavioral phenotypes have varying degrees of expression. There is no question that genes have influences on behavior in multiple, nonspecific ways (Dykens et al., 2000). There are hundreds of genetic etiologies for intellectual disability (Dykens et al., 2000) but with a similar outcome of impaired cognitive and social functioning and adaptive behavior deficits. Authorities agree that intellectual disability alone does not dismiss culpability for criminal or sexual conduct; it nonetheless affects court disposition, treatment planning, and risk management (Baroff, Gunn, & Hayes, 2004; Blasingame, 2005; Melton, Petrila, Poythress, & Slobogin, 1997).

Prevalence Issues

Intellectual disability occurs in a small percentage of the overall population. The diagnosis of intellectual disability requires the individual have an FSIQ two or more standard deviations below the population norm. The broader category of intellectual disability represents about 2.5 % of the general population (Kaufman & Lichtenberger, 2006). Those with mild mental retardation/intellectual disability comprise approximately 85 % of those individuals who have any level of intellectual disability (APA, 2000). Those with FSIQs of 71–84, those with borderline intellectual functioning, represent 14 % of the population.

A question is often raised regarding the co-occurrence of crime and intellectual disability and the prevalence of intellectually disabled persons in the criminal justice system (Crocker et al., 2007; Lindsay & Taylor, 2005). There is a large contingent of intellectually disabled persons among the criminal justice population, but percentages vary from setting to setting and state to state (Petersilia, 2000). Several studies report a strong link between low IQ and later delinquency (e.g., Babinski, Hartsough, & Lambert, 1999; White, Moffitt, & Silva, 1989). A study of Ireland's prison inmate population found that 28 % of the inmates had intellectual disabilities/mental handicaps (Murphy, Harrold, Carey, & Mulrooney, 2000). The frequency in a Canadian study was approximately 20 % (Crocker et al., 2007). An international review found that the range was from 2 % to 40 % depending on varying methodological strategies and definitions (Jones, 2007). The fact that different studies use different methods of measurement or degrees of intellectual functioning makes it very difficult, if not impossible, to compare groups or studies.

An older study reported that 25 % of sex offenders who have intellectual disabilities also had histories of other violent behavior (Lund, 1990). Lindsay (2002) reported that of 62 offenders with intellectual disabilities, 62 % had prior convictions or documented evidence of prior sex offenses. Other studies reported that community-based outpatient samples have a low frequency of serious crimes (Hayes, 1991). Again, however, the setting in which the study occurs has a significant relationship with such prior histories.

Although it is clear that there is an overrepresentation of persons with intellectual disabilities within the criminal justice system, it is not clear that people with intellectual disabilities as a group commit more crimes (Holland, 2004; Lindsay & Taylor, 2005). Holland describes *filter points* or decision points that affect who is criminally charged or otherwise held accountable. These include whether a criminal behavior is detected or identified, whether that behavior is reported to the authorities, whether law enforcement action follows the report or if it is dropped, whether the alleged offender is arrested, and whether the individual is charged, taken to court, and if he is found guilty. Studies investigating the percentage of offenders who have intellectual disabilities are challenged by differences in criteria for intellectual disability (as discussed above), undetected intellectual disabilities among the general criminal population, tolerance of victims due to the subject's apparent disability, a victim's credibility as a witness due to having her/his own disability issues, and whether the law enforcement community believes the alleged offender understood that what he was doing was

actually a crime (Holland, 2004). These factors all influence how prevalence data is tracked and tallied.

Ward, Trigler, and Pfeiffer (2001) estimated that approximately 5 % of persons with intellectual and/or other developmental disability engage in some form of sexually inappropriate behavior. People who have developmental disabilities often do not face adjudication for their sexual misconduct; only 15 % of a community-based sample had ever experienced incarceration for their misconduct (Ward et al., 2001). This suggests that as many as 80 % of offenders with intellectual disabilities are never incarcerated for a particular sex offense. Thirty-seven percent of community-based programs in their survey do not serve those with sexual behavior problems. Per Ward et al., 81 % of the respondents indicated that services in their regions were inadequate to serve the people with developmental disabilities who have sexual behavior problems. This lack of community resources may have an impact on court decisions regarding disposition of cases.

Differentiating subtypes of sexual offenders who have intellectual disabilities is another complex issue. Offenders with intellectual disabilities known to have victimized a child may well have other forms of sexual misconduct and other types of victims (Blasingame, Abel, Jordan, & Wiegel, 2011; Heil, Ahlmeyer, & Simons, 2003; McGrath, Livingston, & Falk, 2007b). McGrath and colleagues found that 54 % of their sample of 153 adult males had a history of more than one type of sexual offense. Of the subjects in the McGrath et al. study, 27 % had assaulted adults, 27 % had male victims of child sexual abuse, 17 % had female child sexual abuse victims, nearly 12 % had committed incest, and 16 % were identified as noncontact sexual offenders.

Description of Sexual Offenders Who Have Intellectual Disabilities

There are a number of similarities between intellectually disabled and intellectually typical sexual offenders (Courtney, Rose, & Mason, 2006; Crocker et al., 2007; Haaven & Coleman, 2000; Haaven & Schlank, 2001; Kalal, Nezu, Nezu, & McGuffin, 1999; Leonard, Shanahan, & Hillery, 2005; Lindsay, Elliot, & Astell, 2004; Quinsey, 2004). Common characteristics among offenders include having poor social support, attitudes supportive of sexual abuse, antisocial lifestyles, poor self-regulation and self-management, poor cooperation with supervision and treatment, and increased anger and stress prior to reoffending (Lindsay et al., 2004). Negative problem-solving strategies and poor skills are correlated with sexual deviancy among persons with impaired as well as normal intellectual functioning (Nezu, Nezu, Dudek, Peacock, & Stoll, 2005). The correlations of several of these characteristics with risk for sexual reoffense are also known (Hanson, 1997; Hanson & Bussiere, 1996; Hanson & Morton-Bourgon, 2007), but no singular characteristic is predictive of reoffense (Table 1).

There are many additional needs and challenges for persons who have intellectual disabilities. Low cognitive functioning impairs the person's ability to manage information, formulate concepts, create internal cognitive scripts, and absorb information. Low cognitive functioning, as measured by intelligence or achievement tests, indicates inadequate vocabularies; slower performance on timed skills tasks; limited working memory, i.e., how much information the person can manage at a given moment in time; and a slower speed for processing the information at hand. This also causes deficiencies in recalling information, i.e., short-term and/or long-term memory skills are often impaired. These challenges make it difficult to take in information in the short term as well as impair the person's ability to transfer short-term memory to long-term memory. Later retrieval of information from memory is compromised. Many children with learning disabilities attempt to please the authority figures that may be talking to them or asking them questions. These cognitive impairments make these individuals susceptible to leading questions. Others perhaps admit behaviors they actually did not commit out of the belief that they do not always understand things yet they assume the authority figure knows and they trustingly go along with the leading questions, as they want to please authority figures. This is a problematic area for law enforcement and mental health evaluators.

Other challenges come in the form of socialization constrictions. Individuals who have intellectual disabilities often have poor social skills or inappropriate boundaries. As such, their parents can be hypervigilant in their supervision of the children. This functions to protect the child from the consequences of his actions, which would typically be part of the learning process. Without social feedback about one's behavior or not having the ability to learn from the consequences of one's actions, an individual may not have sufficient social learning experiences. This can impair the process of internalizing social boundaries. In addition, children who are so closely supervised often do not have the opportunity to experiment with social-sexual behaviors such as flirting, holding hands, kissing, or making out with a girlfriend or boyfriend. While close supervision is helpful in many ways, it can impair the opportunity for these children to learn through normal experimentation. This can contribute to the child getting the sense that such behaviors, that are otherwise natural and normal, are not acceptable to the parent and the child may learn to sneak about or take advantage of clandestine opportunities to experiment with these behaviors. Given that many people with intellectual disabilities are socialized with younger family members or children, their biological urges for sexual experimentation may be acted upon with the younger mental age-mates rather than their chronological age-mates (Blasingame, 2005).

Table 1 Characteristics of sexual offenders with and without intellectual disabilities

Sexual offenders without intellectual disabilities	Sexual offenders with intellectual disabilities or borderline intellectual functioning
Lower intellectual functioning; average FSIQ of 90	Severe cognitive impairments; FSIQ two standard deviations below the mean
	Severe impairments in adaptive functioning
Poor social support	Poor social support
Attitudes supportive of abuse; cognitive distortions that enable sexual aggression	Attitudes supportive of abuse; cognitive distortions that enable sexual aggression
Antisocial lifestyles and attitudes	Antisocial lifestyles and attitudes
Poor self-regulation and self-management	Poor self-regulation and self-management
Issues with supervision and treatment	Issues with supervision and treatment
Increased anger and stress prior to reoffending	Increased anger and stress prior to reoffending
Negative problem-solving strategies	Negative problem-solving strategies
	Greater inability to manage information; poor working memory
	Communication skills deficits; inadequate vocabularies; poor social interaction skills
	Slower information processing speed
	Memory recall deficits
	Early socialization constrictions; poor social training or socialization/boundary training
Significant frequency of prior sexual or physical trauma	Very high frequency of prior sexual traumatization
Problematic coping skills	Poor and problematic coping skills
	High frequency of comorbid mental disorders; high percentage of dual diagnoses
	Low self-esteem
	Significant frequency of personality disorder traits; antisociality
Small percentage have psychopathy	Small percentage have psychopathy traits
Special education in background; school grade failures	Special education in background; school grade failures
	Inconsistent application of sexual knowledge
	Lack of assertiveness
	Neurodevelopmental impairments undermine learning
	Allowances made by staff members; staff complacency
Significant crossover of areas of sexual interest	Significant crossover of areas of sexual interest; diverse victim selection

Another significant challenge for people with intellectual disabilities is their deficits in communication skills. The poor vocabulary, social understanding, and information processing skills impair these individuals' abilities to formulate ideas and to express those ideas. This impairs their ability to identify internal emotions and conceptualize subjective experiences and needs. The inability to communicate one's needs along with poor coping skills often leads to maladaptive behaviors in attempt to meet one's normal needs. These and a variety of medical, mental health, and behavioral problems are well documented (Alloy, Jacobsen, & Acocella, 1999; APA, 2000; Blasingame, 2005; Dykens et al., 2000; Fletcher, Loschen, Stavrakaki, & First, 2007; Haaven & Schlank, 2001; Seghorn & Ball, 2000; Sherak, 2000).

Parental and/or caretaker limitations, perceptions, and frustrations may further complicate family life, sexuality education, and socialization opportunities for some individuals who have intellectual disabilities (Blasingame, 2005; Lund, 1992). These several factors complicate the decision-making process regarding distinctions made between sexually offensive behavior, sexual offending behavior, and sexual deviance (Blasingame, 2005).

People who have intellectual or other developmental disabilities are reported to have two to four times greater risk of developing any comorbid psychiatric disorder (APA, 2000; Fletcher et al., 2007). Mood disorders, attention deficit hyperactivity disorder, conduct disorder, and movement disorders are common comorbid conditions albeit potentially with atypical clinical presentations (APA, 2000; Fletcher et al., 2007; Hurley, 2006). One of the challenges in making mental health diagnoses is that individuals who experience intellectual disabilities may well lack the ability to verbalize complaints regarding psychological symptoms, internal feeling states, emotions, social distress, or identify symptoms (Fletcher et al., 2007). Interviews with family members or other knowledgeable informants are helpful in discerning the presence of such symptoms.

People with intellectual disabilities *and* comorbid mental illnesses are at higher level of risk for reoffending criminally, particularly if they experience a major mental disorder or substance abuse history (Smith & O'Brien, 2004). Day (1997) reported 25–33 % of intellectually disabled sex offenders are dually diagnosed. Likewise, Lindsay et al. (2002) reported that 32 % of their sample of 62 offenders had a diagnosis of a major mental disorder. In another study, Smith, Quinn, and Lindsay (2000) reported that from a sample of 153 individuals with intellectual disabilities who had sexually acted out, 22 % were diagnosed with a significant mental illness, 12 % with a mood disorder, and 10 % with schizophrenia. These frequencies are in greater proportions than in the general population.

Personality disorders and maladaptive personality traits are also relatively common among individuals who have intellectual disabilities (Lindsay et al., 2007). The frequency of personality disorder diagnosis again varies by setting and methodology for making the diagnosis. Some studies have identified a large percentage of individuals with intellectual disability as having *traits* of personality disorders (e.g., maladaptive personality traits). Goldberg, Gitta, and Puddephatt (1995) found *traits* in 57 % of their sample of institutionalized individuals and 91 % of those in a community setting. By contrast, Flynn, Matthews, and Hollins (2002) found 92 % of their sample of 36 subjects who had severe behavior problems were diagnosed with a personality disorder. Setting and context of evaluation appear to have a significant influence on whether personality disorders are diagnosed. Unfortunately, the wide variations in prevalence reported in the literature make it difficult to generalize the findings.

In a study of 164 cases that have intellectual disabilities from three forensic settings, Lindsay et al. (2007) found a preponderance of antisocial personality disorder but very low percentages of other personality disorders. Thirty-nine percent of these forensic subjects were diagnosed with a personality disorder; no correlation was found between FSIQ level and personality disorder diagnosis. Additionally, Lindsay et al. found through confirmatory factor analysis that there were two primary factor loadings. The first was referred to as *acting out*; the second was *avoidant/rumination/inhibited*. These factors crossed over several personality disorder diagnostic categories and when combined made up 37 % of the variance between diagnostic groupings. It should be noted that this study did not provide separate information regarding subtypes of forensic subjects, i.e., they did not separate sex offender data from violent offenders.

A more severe form of personality disorder is that of psychopathy. The construct of psychopathy is valid among criminal offenders who have intellectual disability (Morrissey, Mooney, Hogue, Lindsay, & Taylor, 2007). However, psychopathy may present differently in offenders who are intellectually disabled, due to their communication and adaptive functioning challenges as discussed above. These individuals may present behaviors that are poor matches for the descriptors used in the PCL-R coding manual. Prevalence studies report that approximately 10 % of criminal offenders have elevated traits of psychopathy (Morrissey et al., 2007). The prevalence rates vary from setting to setting, similar to variations in diagnoses of other mental health disorders discussed above. Morrissey et al. further suggest that while some of the characteristics of psychopathy overlap with characteristics of intellectual disability, such as impulsivity or lack of empathic awareness, there remains strong evidence of a percentage of offenders who have intellectual disabilities who are also psychopathic.

Characteristics of psychopathy that are particularly relevant to offenders who have intellectual disabilities are strongly associated with Factor 1 on the PCL-R (Hare, 1991). These are glibness/superficial charm, inflated self-esteem, pathological lying, conning and manipulation, lack of remorse or guilt, shallow affect, lack of empathy or callousness, and failure to take responsibility. Morrissey et al. (2007) reported that higher scores on the PCL-R Factor 1 scale correlates with problems during treatment such as moves to higher levels of supervision and termination from treatment programs.

The sexual knowledge base of persons who have intellectual disabilities and sexual behavior problems is heterogeneous. For example, Lunsky, Frijters, Griffiths, Watson, and Williston (2007) found that among intellectually disabled persons who were evaluated in association with sexual misconduct, there was a significant variation in the amount of sexual knowledge held by the offenders. Those who committed offenses that are more serious had much higher than expected sexual knowledge, while those who committed offenses such as inappropriate touching or public masturbation were less informed about sexuality. Such variation calls for individualized assessment, diagnosis, and treatment planning.

Although it has been postulated that persons with intellectual disabilities who commit sexual offenses did so with motivations other than sexual deviance, the *counterfeit deviance theory* (Hingsburger, Griffiths, & Quinsey, 1991) has met challenges in recent years. The counterfeit deviance theory postulated that while clearly inappropriate, some of these individuals' sexual misconduct is due to characteristics associated with their disabling conditions. Hingsburger et al. (1991) proposed 11 counterfeit deviance hypotheses. Their theoretical constructs are as follows:

- The Structural Hypothesis: The system of care these individuals are required to live in may have failed to address the needs for sexual expression. The iatrogenic effect of such restricted environments could cause these individuals

to seek opportunities in settings or with individuals that are inappropriate.

- The Modeling Hypothesis: Some sexual behaviors are misguided repetitions or reenactments of "caring behaviors" previously done by family members or staff persons. These might include clients being naked in front of staff for hygienic/bathing purposes. The individual may later fail to discriminate with whom such behavior is appropriate.
- The Behavioral Hypothesis: Some sexual behaviors may be mechanisms to gain attention from family or care home staff persons. Some clients learn that one way to get attention is through negative behaviors, including sexually oriented behaviors. There is significant positive reinforcement (attention) for committing such behaviors.
- The Partner Selection Hypothesis: Because many people with developmental disabilities are not afforded age-appropriate opportunities to develop fulfilling relationships, they may well seek out opportunities to relate to staff or an available child in attempt to develop intimate relationships.
- The Inappropriate Courtship Hypothesis: Lacking the interpersonal skills needed to move through the stages of relationship development and unable to discern the nuances of private versus public behaviors, some persons with developmental disabilities may become too aggressive in their pursuits of personal friendships and relationships.
- The Sexual Knowledge Hypothesis: Given their problems with learning through subtle social learning experiences, some people with developmental disabilities have sexual knowledge deficits. When they are afforded sex education, it is often in the context of biology and body parts rather than in the context of social relationships, appropriate consent, and self-control. Some cases involve individuals being given too much information to process, exciting excessive curiosity.
- The Perpetual Arousal Hypothesis: Some persons with developmental disabilities appear to be perpetually aroused due to their inability to fulfill their sexual needs in a normal way, or they may not have the knowledge or skills required for achieving orgasm.
- The Learning History Hypothesis: People with developmental disabilities brought up in overly protective homes or nonnormative environments may not have normal learning opportunities. This would also include being abused or those who lack socialization opportunities.
- The Moral Vacuum Hypothesis: People with developmental handicaps may not comprehend the effects of their behavior on others. As such they may not realize their behavior can inflict pain or discomfort on others.
- The Medical Hypothesis: Some individuals may not realize that particular symptoms are the result of a medical condition that needs attention. For example, scratching one's genitals, albeit inappropriate in social settings, may be indicative of an infection rather than an attempt at masturbation.
- The Medication Side Effect Hypothesis: Many people with developmental disabilities take psychotropic medications. Some people experience side effects such as inhibited sexual desire or diminished ability to achieve orgasm. If these side effects are not effectively explained to the individual or caregiver, sexual dysfunction or behavioral issues might result.

Hingsburger et al. (1991) recommended interventions such as system modification, policy modification, better sex education, staff education and training, and provision of counseling to the individual to address the problems. From this perspective, the client is not considered criminally culpable for his or her actions that are otherwise sexually inappropriate. Rather, the care delivery system is often considered the source of the problem and/or challenged to make corrective adjustments.

Hingsburger et al. (1991) also defined what they refer to as a hypothesis of "real deviance" for individuals with developmental disabilities.

- Benign Paraphilia: Unusual sexual behaviors typically done in private and not dangerous to oneself or others. Hingsburger et al. suggest that stealing underwear for masturbation is an example of a benign paraphilia. If this were done by a noninstitutionalized or unsupervised person, it would not be known about, e.g., it would be benign. It would have no victim and not be offensive to others.
- Offensive Paraphilia: Offensive paraphilia is a sexual arousal in circumstances or behaving in ways that are harmful to others or are offensive, such as an adult sexually interacting with a child.
- Hypersexuality: Ruminating about sexual themes or sexual acts may leave the individual feeling controlled by sexual obsessions and may interfere with daily life. Hingsburger et al. suggested this type of rumination may be an indication of a physical hypersexuality and may need management with hormone therapy.

Recent research, however, found that different offenders with intellectual disabilities have different levels of sexual knowledge, as discussed above. The research provides mixed results as to whether the *sexual knowledge hypothesis* is a sufficient descriptor for offenders with intellectual disability. Talbot and Langdon (2006) found that intellectually disabled sexual offenders had higher levels of sexual knowledge than their non-offender control group. Michie, Lindsay, Martin, and Grieve (2006) made similar findings.

Another aspect of concern is in that of cognitive distortions. Lindsay, Whitefield, and Carson (2007) found that sexual offenders with intellectual disabilities held to a greater

number of cognitive distortions supportive of sexual offending than did the control group of other persons with intellectual disabilities. In another study, Lindsay et al. (2006) found that those intellectually disabled offenders who abused children held a higher number of child-oriented cognitive distortions than the offenders who abused adults and vice versa. These findings strongly support that cognitive distortions are not only relevant to assessment and treatment of offenders with intellectual disabilities, they also suggest that some offenders with intellectual disabilities have the ability to differentiate their targets of sexual interest.

Recent theoretical developments have identified multiple routes or pathways that people take on their way to becoming sexual offenders (Ward & Hudson, 2000). Different goals and motivations drive the individual to follow different pathways to goal attainment. These pathways involve diverse behavioral scripts and patterns of cognitive distortions (Lindsay, Steptoe, & Beech, 2008). Some offenders may want to offend and make efforts to do so, while others are aware of their potential to offend but want to avoid offending. The former pathway is known as the approach pathway; the latter is known as the avoidance pathway. Offenders are also different in their degree of overt effort and planning invested in their acting out. For the approach-oriented offender, these strategies may include making direct, explicit efforts to achieve sexual conquests or thoughtlessly acting on habituated behavioral scripts that are consistent with sexual offending (Lindsay et al., 2008; Ward & Hudson, 2000). The avoidance-oriented offenders may make efforts to avoid offending that are simply inadequate and do not sufficiently interrupt the underlying propensity to sexually act out.

Keeling, Rose, and Beech (2006) investigated the application of the multiple pathways theoretical constructs with offenders who have intellectual disabilities. Their findings supported the use of the self-regulation model with this group of offenders. Keeling, Rose, and Beech found that more than 90 % of their sample of 16 subjects was classified in two of the four pathways. Thirty percent were classified as approach explicit and 62 % were classified as approach automatic. These findings suggest that there is little difference between mainstream and intellectually disabled offenders in regard to their pathways to offending. Lindsay et al. (2008) also found that over 90 % of the intellectually disabled sex offenders in their sample were classified in the approach pathways. These findings also suggest that those intellectually disabled offenders had intact self-regulation and control and may well have engaged in conscious planning. These findings further suggest that a large percentage of intellectually disabled sex offenders are not as naïve or simply impulsive as previously thought.

Blanchard et al. (1999) found a significant correlation between intellectual deficiencies and maternal age in relation to the prevalence of male-oriented pedophilia. School grade failure and/or assignment to a special education class was found to be a significant educational background variable among sexual offenders (Cantor et al., 2006). Offenders with intellectual disability are less discriminating in their victim selection and offenses than are their neurotypical counterparts (Rice, Harris, Lang, & Chaplin, 2008). These characteristics suggest there is likely a neurodevelopmental disruption that contributes to the onset of maladaptive sexual behaviors (Cantor et al., 2006; Rice et al., 2008).

Blanchard et al. (1999) found that mental retardation or lower intellectual functioning was correlated with a diagnosis of pedophilia. In a large study of adult male sexual offenders, Blanchard et al. report that the presence of lowered intellectual capacities decreased the likelihood of exclusive sexual interest in girls. They also found that maternal age at the birth of the child increased the likelihood of exclusive sexual interest in boys. When both of these characteristics were present, there was a greater likelihood of sexual interest in boys; when only one was present, that likelihood was lessened (Blanchard et al., 1999). Based on penile plethysmography findings, the Blanchard et al. data indicate that the victim selection choices made by child sexual abusers who had intellectual disabilities were not due simply to situational availability; their decisions were made because of relative sexual interest in children.

Recidivism studies in recent years have improved our abilities to identify several characteristics to target in treatment. Lindsay et al. (2004) studied 52 adult male offenders with intellectual disabilities. They included *suspicion* of reoffending in their investigation to attempt to capture those unreported reoffenses. Variables identified with reoffending and suspicions of reoffending were separately considered. Those variables associated with reoffense were antisocial attitudes, low self-esteem, lack of assertiveness, poor relationship with mother, allowances made by staff, staff complacency, poor response to treatment, and offenses involving violence (Lindsay et al., 2004).

In terms of variables related to *suspicion* of reoffending, Lindsay et al. (2004) reported somewhat different findings, with some overlap. They reported antisocial attitudes, attitudes tolerant of sexual crimes, denial of a crime, sexual abuse in childhood, low self-esteem, lack of assertiveness, low treatment motivation, erratic attendance, unexplained breaks from routine, deterioration in family attitudes, allowances made by staff, staff complacency, unplanned discharge, and poor response to treatment. While suspicion of reoffending may include persons who have indeed not reoffended, these characteristics can aid in identifying those offenders who are prone to persist in making poor decisions and putting themselves in situations where they will be scrutinized.

Base rates for sexual reoffense vary depending on the setting the subjects are in, i.e., institutional versus community-based treatment settings. Many studies comingle general

criminal data on violent recidivism, including sexual recidivism, making the findings less useful when attempting to ascertain risk with a sexual offender from another setting (Phenix & Sreenivasan, 2009). Individuals in high security settings such as prisons and forensic hospitals have higher frequencies of prior sex crimes than those in community settings; these differences may well affect how outcome studies can be generalized. Lindsay (2004) reported that several older recidivism studies reported 30–70 % of general criminal recidivism among offenders who were intellectually disabled.

However, when looking specifically at sexual offenders with sexual recidivism, the data is more hopeful. Lindsay et al. (2002) reported on a sample of 48 sex offenders who had a 4 % reoffense rate in the first year of follow-up, 12 % reoffense at 2 years, and 13 % reoffense at 3 years. In their 11-year follow-up study, McGrath et al. (2007b) detected 11 recidivists, or approximately 11 %, who committed 20 new crimes. Eleven of those 20 new crimes involved noncontact crimes, and six of the victims were staff members. Finally, Tough (2001) reported a recidivism rate of 16 % in a sample of 76 treated sexual offenders when including informal file documentation as well as formal arrest and conviction records with up to a 19-year follow-up.

Criminal Investigation and Disposition of Sex Offenders with Intellectual Disabilities

Legal systems are involved in a significant number of cases with intellectually disabled sexual offenders. There are several steps along the way before an offender is found guilty or innocent, sentenced, and/or the case disposed of (Holland, 2004). Some studies have reported high frequencies of false confessions by intellectually impaired suspects, who believed they would be "allowed to go home" if they agreed with the police or otherwise acquiesced to the pressures of the interrogation by authority figures (Petersilia, 2000). The Miranda warning that is read to criminal suspects is estimated to require a seventh grade reading comprehension level, far above the comprehension level of an adult with a mild intellectual disability (Baroff et al., 2004; Petersilia, 2000). As much as some individuals with intellectual or other developmental disabilities try to present themselves as normal, it may be difficult for untrained law enforcement professionals to identify that the person is indeed intellectually impaired (Petersilia, 2000). Without such awareness, investigating officers may not make the necessary accommodations.

Once arrested, it is common for inmates with intellectual disabilities to have their cognitive impairments be undetected (Scheyett, Vaughn, Taylor, & Parish, 2009). Without identifying such impairments, these individuals cannot receive appropriate referrals to support agencies or advocates. Further, protective supervision in custody cannot be provided if correctional staff is unaware of the true level of functioning of the inmate. Inmate rights may well be compromised without such awareness by correctional staff (Petersilia, 2000; Scheyett et al., 2009). Given that the average FSIQ within the prison population tends to be lower than the mainstream population, those with somewhat lower intellectual functioning may not stand out to correctional staff (Hayes, 2007). Even though their needs may be similar to their non-impaired counterparts, the need to address those needs differently is clear (Crocker et al., 2007).

Many individuals who engage with the legal system are not formally prosecuted. Some are released as they are deemed not guilty or there is insufficient evidence to move the case forward at the prosecutor's office. Others are charged but later found not guilty. Some are charged but diverted to community-based programming, such as mandated residential treatment through developmental disability service programs. Some are formally prosecuted and ordered to be supervised by probation or may be sent to prison or mental health facilities. It may not be an easier route for the intellectually disabled person to be diverted to a developmental center or psychiatric hospital, as those placements often turn out to be longer sentences than if they had done regular prison time (Hayes, 2007).

Many individuals who have intellectual or other developmental disabilities, such as autism spectrum disorders, have difficulty dealing with the investigation processes. Some are poor historians due to time frame distortions or have difficulty differentiating what was their own idea versus what someone suggested that they do. Others misinterpret questions and their own answers. Some are incautiously frank in their answers, are overly compliant with authority figures, and use words they do not fully understand (Allen et al., 2008).

Before a trial can take place, competency to stand trial must be determined. Competence to stand trial requires the defendant be able to aid his attorney in his own defense, understand the crime and consequences for the charges he is facing, and understand the roles of the participants in the court processes and the purpose of the trial (Baroff et al., 2004; Blasingame, 2005). If the person is found not competent to stand trial due to issues associated with intellectual disability, he may be incarcerated in a hospital or residential setting for training. The great majority of those with mild intellectual disability are found competent to stand trial (Baroff et al., 2004). In some cases, the charges may be dropped although the individual is still court ordered into a nonjudicial alternative such as care home placement or be placed under guardianship. In some cases, these individuals are trained to be competent and are then returned to court for continuation of the prosecution process.

Another issue facing the court is whether the defendant who has intellectual disabilities should be declared not

guilty by reason of insanity (NGRI; Baroff et al., 2004). Those who are acquitted on the basis of NGRI are determined to have a mental disease or defect that decreases the person's capacity to control their behavior (Melton et al., 1997). Those who are acquitted as NGRI are often ordered into hospital placements for longer sentences than they would have faced if they would have been sent to prison, so being declared NGRI may not be particularly advantageous (Blasingame, 2005; Salekin & Rogers, 2001). Individuals incarcerated in a psychiatric setting due to NGRI status are to receive treatment for the condition that diminished their capacity and be prepared to return to the community (Salekin & Rogers, 2001). In order to return to the community, a judicial hearing must take place and the hospitalization order be altered.

Courts have several legal options for sentencing an offender who has intellectual disability. One of those options is a diversion plan established by the regional service agency responsible for assisting individuals who have developmental disabilities. These types of plans often involve mandated placement in board and care facilities in the community, participation in approved treatment programming, specialized day programs or sheltered work settings, and being evaluated for psychotropic medications. Sometimes these plans also include incarceration in a state hospital or developmental center where the individual can be contained and treated for long periods of time.

Other sentencing options the courts have are to grant probation or to sentence the individual to prison. Individuals with intellectual disabilities are at increased risk of victimization when incarcerated in prison or institutions for persons with developmental disabilities (Haaven & Schlank, 2001). Many states now have civil commitment programs for sexual offenders who have completed their prison sentences. Those civil commitment programs have both mental health and correctional components (Haaven & Schlank, 2001). They nonetheless need to make adjustments to routines and protocols to accommodate the physical and psychosocial needs of those inmates who have intellectual disabilities. Inmate safety becomes a significant concern due to the risk of continued sexual acting out by the offender or his being victimized by other inmates or patients. Some civil commitment programs or institutions have been reported to attempt to include the intellectually disabled offenders in the general sex offender population and simplify the treatment curricula (Haaven & Schlank, 2001). This is inadequate in many ways, as the inmates with intellectual disabilities have a variety of learning problems that are very different from mainstream offenders, as discussed above. The author is aware of State institutions being subject to lawsuits for failure to make appropriate accommodations and adaptations in the programming for those patients who have intellectual disabilities.

Some court orders for probation also include the case management plan noted above in the context of a diversion plan. The intent of such an order is rehabilitation based on the assumption the individual can benefit from such a plan while also maintaining community safety. Collaborative management and treatment of these individuals appears to improve public safety through reduced recidivism (Hayes, 2004).

Community placement after incarceration or hospitalization, or as a diversion from custodial sentencing, requires thoughtful reentry planning, including addressing employment, housing, substance abuse treatment, mental health treatment, and of course sexual offender treatment. Ongoing support services are needed during institution to community transitions, including close supervision from parole or aftercare clinicians (Haaven & Schlank, 2001). Locating housing and appropriate services is both critical and difficult, as most communities do not have sufficient resources (Ward et al., 2001).

General Assessment Issues for Individuals with Intellectual Disabilities

Interviewing and testing individuals who have intellectual or other developmental disabilities has several inherent challenges. Evaluators need to be thoughtful about matching their vocabulary with these individuals to ensure accurate communication. The usual interview techniques of asking questions and expecting a relatively prompt response may not generate helpful information. Evaluators need to monitor their voice for suggestive tones, avoid leading questions, and slow the pace of the interview process. Providing multiple-choice options and the use of plain language are strongly recommended (Blasingame, 2005).

Acquiescence is a significant concern when evaluating individuals who have intellectual disabilities (Finlay & Lyons, 2002). Many of these individuals have a yea-saying response pattern, regardless of what is being asked. This may be associated with fears of disapproval from the evaluator, confusion about the questions being posed, feared consequences of disclosing certain information, or simply wanting to be compliant. Acquiescence should not be confused with dissimulation, lying, or socially desirable responding (Blasingame, 2005; Finlay & Lyons 2002).

For diagnosis, treatment planning, and case management purposes, measures of adaptive functioning should commonly be used in conjunction with intelligence tests to ascertain behavioral functioning levels, i.e., in what skill areas can the individual function independently and/or in what skill areas might the individual need supports and assistance (Fletcher et al., 2007). The *Adaptive Behavior Assessment System, Second Edition* (ABAS-II; Harrison & Oakland, 2003) and the *Supports Intensity Scale* (Thompson

et al., 2004) are examples of standardized tools for this purpose. Such assessments are needed to discern environmental supports and contextual factors associated with risk management and intervention.

Intelligence tests are about information processing and accomplished learning. Intellectual functioning levels reveal information about one's ability to learn, what he has learned, and the person's adaptation to the environment (Kaufman & Lichtenberger, 2006). When assessing persons with intellectual disabilities, evaluators need to be cautious when interpreting results from instruments that have high demands of the executive functioning system, abstract thought, and information processing. Ultimately, to qualify for a diagnosis of mild intellectual disability, one has to obtain an intellectual quotient (IQ) score between 55 and 70, manifesting subaverage intelligence (American Psychiatric Association (APA), 2000; Fletcher et al., 2007). As mentioned earlier, this represents about 85 % of persons with intellectual disability. Individuals in this mild level of intellectual disability are said to be able to achieve about a sixth grade level of academic skills, significantly impacting treatment strategies and risk management efforts. Persons diagnosed with moderate intellectual disability, having IQ scores between 40 and 55, are said to be able to achieve about a second grade level of academic functioning (APA, 2000). To be diagnosed with intellectual disability, there needs to be evidence the person met or would have met the criteria prior to the age of 18 (APA, 2000).

A baseline risk assessment based on an actuarial procedure is very useful in treatment planning (Boer, Tough, & Haaven, 2004; Quinsey, 2004). However, the actuarial risk estimates (a) do not include all risk factors known in the literature and (b) do not discern the conditions under which that baseline risk may be increased or decreased dependent on a given offender in a given situation. The latter variables, also known as dynamic risk factors (Hanson, Harris, Scott, & Helmus, 2007), may be of keen interest to those performing risk assessments on individuals with intellectual disabilities particularly due to the issue of inaccurate or incomplete "official records" (Beech et al., 2003; Boer et al., 2004; Keeling et al., 2006; Tough, 2001). It is important to assess each individual in the primary areas associated with changes in risk, specifically self-management, socio-affective functioning, degree of deviant sexual interests, and pro-offending attitudes (Thornton, 2002). Therefore, holistic assessments for persons with intellectual disabilities should include not only the actuarially based risk estimate (discussed below) as a beginning baseline; they also should address the following additional areas:

- Psychiatric or mental health assessment
- Psychosexual assessment
- Psychosocial assessment
- Contextual assessment

Persons with intellectual disabilities are sometimes marginal to poor historians and reporters. Parents and/or other caretakers should participate in collateral clinical and/or psychosocial interviews when possible (Harrison & Oakland, 2003). Additional knowledgeable informants include care home staff members, previous treatment or care providers, teachers, physicians, probation officers, or service coordinators/case managers. Discussing the case history and current functioning with these informants may also help ascertain the reasonable veracity of any client testing or interview information.

Assessing Psychiatric or Mental Health Conditions Among Persons with Intellectual Disabilities

Individuals with intellectual disabilities have an increased risk for comorbid mental disorders, as discussed above (APA, 2000; Fletcher et al., 2007). The presence of these additional mental disorders may impact the individual's capacity to self-regulate his or her behavior, meaningfully participate in an assessment or treatment process, and may or may not diminish his or her capacities to such an extent as to undermine culpability for their actions (Melton et al., 1997). These of course may also be relevant concerning the needs, risks, and responsivity factors when treatment planning (Andrews & Bonta, 2003).

Due to the diversity of issues and idiosyncratic nature of challenges faced by these individuals, mental health assessments are also complex but not overwhelmingly difficult. Comprehensive review of case records, client interviews, informant interviews, and, in some cases, psychological testing are called for (Blasingame, 2005; Fletcher et al., 2007; Hurley, 2006; Mikkelsen, 2004).

The types of file information needed for evaluative processes are fairly broad in range, including early social and behavioral histories, academic and school testing, school behavioral concerns, child protective services and/or police reports, court reports, civil commitment reports, leisure activities and recreational interests, index (present concern) incident reports, medication history, and treatment history (Blasingame, 2005). If the client has resided in institutional or residential care, summary information about in-home and out-of-home placement functioning is also helpful in determining any behavioral problems of a pervasive nature. Indeed, many intellectually disabled offenders' victims may be other care home or institution residents. The evaluator needs to have access to this full range of background information in order to perform a comprehensive evaluation (Blasingame, 2005).

Mental health conditions among persons with intellectual disabilities may not easily yield themselves to the traditional

diagnostic interview process (Fletcher et al., 2007; Hurley, 2006). In some diagnostic situations, it may be necessary to discern the presence of behavioral phenomena and consider these as "behavioral equivalents" in place of diagnostic criteria (Hurley, 2006). As such, maladaptive behavioral symptoms may be considered as substitutes for some criteria when reviewing diagnostic checklists, e.g., when completing a diagnosis based on the *Diagnostic and Statistical Manual of Mental Disorders, fifth edition* (DSM 5; APA 2013), or the *Diagnostic Manual-Intellectual Disability* (DM-ID; Fletcher et al., 2007).

Mental disorders are neither static variables nor are they always associated with increased risk for sexual or violent reoffense. Nonetheless, it is important to recognize that having a mental disorder may undermine, at different points in time, the individual's capacity to self-regulate and self-manage his behaviors, subsequently contributing to behavioral dysregulation and/or impulsivity.

Psychosexual Assessment of Persons with Intellectual Disability

Significant research points to the fact that the presence of deviant sexual arousal involving children or other sexual deviations is indicative of increased risk for sexual reoffense (Hanson & Bussiere, 1996). Hanson and Morton-Bourgon (2004) further identified indicators of current risk for reoffense to include, among others, sexual preoccupation, emotional identification with children, having any deviant sexual interests, and general self-regulation problems.

These findings strongly suggest that measurement for these factors is important in the assessment and risk management processes. Psychosexual variations are measured by a variety of means. These include the following:

- Penile plethysmography
- Attentional or viewing behavior measurements
- Self-report questionnaires
- Clinical interview

These methods each have its own strengths and weaknesses such that these should not be used independently or outside the clinical domain (Keeling, Beech, & Rose, 2007; Kalmus & Beech, 2005). It should not be expected that all sexual abusers would exhibit measurable preferences during phallometric or similar assessment (Reyes et al., 2006). Sexual arousal or sexual attraction assessment procedures should not be used independent of other sources of information gathering and clearly should not be used in the courtroom as evidence of guilt or innocence (Association for the Treatment of Sexual Abusers (ATSA), 1997).

Many child sexual abusers have what appear to be "normal" patterns of sexual interest under laboratory conditions (Reyes et al., 2006). Nonfamilial child sexual abusers with multiple victims are identified as more deviant during assessments compared to nonfamilial offenders with one victim or incest-only abusers. In fact, incest-only abusers are often nonresponsive to child stimuli in phallometric tests (Marshall, Anderson, & Fernandez, 1999). Marshall et al. note that nonfamilial child sexual abusers have the most consistent phallometric measurement results, i.e., they exhibit the most consistent sexual attraction for children. Nonetheless, there is significant variance in outcomes of phallometric assessments even within the subtypes of nonfamilial child sexual abusers, rapists, or exhibitionists (Kalmus & Beech, 2005; Reyes et al., 2006).

Not all individuals who sexually abuse children have deviant fantasies about children prior to the offense behavior (Marshall et al., 1999). Nonetheless, it is important to rule in or out the presence of sexual deviance, current sexual interest or arousal involving children, or other forms of sexual preoccupation if one is to assess current risk for reoffense and develop realistic intervention plans and programming to manage any current risk for reoffense.

A confounding issue regarding penile plethysmography (PPG) or the viewing time measures (discussed below) in assessing sexual abusers has to do with undisclosed offenses in the histories of the offender. Heil et al. (2003) summarize a number of studies as well as their own data which demonstrates that a majority of sexual offenders have fluid interests and victim types, i.e., offenses that cross over the lines of age and gender differing from the victim of record. Official records often do not have complete information about other, non-adjudicated victims such as other adults, children, or animals (Blasingame, 2005; Heil et al., 2003). Therefore, it should be no surprise that the tools attempting to assess sexual preferences and interests will often be perceived as falling short given that sexual abusers' interest patterns are not as discriminating or as stable as had previously been assumed.

Penile plethysmography is used with intellectually disabled males and is effective in ascertaining sexual arousal patterns (Haaven & Coleman, 2000; Haaven, Little, & Petre-Miller, 1990; Haaven & Schlank, 2001; Hingsburger et al., 1999; Reyes et al., 2006; Seghorn & Ball, 2000). Programs using it adjust the administration protocol to allow more adaptation time between stimuli and making sure the client understands the instructions. There is no research regarding the lower limits of intellectual functioning for use of PPG with persons with intellectual disabilities. Some programs perform pre- and posttreatment phallometric assessments to assess change of arousal patterns over time.

In a PPG study involving adult male sex offenders with developmental disabilities, Reyes et al. (2006) found three

response patterns. While their sample size was only ten, they found one subset of sexual abusers who showed distinct differentiated arousal to deviance, another subset who showed undifferentiated deviant arousal, and the third subset of sexual abusers who showed no measured deviant arousal. Differentiated deviant arousal was defined as measured arousal to the presence of a specific gender or age, and this was measured higher than neutral stimuli or other categories. Undifferentiated deviant arousal was defined as measured arousal to deviant and nondeviant stimuli at a higher level than arousal to neutral stimuli. The nondeviant subset of offenders did not demonstrate measured arousal to deviant stimuli and was at a comparable level with neutral stimuli (Reyes et al., 2006). The subjects in this study all had child victims; the data indicates that not all intellectually disabled sex offenders with child sex abuse victims will exhibit measurable sexual interest/arousal in the testing situation despite their known history of abusive behaviors.

Another method for attempting to measure the sexual interests of abusers is that of viewing behavior measures. These have also been called stimulus viewing time, viewing time, and visual reaction time. Abel, Huffman, Warberg, and Holland (1998) reported high reliability and validity comparing the *Abel Assessment for Sexual Interest* visual reaction time (VRT) assessment with penile plethysmography. Others have also found the *Abel Assessment for Sexual Interest* (AASI) outcome comparable to penile plethysmography outcome data (Johnson & Listiak, 1999; Letourneau, 2002).

One viewing time instrument that has been used in the evaluation of individuals with intellectual disabilities or other developmental disabilities is the *Abel-Blasingame Assessment System for individuals with intellectual disabilities* (ABID; Abel & Blasingame, 2005). The ABID was adapted from the Abel Assessment for Sexual Interest and is designed specifically for the evaluation of individuals with intellectual disabilities or borderline intellectual functioning. The ABID has two components: a self-report questionnaire administered by the clinician as a semi-structured interview and an objective measure of sexual interest, using visual reaction time. The design of the ABID questionnaire intends that the evaluator will read the questions aloud to the test subject and record the responses on the computer. The questionnaire requires only a second grade level of reading comprehension for the questions.

The ABID questionnaire inquires about involvement in 16 problematic sexual behaviors or potential paraphilic sexual behaviors. In addition, the questionnaire component of the ABID is of value to evaluators as it includes endorsement of sexual fantasy vignettes, measurement of cognitive distortions, social desirability, alcohol and drug history, social-sexual history, and additional self-report information. The ABID contains a number of concrete visual aids, scheduled breaks, and instructions to facilitate transitioning between content topics. The stimuli used in the objective measure of sexual interest are the same as used with the AASI; however, the instructions have been simplified. The VRT portion of the ABID assesses sexual interest in several age categories, including preschool, grade school, adolescent, and adult in both males and females. These components combine as a system of assessment rather than the seemingly more popular focus on the viewing component alone.

The self-report data collected on the questionnaire portion of the *Abel-Blasingame Assessment System for individuals with intellectual disabilities* (Abel & Blasingame, 2005) indicates a significant amount of sexual behavior crossover between age of victims, gender of victims, and a variety of other potential paraphilic behaviors. The preliminary data, based on a sample of 495 adult males, on the utility of the ABID questionnaire is very promising as it solicits significant information from subjects in sixteen areas of sexual history. ABID data evidences significant increases in the number and types of sexual misconduct admitted in the assessment processes of the ABID; increased reporting of paraphilic behaviors, types of victims, and types of sexual misconduct improve the clinicians' ability to discern clinical and protective supervision needs of these offenders. Preliminary data analyses indicated that there was an average of about a 50 % increase in disclosure of the 16 problematic sexual behaviors as a result of the administering the ABID, with the more significant disclosures found among domains involving behaviors done in secret. Preliminary analyses of the fantasy vignette card sort found that endorsement of the female child sexual fantasies correlated ($r = .34$) with the number of self-reported child victims. Endorsement of the male child sexual fantasies also correlated ($r = .33$) with the number of self-reported child victims (Blasingame et al., 2011).

Viewing time measurements, as well as plethysmography, are confronted with the issue of crossover interests and behaviors among sexual offenders. The sexual interests of sexual offenders who have intellectual disabilities appear to be fluid and are often undifferentiated. Other times their interests are fixed and clearly defined. Additionally, offenders often use measures to try to "beat the test" including socially desirable responding and purposeful means of preventing the evaluator from discerning the person's deviant sexual interests or preferences. Using the visual reaction time portion alone of the ABID should not/will not necessarily discriminate between perpetrators referred for evaluation of child sexual abuse as opposed to those who are identified as having adult victims due to the fluidity of interest measured and reported on the ABID (Blasingame et al., 2011).

Other card sorts and similar questionnaires seek to discern the presence of sexual interests, fantasies, and/or preferences by presenting the individual with information and soliciting responses associated with the degree of sexual desirability or interest the person may have in the stimulus.

The Multiphasic Sex Inventory (MSI; Nichols & Molander, 1984) has 560 items on 20 scales but requires a seventh grade reading ability (Keeling et al., 2006). Scales include child molest, rape, fetish, voyeurism, social-sexual desirability, cognitive distortion, immaturity, and others. The MSI is able to detect faking by subjects and level of denial (Kalmus & Beech, 2005).

The Questionnaire of Attitudes Consistent with Sexual Offending (QACSO; Broxholme & Lindsay, 2003; Lindsay et al., 2006) measures cognitive distortions supportive of sexual offending among intellectually disabled males. The QACSO surveys the offender's attitudes regarding rape, voyeurism, exhibitionism, dating abuse, stalking, homosexual assault, and sex with children (Lindsay & Taylor, 2005). It is reported to be able to discriminate intellectually disabled offenders from non-offenders as well as non-offenders without intellectual disability (Keeling et al., 2006; Lindsay et al., 2007).

While measurements of cognitive distortions, fantasies, and attitudes have the risk of transparency, these tools have demonstrated adequate effectiveness and should be incorporated within the evaluation process. A combination of these tools is recommended to assist in ascertaining the psychosexual histories and interests of individuals with intellectual or other developmental disabilities who have sexual behavior problems. Discerning these potential risk areas is critical in the later development of risk management strategies.

Psychosocial and Contextual Variables Associated with Assessment and Risk Management

Self-report information gained during clinical interviews with intellectually disabled offenders can be helpful. Many individuals with intellectual disabilities referred for treatment for sexual behavior problems are sufficiently motivated to make disclosures regarding their sexual histories and interests in an effort to engage with an evaluator. While this information may be held with some degree of question, it may be possible to ascertain the veracity of the information through review with knowledgeable informants or by reviewing the person's file information to discern the degree of credibility to attribute to the self-report information. This self-report information may be helpful in determining the presence of additional factors not included in the actuarial or other procedures administered. Given the low level of accuracy of assessments based on clinical judgment (Hanson & Bussiere, 1996), reliance on self-report information alone, such as that from a psychosocial interview, is counter indicated.

Assessment of persons with intellectual disabilities who have sexual behavior problems may require consideration of a number of idiographic factors associated with the offender himself *and* the environment he lives in (Boer, McVilly, & Lambrick, 2007). Within this paradigm, staff members and other care providers become part of the risk management equation (Boer et al., 2004).

Boer et al. (2004) outlined a number of contextual, dynamic risk management variables that need to be assessed in the course of ascertaining the degree of risk an individual presents at a given time. These include the following:

- Staff member attitudes toward intellectually disabled sex offenders and the degree of effort they are willing to put forth to understand them
- Communications among supervising staff persons including care providers, therapists, and case managers
- Client-specific knowledge retained by supervisory staff persons
- Consistency of and between supervisory staff members
- Consistency of the environment and environmental changes
- The presence of new staff members and changes in support system
- The degree of monitoring of the offender by staff members
- The degree or opportunity for victim access
- Offender compliance with supervision and attitude toward supervision and treatment
- Offender knowledge of his own problem thinking, crime history, risk factors, and relapse prevention plan
- Offender sexual knowledge and self-regulation of sexuality and degree of sexual preoccupation
- Offender capacity to manage impulses, cope with change, and manage emotions (Boer et al., 2004)

These dynamic factors can be discerned by observing and interviewing care providing staff members, family members, and the offender-client himself in pursuit of this information.

The *Treatment Intervention and Progress Scale for Sexual Abusers with Intellectual Disability* (TIPS-ID; McGrath, Livingston, & Falk, 2007a) is another structured approach to gathering dynamic variable information that is well documented. The TIPS-ID has 25 factors that are examiner-scored on a four-point scale of zero to three. Items rated involve domains such as sexual knowledge, attitudes, and behaviors; criminality; mental health and substance abuse; social influences; cooperation with treatment and supervision; and risk management application. The TIPS-ID serves as a structured approach when evaluating dynamic, changeable characteristics within the individuals' psychosocial and contextual environment.

Actuarial Risk Assessment of Sex Offenders with Intellectual Disabilities

Risk assessment of sexual offenders with intellectual disabilities is approached by multiple strategies: actuarial assessment, structured clinical assessment, or by use of a combination of these (Blasingame, 2005; Boer et al., 2004). Quinsey (2004) has noted that while intellectual disability is an associated risk factor for general antisocial behavior and pedophilia, it does not correlate in and of itself with general sexual reoffense.

Actuarial assessment focuses on a limited number of clear and distinct factors or offender characteristics identified from the research literature. Completing actuarial ratings typically relies on official records, e.g., from official criminal records. Actuarial instruments yield a specific score so the offender can be compared to other offenders with similar histories and a comparison of reoffense rates can be done. While the accuracy of actuarial risk assessments regarding groups of persons with a similar score is very high, the application of group-based actuarial ratings to individuals has been challenged (Hart, Michie, & Cooke, 2007). This is likely exacerbated when discussing individuals with intellectual or other developmental disabilities. The use of actuarial estimates is nonetheless recommended in the formation of baseline risk assessments, particularly if used in the larger context of the evaluative process, i.e., not as stand-alone assessment procedures (Blasingame, 2005; Boer et al., 2004; Hart et al., 2007; Tough, 2001). Structured clinical assessments are more idiosyncratic and contextual; these were discussed earlier in this chapter.

Actuarial procedures rely on a limited number of variables associated with reoffense that are delineated in advance of the assessment (Boer et al., 2004). There are limitations to these tools; they do not encompass every risk factor that is identified in the research literature (Quinsey, 2004). Nonetheless, they are well researched and offer validation data to support their use. Actuarial tools offer a baseline risk rating that can aid in determining an individual's needed level of case management, supervision, and/or treatment intensity (Boer et al., 2004; Hart et al., 2007).

Actuarial tools validated on samples of males with intellectual disabilities who had committed sexual offenses include the following:

- The Violence Risk Assessment Guide (VRAG; Quinsey, Harris, Rice, & Cormier, 1998; Rice et al., 2008)
- The Static-99 Structured Risk Assessment (Hanson & Thornton, 1999; Tough, 2001)
- The Rapid Risk Assessment of Sex Offender Recidivism (RRASOR; Hanson, 1997; Tough, 2001)

The *Violence Risk Assessment Guide* (Quinsey et al., 1998) estimates long-term risk for violent and/or sexual recidivism. It has been cross-validated on a variety of offender types, including forensic psychiatric and correctional facility populations and offenders with intellectual disabilities. The VRAG includes 12 domains, including psychopathy measured by use of the Psychopathy Checklist-Revised (PCL-R; Hare, 1991). Due to the use of the PCL-R, the VRAG is somewhat more complicated to use with persons with intellectual disabilities as the PCL-R relies significantly on information in the person's file. Since a significant number of intellectually disabled persons referred for sexual behavior problems have poor documentation and/or no official charges in their file information, it may not be possible to complete the PCL-R (Quinsey, 2004). Nonetheless, in the original development samples for the VRAG, it was as accurate with persons with intellectual disabilities as it was with intellectually typical individuals (Quinsey et al., 1998).

PCL-R trait scores are reported to correlate with IQ scores among sex offenders who have normal intellectual functioning (Beggs & Grace, 2008). PCL-R scores were found to correlate ($r = .18$; $p < .01$) with prior sexual offenses and with reoffending ($r = .25$; $p < .01$) although the IQ scores did not. Beggs and Grace report that higher PCL-R *trait* scores are associated with increased risk of reoffending and that there is an interaction between PCL-R score and IQ. This particular study did not use the traditional cut-point of 25 or 30 for PCL-R scores; the authors considered scores of 12–15 as high. Beggs and Grace found the "high" PCL-R /lower IQ group to have the highest reoffense rate. Given the low level of psychopathy reported in the study, it may be more accurate to refer to these phenomena as antisociality rather than psychopathy. These findings suggest that evaluators can strengthen their assessments by including the PCL-R in the assessment regimen and that there should be raised concern if there are more modest PCL-R scores in combination with lower intellectual functioning.

Another advance in the development of risk assessment procedures is the *Static-99* (Hanson & Thornton, 1999). The research included two large meta-analyses of sexual offender recidivism studies. On the Static-99, points are assigned based on the presence of several factors. These are prior offense convictions, age over/under 25, male gendered victims, the presence or absence of a relationship with the victim, prior nonsexual crimes, offense of immediate concern relating to nonsexual violence, having stranger victims, length and presence of marital/relational status, and the total number of prior sentencing dates. Individual cases are compared to the frequency of recidivism known among groups of individuals with similar ratings.

The Static-99 was slightly more accurate than the RRASOR (discussed below; Hanson, 1997) in classifying risk categories among the general sexual offender popula-

tion (Hanson & Thornton, 1999). The Static-99 requires access to criminal justice documentation such as police or court records. For a variety of reasons, many persons with developmental disabilities that are referred for evaluation and treatment of sexual behavior problems have no formal criminal record (Beech et al., 2003). There does not appear to be an interaction of Static-99 scores and IQ (Beggs & Grace, 2008).

Harris, Phenix, Hanson, and Thornton (2003) note that the original data samples for the Static-99 included developmentally delayed offenders. They indicate that research to date supports the utility of the Static-99 with the developmentally delayed population, and where formal legal documentation does not exist, the use of documentation from informal hearings and sanctions such as placement in treatment facilities and residential moves are counted as both a charge and a conviction for a sexual offense. When such documents are available, the Static-99 is a useful tool in classifying levels of risk for reoffense among intellectually disabled offenders.

The *Rapid Risk Assessment of Sex Offender Recidivism* (RRASOR; Hanson, 1997) is another tool useful for sexual offenders with intellectual disabilities. Tough (2001) found the RRASOR to provide a good estimate of overall risk for recidivism among intellectually disabled sex offenders.

The RRASOR consists of only four items: prior history of sexual convictions, age of the offender at the time of the RRASOR assessment, victim(s') gender, and the offenders' relationship to the victim. The coding rules for the RRASOR can be modified, as discussed above regarding the Static-99, to overcome the fact that many offenses committed by intellectually disabled persons are not reported to law enforcement or that the legal system may dismiss the charges due to the individual having a developmental disability (Harris et al., 2003; Keeling et al., 2006; Tough, 2001). In her study, Tough used institutional and counseling center records in addition to official legal system records in scoring the RRASOR. Tough suggests the RRASOR to be the more appropriate tool for use with the intellectually disabled population of sexual offenders as it has fewer items than the Static-99. She suggested that her finding that the RRASOR more accurately classified risk for sexual reoffense than the Static-99 may be related in part to the fact that the additional six items on the Static-99 may be absent or poorly documented in intellectually disabled individuals' charts, given the documentation problems noted above. By using institutional and/or clinical records that include information regarding what would otherwise have been a matter brought to the attention of the criminal justice system, except that the alleged perpetrator was an individual with intellectual or other developmental disability, Tough found that the subjects' risk estimate scores were indeed increased as was the overall accuracy of the RRASOR.

Evaluators must recognize the weight of their opinion and how these opinions influence restriction of civil liberties (Blasingame, 2005; Hart et al., 2007). Further, it is understood that given a number of documentation challenges and complications, an individuals' risk estimate may be an underestimate (Keeling et al., 2006). Nonetheless, the current data on these actuarial tools does support their use in assessment and risk management with those sexual offenders who have intellectual disabilities (Phenix & Sreenivasan, 2009).

Actuarial tools offer a baseline risk rating that can aid in determining an individual's needed level of supervision and/or treatment intensity (Boer et al., 2004). However, evaluators should be cautious in making decisions from outcomes based on documents that have not been subject to legal scrutiny and due process in the legal arena. Additionally, given the limitations of actuarial tools, it is critical to integrate all sources of information in the evaluation and treatment planning process. Incorporating the individuals' psychosocial and sexual histories, the PCL-R, sexual interest measures, and measures of cognitive distortions, along with the actuarial risk measures creates the most helpful evaluation. The *TIPS-ID* (McGrath, 2005) provides a structured format for summarizing information about 25 risk factors that should be addressed. Bringing all these various pieces of information together in a systematic fashion allows evaluators to accomplish more holistic assessments with more specific discernment of an individual's risk, needs, and strategies to engage the individual in treatment.

Current Treatment Strategies

Therapeutic treatment of individuals with intellectual disabilities has been described from a variety of approaches. These include behavior management, problem-solving skills training, psychoeducational activities, and cognitive-behavioral therapies (Blasingame, 2005; Lindsay & Taylor, 2005). Many programs, including the Developmentally Disabled Sexual Offender Rehabilitative Treatment model (DD-SORT; Blasingame, 2005), integrate multiple components using these varied strategies, making it difficult to ascertain which individual elements of treatment have significant, if any, effects.

At least one meta-analysis of studies on the effectiveness of psychotherapy with individuals with intellectual disabilities found a moderate level of effectiveness (Prout & Nowak-Drabik, 2003). This exploratory study suggested that individual therapies might be more effective than group therapies. The study also suggested that behaviorally oriented treatments showed more promise for bringing about change.

Cognitive-behavioral approaches have been the most popular in recent years and have relatively good support in the literature (Blasingame, 2005; Lindsay & Taylor, 2005).

While randomized control studies are yet to be located, cognitive-behavioral treatments have been reported to reduce recidivism among intellectually disabled sex offenders (Lindsay & Taylor, 2005; Rose, Jenkins, O'Conner, Jones, & Felce, 2002). Small sample sizes challenge broad-based comparisons, but these findings are promising. These findings are also consistent with various studies suggesting that cognitive-behavioral treatment helps reduce recidivism in the mainstream population.

McGrath et al. (2007b) reported a skills training and cognitive-behavioral group therapy program was the primary treatment approach for intellectually disabled sex offenders in their statewide program. As discussed earlier, this study found an approximate 11 % reoffense rate among over a hundred subjects. The authors included in their reoffense data incidents that may not have been prosecuted, but under state law, the behaviors could have been considered criminal had prosecution been pursued. The findings from this study suggest that a multifaceted management strategy, including cognitive-behavioral treatment, can be an effective tool in reducing recidivism among intellectually disabled sexual offenders.

Keeling et al. (2006) found that the self-regulation model of relapse prevention can reasonably be applied to intellectually disabled sex offenders. While the great majority of these offenders were classified in the approach pathways, these findings aid in defining the types of risk and needs issues that are to be addressed, particularly self-regulation deficits and abuse-oriented goals. Suggested treatment, teaching, and training targets include correcting cognitive distortions and pro-offending attitudes, developing victim empathy or awareness, controlling deviant sexual interests, and developing motivation to change (Blasingame, 2005, 2006a, 2006b; Haaven & Schlank, 2001; Keeling et al., 2006).

Effective and adaptive solutions to the problems of day-to-day life need to be developed (Nezu, Fiore, & Nezu, 2006). Teaching an individual with intellectual disabilities to consciously monitor his own reaction to a situation and purposely change his reaction to a problem is part of this approach. Internal thoughts, fantasies, and habituated scripts each contribute to problem interpretation and efforts at solving those problems. However, some individuals avoid their problems and therefore fail to implement any problem-solving efforts. Reducing sexual aggression can be aided by discovering alternative ways to cope and resolve issues. Problem-solving interventions need to be multimodal and address cognitive, affective, and behavioral skills development (Nezu et al., 2005). Addressing problems directly, developing a positive attitude about problem solving, and reducing impulsive approaches to problem solving are examples of this multimodal schema.

Collaborative Management of Sex Offenders with Intellectual Disabilities

There are a large number of potential factors influencing an individual client's functioning at any given time. These affect risk management strategies for offenders who have intellectual disabilities. Until the offender can reduce and manage his own risk, treatment providers, family members, and supervising care providers pursue risk management to prevent further sexual misconduct (Blasingame, 2005).

Andrews and Bonta (2003) articulately point out that engaging the offender-client in a manner that increases responsivity to treatment is associated with reduced recidivism. The methods discussed above address ways of discovering the offenders' comparative risk level for sexual recidivism and the criminogenic needs which have accumulated in the person's life.

Risk management efforts will need to address at least seven areas. These are environmental contingencies, coordinated case management, supervisory staff competencies, psychiatric care, cognitive-behavioral treatment, law enforcement supervision, and victim advocacy (Table 2).

Environmental Contingencies: Risk management efforts in this domain include restricting access to children or potential opportunities to engage in inappropriate sexual conduct; restriction of access to alcohol or other mind-altering substances that might contribute to impulsivity and undermine self-regulation; monitoring types of peers and associates; creating opportunities to have pro-social and age-appropriate social interactions; and providing line-of-sight supervision when the offender is in the proximity of potential victims (Blasingame, 2005). Providing housing and supported employment, access to medical and psychological care, and transportation services are important aspects of the overall life management assistance for these offenders, provided in effort to reduce risk of harm to others in their communities.

Coordinated Case Management: Risk management efforts in this domain include concerted collaborative communication and shared responsibilities between the multiple professionals and supervisory staff persons who form the offenders' risk management circle. Regular communications between such persons provides for greater continuity across venues, such as case managers, residential facilities, day programs, therapeutic services, and psychiatric services (Blasingame, 2005).

Staff Competencies: Risk management efforts in this domain include having well-trained and adequately motivated staff persons involved in the day-to-day life of the offender. Many intellectually disabled sexual offenders who are known to the service delivery system will be placed in board and care

Table 2 The risk management circle for individuals with intellectual disabilities

facilities and attend sheltered workshops or day programs. The staff members in these settings play a key role in risk management. Staff members who supervise the daily activities of the offender need to be competently trained across a number of areas (Blasingame, 2005; Mussack, 2006).

Psychiatric Care: Risk management efforts in this domain include evaluation and prescription of appropriate psychotropic medications for those individuals who have dual diagnoses. The frequency of comorbid mental disorders is high and should be attended to in effort to assist the individual in self-regulation of mental health issues, relapse prevention efforts, and the pursuit of a better life for the individual.

Cognitive-Behavioral Treatment: Risk management efforts in this domain include provision of relapse prevention training, sexual education training, relationship skills, adaptive functioning skills, self-regulation skills training, pragmatic problem-solving skills, and other sex offender-specific training based on his needs, risk level, and strategies for garnering engagement. The use of behavioral reinforcement principles and developmentally appropriate adaptations to the therapy delivery is critical (Blasingame, 2005).

Law Enforcement Supervision: Risk management efforts are enhanced for many offenders who have intellectual disabilities when there is significant collaboration with the law enforcement supervision agents, such as probation officers or parole agents. Not all offenders with intellectual disabilities have probation or parole status. When this is the case, it is imperative that all the members of the risk management circle understand the legal conditions imposed on the individual and that there is open communication between the professionals and care providers.

Victim advocacy: Risk management efforts in this domain require that the offender and all the professionals and paraprofessionals involved are working toward the goal of no more victims. While a better life for the offender is desirable, that is secondary to prevention of further harm to other children or other vulnerable persons.

Conclusion and Recommendations for Future Research

Sexual offenders who have intellectual disabilities present evaluators and treatment providers with a number of unique challenges. While the needs of these individuals who have intellectual impairments are very similar to neurotypical offenders, how their needs are assessed and met requires thoughtful intervention. This chapter has reviewed a number of these areas and identified strategies and potential tools to aid evaluators, treatment providers, and other members of the risk management circle.

Research in this specialized area of sexual offender treatment and management has flourished in the recent decade. However, there continue to be a number of areas that

need further investigation and clarification. These include developing additional assessment procedures to evaluate mental health, personality characteristics, applied treatment strategies, risk assessment and management procedures, and continued cross-validation of the few tools that have been specifically developed for offenders who have intellectual disabilities. Many of the extant studies involving sex offenders who have intellectual disabilities have small samples from select settings, making it difficult to generalize the findings. Using different definitions or criteria also complicates use of the data. Researchers are encouraged to be more consistent in inclusion/exclusion criteria and collaborate across settings to help remedy these issues.

Ultimately, these sexual offenders will require a risk management circle of professionals, family members, and others to communicate effectively and work in support of the individuals' success. The evidence is that treatment and intervention with offenders who have intellectual disabilities can be effective in reducing recidivism. Our shared mission is to have no more victims and better lives for these individuals.

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Overview of Assessment of Sexual Offenders

Anita Schlank, Saprina Matheny, and Jessica Schilling

Introduction

The most popular topic related to sexual offenders over the past decade appears to be how to assess the risk they present to society (Beech, Erikson, Friendship, & Hanson, 2002; Beech, Fisher, & Thornton, 2003; Doren, 2002; Hanson & Harris, 2000; Hanson, Morton, & Harris, 2003; Hanson & Thornton, 2000; Thornton, 2002). However, this is just one of many types of assessments a clinician may be asked to perform related to a sexual offender. For example, assessments are often needed of alleged perpetrators of sexual abuse in child custody situations, and in the 20 states in which sexually violent predator laws were adopted, assessments are needed to determine whether sexual offenders meet legal criteria for civil commitment. In addition, presentencing evaluations are often sought to help with disposition planning, and sexual offenders are also often evaluated prior to their release on probation or parole. Also, once sexual offenders have been civilly committed, they usually require an assessment for treatment planning purposes, since the civil commitment evaluation was likely to focus mainly on risk and legal criteria rather than treatment needs. Finally, assessments are also needed to determine when civilly committed sexual offenders have lowered their risk sufficiently to be released into the community. This chapter will discuss aspects of comprehensive clinical assessments of sexual offenders in a variety of contexts.

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Guiding Principles of Sex-Offender Assessment

Before undertaking an assessment of a sexual offender for any purpose, clinicians should first ask themselves if they are comfortable working within the legal arena with cases that are often adversarial. Clinicians should be comfortable taking on a neutral consultant role, rather than an advocacy role, and should feel comfortable with the possibility of making recommendations that might displease the individual being assessed. Regardless of the purpose of the evaluation, assessments of sexual offenders need to be individualized and comprehensive. With the exception of the rare case in which an offender voluntarily seeks treatment for sexual deviance even though offenses were never reported, it will be extremely important to rely on multiple sources of data, as self-report will be inherently unreliable. Clinicians should use research-supported tools and need to keep abreast of the recent research on those tools, and they should also recognize that different populations will require the use of different tools. Clinicians should ensure that they are properly trained before attempting to use these tools. They should be aware that while physiological assessment might be valuable, it is also fallible and may be inappropriate for certain individuals. Finally, no clinical assessment should ever be used to offer an opinion about whether an alleged offender is guilty or innocent of a crime. There is no set "profile" of a sexual offender, and no measure or tool will provide information about guilt or innocence; therefore, to offer such an opinion would be unethical (ATSA Professional Issues Committee, 2005). When reporting findings, it is important to clearly demonstrate how conclusions were drawn and to highlight any inconsistencies in the data or limitations to the

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conclusions. When an offender refuses to participate in the assessment, it is important to note the significant limitations to the evaluation posed by the lack of opportunity to conduct a clinical interview. There are also several ethical issues to consider when conducting sex-offender assessments. Evaluators should not have had a prior treating relationship with the offender since the evaluator might know information that would not be normally revealed to someone conducting an evaluation, and it could betray the trust of the client who had been seen in treatment and could impair the evaluator's objectivity since a therapist often takes on an advocacy role for the client (Greenberg & Shuman, 2007) or might experience countertransference if the client was extremely resistant or challenging. Evaluators should also be careful about conducting assessments which recommend placement in the evaluator's treatment program, as there may be unconscious bias toward recommending this treatment or at least it may appear that there are financial incentives associated with the recommendation. In rural areas or small towns, where there is essentially only one sex-offender treatment program, it would be wise for the assessments to be conducted by neutral evaluators not employed by the program to avoid any appearance of a conflict of interest (ATSA Practice Standards and Guidelines for Members of the Association for the Treatment of Sexual Abusers, 2005).

Alleged Sexual Abuse in Child Custody Situations

Sexual abuse allegations may appear during divorces or after the parties have already agreed to a custody/visitation arrangement. Courts often seek psychological assessments in these complex cases, but assessment of an alleged perpetrator is extremely difficult since, as mentioned above, there is no way for a clinician to determine their guilt or innocence. Many inventories about sexual interests and behaviors have obvious face validity, making it very easy for an alleged perpetrator to deny sexual deviance. In addition, there are no set guidelines for assessment of sexual abuse allegations in custody evaluations. Bow, Quinnel, Zaroff, and Assemany (2002) did propose a model for conducting such evaluations. They stress that first the evaluator should have no prior involvement in the case and should be court appointed to preserve their neutral, objective role. Evaluators should have access to all records, including police documents, medical records, social service records and therapy notes, and it is important that these be reviewed prior to clinical interviews. They suggest that it is crucial for an evaluator to assess the nature, sequence, and circumstances of the allegations, including the plausibility of the alleged occurrence. Collateral contacts should be sought, and it is recommended that each party be interviewed a number of times, with attention paid to inconsistencies. They recommend psychological testing of the alleged perpetrator, as well as an assessment of their use of mood-altering chemicals and, if there is a criminal history, an assessment of psychopathy. At times, psychological testing of the alleged victim will be required as well. A complete sexual history of the alleged perpetrator should be obtained, and parent–child observations may provide useful information but may not be possible or even recommended in certain cases.

Assessment for Civil Commitment

Beginning approximately 20 years ago, a wave of new sexual offender laws spread throughout the nation. These laws allowed for the indeterminate commitment of a sexual offender after the offender had completed a term of incarceration. While each state has a slightly different statute, there are commonalities, including determining the presence of a mental disorder and determining that the offender presents a risk for reoffending sexually because of that disorder. Some statutes require a history of having committed certain types of offenses and others require an assessment of the offender's volitional impairment. Those conducting assessments for possible civil commitment need to be aware of the specific statutes and the burden of proof used in their state and must keep abreast of relevant case law.

With regard to the first criterion, states have been quite broad in what they accept as a qualifying "disorder," including personality disorders. There has been some controversy regarding the use of the diagnosis Paraphilia Not Otherwise Specified (in the DSM-IV, or Other Specified Paraphilia in the DSM-5), which is often used for offenders who appear to have significant deviant arousal to forced sexual activity. Some have argued that Paraphilic Coercive Disorder was expressly rejected from the DSM-IV (Zander, 2008) and also from the DSM-5; however, many have recognized that there is a group of individuals who clearly have significant deviant arousal to coerced sexual activity (Abel & Rouleau, 1990; DeClue, 2006; Thornton, 2009; Vognsen & Phenix, 2004). In addition, the DSM Casebook (Spitzer, Gibbon, Skodol, Williams, & First, 2002) contains an example for this diagnosis of an offender with deviant sexual arousal to rape but who does not have a history of other general criminality. Case law also exists supporting the use of this diagnosis to describe such individuals. McGee v. Bartow (2010) and Brown v. Watters (2010) are both cases in which the US Court of Appeals upheld the use of this diagnosis for civil commitment. When assessing for this diagnosis, it is important to distinguish between this disorder and the general criminality associated with Antisocial Personality Disorder. In addition, some men who commit rapes are not necessarily aroused by the coercion but have cognitive distortions in which they are convinced the victim is enjoying or wanted the sexual activity. Therefore, evaluators should look for signs that the offender stopped when emotional distress was evident or evidence that he believed the victim was consenting

(such as attempting to make a "date" to meet later), which would contraindicate such a diagnosis (Doren, 2002).

With regard to the use of Other Specified Paraphilia (Paraphilia NOS in the DSM-IV) for what was formerly known as hebephilia, there are arguments both for (Blanchard et al. 2009) and against (Moser, 2009; Zander, 2009). If the decision is made to use this diagnosis, the evaluator should look for a clear fixation on adolescents, a continued sexual abuse of adolescents following consequences for that behavior, and a tendency to end relationships when the adolescent "ages out" of the preferred range.

There is an extensive body of literature concerning the assessment of an offender's risk to reoffend, and this topic is covered in other areas of this book, so this will not be addressed in any detail here. However, clinicians should be aware that it is generally accepted that actuarial instruments or structured guides to clinical judgment are superior to clinical judgment alone. In addition, assessors should be aware of the latest publications regarding these risk assessment tools and to which populations each are applicable. Finally, assessors should be familiar with recent research which has suggested that those sexual offenders who were civilly committed in the past may not have been as high risk as initially believed (Duwe, 2013).

Predisposition Evaluations and Treatment Planning Evaluations Following Civil Commitment (Adult Male Offenders)

Predisposition evaluations and treatment planning evaluations following civil commitment are very similar in that both require a comprehensive evaluation of the offender's history, sexual behavior and interests, cognitive functioning, and specific treatment needs. In addition, for the predisposition evaluations, an assessment of the offender's risk will be necessary to determine the context in which he/she can receive treatment. In addition to using risk assessment tools, it will be important to acknowledge the offender's past behavior while under supervision when making that determination. Unlike evaluations prior to civil commitment or evaluations related to allegations of sexual abuse related to child custody, the offender is more likely to be forthcoming with personal disclosures, although many may remain guarded due to plans to appeal the conviction or commitment. Therefore, it remains important to utilize multiple data sources for the evaluation. A more detailed description of the specific areas for such an assessment follows.

Clinical Interview

When interviewing a sexual offender, the first step should be obtaining informed consent or, if the evaluation is court ordered, informing the offender about the nature of the evaluation and the limits to confidentiality. Specific information should be given regarding mandatory reporting laws and duty-to-protect requirements. It is helpful to instruct the offender regarding how he may discuss past undisclosed offenses in a manner that will not trigger the need for a mandated report. Following these warnings, it is often beneficial to have the offender take some self-report questionnaires, such as the Multiphasic Sex Inventory (MSI) (Nichols & Molinder, 1984) prior to the clinical interview. In the experience of the first author, seeing some deviant sexual interests in print can allow the offender to realize that others have similar interests and may make it more likely for the offender to honestly endorse certain interests prior to the interview. It is useful to begin the interview by obtaining general background information, as this can help establish rapport before beginning any discussion of the more difficult topic of sexually deviant behavior. History regarding family of origin, juvenile conduct problems, academic problems and achievement, work history, medical history, substance abuse history, nonsexual criminal history, and history of romantic relationships, marriage, and children should all be obtained. A thorough sexual history should also be obtained, including information regarding early parental messages regarding sexuality, sexual orientation, history of sexual behavior, frequency of masturbation, and interest in various sexual themes. Then, the offender's account of the sexual offense(s) can be obtained. It is often useful to allow the offender to provide this historical information without any confrontation regarding inconsistencies first, before going back over the information to challenge any answers. The clinicians should have carefully read background information and reviewed self-report questionnaires prior to the clinical interview, so that inconsistencies between verbally provided history and data contained in the records can be challenged.

Assessment of Intellectual Functioning

An assessment of intellectual functioning is important to determine if any offenders admitted for treatment have intellectual deficits that require special programming. Several researchers have noticed a relatively high incidence of cognitive deficits in sexual offenders (Gross, 1985; Lund, 1990), and sexual offenders with intellectual disabilities may appear more likely to commit offenses across categories of offenses and may seem less discriminating in their victims (Lindsay, 2002), which suggests that they require special attention. To save time in the assessment process, many programs choose to start with a quick screening test and then use a more comprehensive test if the screening results suggest a score at or below the borderline range or lower. The Shipley Institute of Living Scale (SILS) (available www.wps.publish.com) is a very brief screening test of intellectual abilities; however, it has not yet been updated to include an estimate based on the

more recent Wechsler comprehensive batteries and relies heavily upon verbal abilities, so it may underestimate IQ in those with cultural and socioeconomic differences. In addition, it was standardized on a group containing few older adults and tends to overestimate the lower ends of cognitive functioning and underestimate the scores which are higher than average. A better choice for a brief intellectual estimate may be the Wechsler Abbreviated Scale of Intelligence (WASI) (available from www.pearsonassessments.com), which is a standardized, independent scale based on the WAIS-III and the Wechsler Intelligence Scale for Children-III (WISC-III) (available at www.harcourtassessment.com). It provides more information than is typically received from other brief intelligence tests and yields the three traditional indices of Verbal IQ, Performance IQ, and Full-Scale IQ. While the WASI is useful for screening purposes, it is not comprehensive enough to be used to diagnose mental retardation, and some psychologists have expressed concern about the differences obtained in these scores as compared to the more comprehensive Wechsler batteries (Axelrod, 2002). Therefore, it would still be recommended to use the more comprehensive test if a Full-Scale IQ falling in the borderline range or lower was obtained on the WASI. If initial screening suggests functioning in the borderline range or lower, assessment with a test such as the Wechsler Adult Intelligence Scale-Fourth Edition (WAIS-IV), which is available at www.pearsonassessments.com, is recommended. The WAIS-IV was released in August 2008. Like the Wechsler Intelligence Scale for Children-Fourth Edition (WISC-IV), it eliminates the dual IQ but provides a Full-Scale IQ and important Index Scores. This revision reportedly takes an average of 67 min to administer (as opposed to approximately 80 min for the WAIS-III). It has updated the norms and added five points to the floor and ceiling IQs measured (FSIQ range of 40–160 as opposed to 45–155 of the WAIS-III). In addition, the Picture Completion subtest now has enlarged visual stimuli, and the Digit Span subtest now contains a sequencing task. In addition, there are two new Perceptual Reasoning subtests entitled "Visual Puzzles" and "Figure Weights" and a new Processing Speed subtest entitled "Cancellation." Besides clarifying possible borderline intellectual functioning, this test provides useful information when data about processing speed or working memory is needed, since specific Index Scores for those abilities are provided.

Assessment of Educational Achievement/ Learning Disabilities

While the assessment of all aspects of educational achievement can be beneficial for educational planning purposes, an assessment of reading comprehension is the most important for planning sex-offender treatment. Obtaining information about one's ability to understand written materials is crucial because so much of sex-offender treatment strategies assume that the resident is capable of reading written handouts and materials. In addition, the validity of self-report questionnaires used later in the assessment process often rely on the ability of the offender to be competent at reading information provided at least a sixth-grade level. Therefore, at least a brief screening of reading comprehension should be administered early in the assessment process, before an offender is given any self-report questionnaires. This should be done even with those reporting a high school diploma, since graduation requirements vary from state to state, as do the diploma and certificate of completion options that are offered to students. Therefore, it is possible that an individual could have received a diploma without mastering a sufficient level of reading comprehension.

Tests of reading comprehension often use one of three response formats: cloze, question answering, and retellings. Cloze format tests present sentences or passages with blanks in them, and the examinee must read the text and suggest an appropriate word for the blank. The question-answering format requires a passage to be read and an answer given to either a multiple-choice or open-ended question about the passage. Retellings require the client to paraphrase a passage to demonstrate adequate understanding and use a coding system for scoring the quality of the response.

The Wide Range Achievement Test-Fourth Edition (WRAT-4) contains a brief measure of reading comprehension (available at www.psychpress.com). This fourth edition is an improvement over previous editions of the WRAT because it has added a Sentence Comprehension subtest (a cloze format test) where previously the reading score was based entirely on word recognition. The age-based norms are also now extended to include ages up to 94 years. The Sentence Comprehension subtest takes approximately 15–20 min to administer. However, learning disabilities should not be diagnosed based on this brief screening test, and those receiving low scores on the Sentence Comprehension subtest should be administered a more comprehensive measure of reading skills, such as the Wechsler Individual Achievement Test-Second Edition (WIAT-II) or the Woodcock–Johnson-III Tests of Achievement (WJ-III).

The WIAT-II (available at www.harcourtassessment.com) is an achievement battery empirically linked with the Wechsler Intelligence Scales, and tables (Psychological Corporation, 1997) offer the expected WIAT-II scores based on the Wechsler IQ scores. However, the Reading Comprehension subtest of the WIAT-II can be fairly lengthy, and some portions of the question-answering format are possible to be answered simply by repeating words from the passage without fully understanding what has been read.

The WJ-III (available at www.riverpub.com) includes tests and clusters that are meant to directly parallel those outlined by the Individual with Disabilities Education Act of 2004 (20 USC Statute 1400). Administration time is approximately 5 min per subtest, and this test has shown good reliability.

Assessment of Psychosexual Disorder/Sexual Compulsivity

The assessment of disordered sexual arousal is very important for treatment planning, as it has been closely linked with risk for reoffending (Harris et al., 2003). One instrument which the current authors have found helpful for eliciting information about deviant sexual interests beyond what is obtained in a clinical interview is the Multiphasic Sex Inventory (MSI) (Nichols & Molinder, 1984). The MSI is a self-report questionnaire which asks about sexual activities, experiences, and problems. It also contains scales that assess the level of openness about the deviant sexual behaviors. Research on the MSI suggests that it offers information not provided by traditional psychological tests (Kalichman, Henderson, Shealy, & Dwyer, 1992; Schlank, 1995) and has adequate internal consistency and convergent validity (Kalichman et al., 1992). The second edition of the MSI (MSI-II) was made available in 2000, which is an expanded version, with the wording of some questions clarified and some items eliminated because they were found not to be useful for discrimination purposes (Nichols & Molinder, 2000). In the MSI-II, the client's scores can be compared to the scores of known groups of child molesters and rapists, and there are additional paraphilia indices. New scales to assess an offender's justifications for his/her offenses were also added, and further inquiry has been made into physiologic dysfunction. In addition, items regarding gender identity and gender orientation are also included. Unlike the original MSI, the MSI-II cannot be scored by the clinician but must be sent to Nichols & Molinder, who return an interpretative report. While this version appears to have important additions not found in the MSI, and it appears especially useful for those men who openly admit their deviance, some treatment providers have made a decision to continue using the old MSI because of the relative lack of independent research on the MSI-II. In addition, it requires a seventh-grade reading level. While a cassette tape version is available, the vocabulary used is at a level where even an auditory administration might prove problematic for some.

Other self-report questionnaires are also available, such as the Wilson Sex Fantasy Questionnaire (Wilson, 1978), which is a 40-item questionnaire that questions about four types of sexual fantasies: exploratory, intimate, impersonal, and sadomasochistic. Other options include the Clarke Sex History Questionnaire (Paitich, Langevin, Freeman, Mann, & Handy, 1977) and the New England Sexual Compulsivity Scale (Kalichman & Rompa, 2001).

The penile plethysmograph is an objective measure of sexual arousal which records the changes in penile responses during the presentation of a variety of sexual stimuli (either visual or audiotaped). Most experienced sex-offender treatment providers have had the experience of clients who claim no deviant sexual interest, but objective results such as these might indicate differently. Therefore, the use of an instrument such as the penile plethysmograph can offer useful information about disordered arousal. However, the plethysmograph is not without controversy. For example, some subjects are capable of manipulating their erectile responses (Hall, Proctor, & Nelson, 1988; Murphy & Peters, 1992; Quinsey & Laws, 1990), even though there are several techniques to try to prevent this occurrence. Some clinicians believe that the method is intrusive or too expensive. In addition, the most significant concern about the plethysmograph is its misuse, as some have inappropriately attempted to use it to determine guilt. This is an inappropriate use of the measure as not all sex offenders have disordered arousal patterns, and the presence of a disordered arousal pattern does not confirm any acts of sexual deviance (Freund & Watson, 1991; Marshall & Eccles, 1991; Murphy & Peters, 1992).

The Abel Assessment for Sexual Interest (AASI) (Abel, Huffman, Warberg, & Holland, 1998) and the Affinity Measure of Sexual Interest (available from http://www.pacific-assmt.com) are other options for objective measures, although they measure sexual interest through visual retention time rather than actual sexual arousal. This type of procedure measures the length of time a subject spends viewing different slide photographs of clothed individuals of various ages against a plain background, with no distracting stimuli in the picture. This assessment technique is sometimes preferred because it is less intrusive and potentially less embarrassing than the PPG, and some research has shown that visual retention time can reliably predict sexual interest categorization (Abel et al., 1998). Additional research has suggested that the AASI can be as accurate as the plethysmograph in identifying some categories of sexual interest, better than the plethysmograph in other areas, but less accurate in additional areas. For example, Letourneau (2002) found that both the AASI and the plethysmograph were accurate in identifying sexual interest in young boys, and the AASI identified offenders against adolescent girls, but neither method was able to accurately differentiate offenders against adult women or young girls. However, some researchers (Fischer & Smith, 1999) have had concern about the validity and reliability of this technique.

One final method for assessing sexual interest is the Implicit Association Test (IAT) (Greenwald, McGhee, & Schwartz, 1998). The IAT is described as measuring "the strength of automatic associations in memory between a

concept (e.g., child) and an attribute (e.g., sexual attractiveness) is inferred from the relative speed with which one sorts stimulus words or pictures into categories….Respondents must sort each word or picture into one of four categories by pressing one of two keys on a computer keyboard....Response speed is thought to depend on the extent to which the categories that share one key are associated in one's memory" (Babchishin, 2008, pp. 15–16). While the IAT may be able to complement more commonly used measures of assessing sexual interest, further research is required to examine its convergent validity with these other measures.

Assessment of Substance Abuse

It is important for evaluators to obtain a thorough assessment of a sexual offender's substance use history, as it is one of the "central eight" risk/need factors that is predictive of criminal behavior (Andrews & Bonta, 2006). Offenders frequently minimize the extent of their past use and collateral information is important in order to obtain an accurate assessment. In addition, the use of the Substance Abuse Subtle Screening Inventory-3 (SASSI-3) can be extremely helpful (available from www.sassi.com or www.parinc.com). The SASSI-3 requires a fifth-grade reading level and takes approximately 15 min to administer and score. In addition, its scales include both obvious and subtle items associated with substance abuse or dependence, and it includes a scale that measures a defensive response pattern. It is particularly useful in identifying individuals who are experiencing substance abuse problems but who minimize their use history. The decision rules suggesting a high probability of a substance dependence disorder have been found to yield a 95 % agreement with clinical diagnoses of substance dependence (Lazowski, Miller, Boye, & Miller, 1998). While there are many other self-report questionnaires regarding substance use, those measures tend to provide little information above and beyond that could be obtained in a clinical interview and do not specifically address the difficulties presented by offenders who minimize their substance use.

Assessment of Psychopathology

For obvious reasons, the presence of major psychopathology can interfere with a sexual offender's ability to benefit from treatment. Assessment of psychopathology can often be accomplished during a thorough clinical interview and record review, although some evaluators may wish to use an objective personality inventory, such as the Minnesota Multiphasic Personality Inventory-Second Edition (MMPI-2), the Minnesota Multiphasic Personality Inventory-Second Edition-Revised Format (MMPI-2-RF) (available from www.pearsonassessments.com), or the Personality Assessment Inventory (PAI) (available from www.parinc.com). The MMPI-2 is one of the most popular and most researched self-report personality inventories in use today. The MMPI-2's clinical scales had much overlap, which led to some criticism. Therefore, in 2003, the Restructured Clinical Scales were developed, removing the contribution of demoralization from each clinical scale and resulting in more pure and distinct clinical dimensions (Tellegen et al., 2003). The most recent revision of this test is the MMPI-2 Restructured Form (MMPI-2-RF), which was released in July 2008. This version of the MMPI-2 is only 338 items (as opposed to 567 items) and contains 50 scales, including the Restructured Clinical (RC) Scales, but which eliminates the older clinical scales. Replacement of the original clinical scales with the RC Scales has been criticized by some who fear that they might measure pathology which is markedly different from that which was measured by the original scales or that the research based on the original scales will now be irrelevant. Others believe that the new scales are as good or better as the original scales because of the lower inter-scale correlations and no inter-scale item overlap (Tellegen et al., 2006). In addition, the RC Scales have been found to offer improved information for certain types of assessments, such as for police preemployment evaluations (Sellbom, Fischler, & Ben-Porath, 2007), and the fewer number of items in the MMPI-2-RF should be a relief to many clinicians who had difficulty asking clients to take such a lengthy questionnaire (especially those with attentional deficits).

The PAI is a 344-item self-report questionnaire which can also be used to assist with clinical diagnosis, treatment planning, and screening for psychopathology. Some clinicians preferred this to the MMPI-2 because of the fewer number of items and the lack of overlapping items in the scales (an issue corrected in the MMPI-2-RF). In addition, clients can respond to each PAI item on a four-point scale, ranging from "not at all true" to "very true." The PAI has a high degree of internal consistency and research shows good convergent and discriminant validity (Morey, 1991; Rogers, Ustad, & Salekin, 1998).

While symptoms of depression and anxiety would usually be adequately addressed during the clinical interview, some may wish to add measures such as the Beck Depression Inventory-II or the Beck Anxiety Inventory (both available from www.harcourtassessment.com). The Beck Depression Inventory-II is a 21-item self-report questionnaire with each answer being scored on a scale value of zero to three. Higher total scores indicate more severe depressive symptoms. This test demonstrated good concurrent validity with other measures of depression (Beck, Steer, & Brown, 1996). However, like most self-report inventories, the scores can easily be exaggerated or minimized by the client (Bowling, 2005).

The Beck Anxiety Inventory is also a 21-item scale with each answer scored from zero to three and was developed to screen anxiety while discriminating it from depression. The psychometric properties of this test have proven to be quite good (Fydrich, Dowdall, & Chambless, 1992).

Assessment of Psychopathy

Psychopathy is a construct that overlaps but is not identical to Antisocial Personality Disorder and includes traits such as a lack of a sense of guilt, a lack of empathy, egocentricity, pathological lying, irresponsibility, impulsivity, repeated violations of society's norms, shallow emotions, and a history of taking advantage of or victimizing others. Because psychopathic traits in an offender can lead to a higher risk for reoffending and may suggest the possibility of the psychopathic offender being disruptive to other members of the program, assessing this construct is important for treatment planning. While researchers have recently attempted to devise a self-report measure of these traits (Lilienfeld & Andrews, 1996; Lynam, Whiteside, & Jones, 1999; Poythress, Edens, & Lilienfeld, 1998), the most commonly used method is the use of the Hare Psychopathy Checklist-Revised (PCL-R) (Hare, 2003), which is coded based on a combination of a record review and a structured clinical interview.

Assessment of Cognitive Distortions

Treatment providers focus a great deal of attention on the assessment and replacement of cognitive distortions, including distortions at the initiation of and maintenance of sexual offending, as well as justifications that might be used following the offenses. Modification of these cognitive distortions is often seen as indicative of progress in treatment (Auburn, 2005; Bumby, 1996; Marshall & Barbaree, 1990; Moster, Wnuk, & Jeglic, 2008; Murphy, 1990), and the presence of pro-criminal attitudes is considered one of the "central eight" risk/need factors associated with future criminal behavior (Andrews & Bonta, 2006). Initially, many clinicians used the Abel and Becker Cognition Scale (Abel, Gore, Holland, Camp, & Rathner, 1989) to assess myths about child sexual abuse and the Burt Rape Myth Scale (Burt, 1980) to assess cognitive distortions about rape victims. One weakness of those scales was the odd number of Likert scale response options, which allowed for the offender to assume a "neutral" position on each item. In addition, several items of the Burt Rape Myth Scale were not directly related to rape myths but appeared to be more highly related to an individual's likelihood to believe rape reports from various subgroups of people.

Kurt Bumby introduced two new tools in 1996 which appear to be an improvement over the abovementioned scales. His MOLEST and RAPE Scales contained derivations of those scales but appeared less transparent and utilized an even number of Likert scale items, preventing the neutral response. In one pilot study, 91 % of new admissions to a civil commitment program for sexual offenders endorsed a higher percentage of cognitive distortions on either the MOLEST or the RAPE Scale, as compared to their scores on the Abel and Becker Cognition Scale and the Burt Rape Myth Scale (Schlank & Bumby, 1997). These results suggested that the Bumby Scales might be more useful for treatment purposes than the earlier scales because of the higher number of cognitive distortions identified. In addition, other scales have been used to assess cognitive distortions, including subscales from the MSI, the Empathy Scale (Empat) (McGrath & Konopasky, 1995), and the Child Molester Scale (CMS) (Cann, Knopasky, & McGrath, 1995).

Neuropsychological Screening

The presence of symptoms of Attention-Deficit/Hyperactivity Disorder (ADHD) may interfere with an individual's ability to benefit from treatment, so evaluators may wish to consider some screening of neuropsychological deficits in their assessment of treatment needs. One extremely quick screening test for attentional deficits is the Stroop Neuropsychological Screening Test (available from www.parinc.com). This test requires only 5 min to administer and has been found to have good discriminant validity and test–retest reliability.

The Conners' Adult ADHD Rating Scales (available from www.pearsonassessments.com) can also provide useful information about symptoms of ADHD. This is a self-report questionnaire that takes approximately 10–15 min and assesses symptoms of inattention/memory problems, impulsivity/emotional lability, and hyperactivity/restlessness. There is also an observer-rating form of this test, to provide collateral information about ADHD symptoms.

Other tests and tools that can be used to assess for ADHD in adults are the Copeland Symptom Checklist (available from Resurgens Press), the Brown ADD Scale (available from www.harcourtassessment.com), and the Wender–Reimherr Adult Attention Deficit Disorder Scale (available by contacting Fred Reimherr, M.D., Mood Disorders Clinic, Dept. of Psychiatry, University of Utah Health Science Center, Salt Lake City, UT 84132).

The Neurobehavioral Cognitive Status Examination (COGNISTAT) (available at www.cognistat.com) is a brief screening test of neurocognitive abilities. It screens for significant difficulties in language, constructional ability, memory, calculation skills, and reasoning/judgment. This screening test takes only approximately 10 min for cognitively intact clients and 20–30 min for those who are cognitively impaired. Research has shown it to be a sensitive

measure of cognition that can identify areas of cognitive impairment (Doninger et al., 2006; Kiernan, Muller, Langston, & Van Dyke, 1987; Wallace, Caroselli, Scheibel, & High, 2000) in several areas.

Other Issues in the Assessment of Adult Sex Offenders

After the initial assessment process has been completed, assessment will likely continue during treatment based on the Self-Regulation Model to determine which pathway an offender uses toward offending (Ward et al., 2004). Assessing whether offenders consciously decide to engage in sexually abusive behaviors (approach pathways) or seek to avoid them but are unsuccessful (avoidant pathways) provides useful information for planning treatment interventions. In addition, at later stages in treatment, an offender can be assessed to determine whether they require social skills training and have any history of domestic violence and the extent of any personal victimization. Nearly all offenders will benefit from strategies to improve their relationships with others and their use of leisure time, so their individual needs in these areas should also be addressed. Finally, an assessment of their values and how they prioritize their goals in life can be helpful for assisting them to develop a "good lives" plan for a life worth living (Ward & Gannon 2006).

Special Populations

Adolescent Offenders

Sex offenses committed by adolescents account for 25 % of adjudicated sexual offenders and are responsible for one-third of sexual offenses against minors (Finkelhor, Ormrod, & Chaffin, 2009). However, Finkelhor and colleagues (2009, p. 1) echo a common sentiment that "relatively little population-based epidemiological information about the characteristics of this group of offenders and their offenses has been available." This creates a number of problems in effective assessment, treatment, risk management, and social understanding of such offenders.

The assessment and treatment of juvenile sex offenders (ages 12 and up for the purpose of this chapter) is a unique field given the heterogeneity of the population and the offenders' critical and dynamic developmental stages. Historically, information about typology, treatment, and risk assessment has been extrapolated from the adult literature; however, the basic assumption of similarities between the populations seems largely erroneous. Unfortunately, this lack of age-specific literature has meant that juveniles largely receive generic treatment models (Hunter, Figueredo, Malamuth, & Becker, 2003). Therefore, a disservice is being done to the juveniles, victims, and society as a whole. Despite the sometimes egregious acts of the juveniles, it makes little sense to conceptualize adolescents who commit sex offenses in the same way as adults convicted of similar crimes, particularly given current literature on recidivism.

Worling and Langstrom (2006) identify five logical outcomes of adolescent sexual offending. Some adolescents may commit assaults, are never detected, and stop on their own. A second group commits assaults and stops when they are caught or reported. A third group commits sexual offenses and will stop only after being both detected and treated. The final two groups are perhaps of more concern: those that offend as adolescents, are never caught, and continue to offend into adulthood and finally those who continue to offend after both being detected and undergoing treatment. In the studies reviewed by Parks and Bard (2006), more than half of the research reported recidivism below 10 %, although international samples were frequently closer to 20 %. It appears that, similar to delinquent offenders, a small number of juvenile offenders continue to offend, some into adulthood, after being detected (Worling & Curwen, 2000). In short, the vast proportion of juvenile offenders who are detected will not likely commit sexual offenses later in life, although a significant portion of adult offenders identify that they began to engage in sexually inappropriate behavior as an adolescent. Therefore, there is a high need for more adequate methods of addressing, and intervening with, high-risk adolescent offenders.

The current social and political climate has created an environment in which adolescents are treated similarly to adult offenders in all too many cases. Additionally, they are subjected to punitive and life-altering consequences, such as registration and labeling as sexually dangerous persons. The reality is that most adolescents do not continue to offend into adulthood (Parks & Bard, 2006), and identifying those at greatest risk for continued offending appears to be the best use of ever-shrinking social service and criminal justice resources. Doing so could lead to "improved treatment by targeting specific risk factors for intervention and better use of risk management resources in the community, while preserving the most restrictive treatment options for the highest risk offenders" (Parks & Bard, 2006, p. 319).

Several attempts have been made to create a comprehensive typology of offenders and understand more about the etiology of offending in order to provide adequate treatment. Certainly some adolescents offend in a time-limited, sexually reactive way. Others offend related to behavior modeling, such as premature sexual exposure (Saleh & Vincent, 2004). Hunter and colleagues (2003) suggested that some youth with impaired functioning may commit opportunistic offenses. There are youths whose offenses may be related to poor integration of social skills and to mental health

diagnosis. Another group may demonstrate conduct-disordered behaviors, and sexual offending may or may not be part of a more typical pattern of interpersonal exploitation and aggressive behavior (Saleh & Vincent, 2004).

The lack of comprehensive typologies and empirical methods for determining treatment needs and recidivism risk identifies the need for quality, clinically sound assessments. For many juveniles, certainly the impact of their behavior may have life-altering effects, but inaccurate or incomplete assessment should not needlessly compound those effects.

Juvenile assessment and treatment must take into account static and dynamic variables given that adolescence is a time of dramatic physical, physiological, emotional, mental, and social change. It may be that the rapid changes during the teenage years present somewhat of a risk factor themselves. Another key variable in adolescent assessment is familial and environmental factors, as teenagers may have little power over their home environment. They may also be greatly influenced by their parents' issues, denial, support, or lack of support.

There may be many purposes for the clinical assessment of adolescents convicted or alleged to have committed a sexual offense. Those purposes may include assisting in determining sentencing recommendations, identifying treatment needs, assessing future risk of sexual behavior, providing information regarding needed level of care, and assessing environmental variables that may support or inhibit treatment.

Adolescent assessment should include a comprehensive record review, collateral contacts with those who know the adolescent, clinical interview, substance use assessment, intelligence testing, personality testing, and sexual history.

A comprehensive record review should include all available documentation of the offense, given the frequency in which initial reactions to questions regarding the offending behavior result in denial or minimized responses. Victim reports may be useful in identifying modus operandi and severity of the offending behavior. Medical records and mental health records may be helpful in identifying early developmental issues or concerns regarding abuse and neglect. Education records may highlight behavior issues in school, poor school performance, learning disabilities, or special education services.

Collateral contact, particularly with parents, is frequently necessary to obtain early developmental history (e.g., teratogenic exposure to chemicals, early attachment issues), information about general socialization patterns, emotional reactivity, and the ability of parents to monitor or influence the adolescent's behavior. Parents of adolescents may be in difficult circumstances as they naturally struggle to believe that their child could have committed such an act. Their own levels of minimization, denial, or offender rejection are often clinically relevant. Parents' support of sex-offender-specific treatment is an item rated on the Estimate of Risk of Adolescent Sexual Offense Recidivism (ERASOR) (Worling & Curwen, 2001), while caregiver consistency and positive social support are rated on the Juvenile Sex Offender Assessment Protocol-Second Edition (J-SOAP-II) (Prentky & Righthand, 2003). Adolescents may struggle to overcome their own denial but may face additional challenges if they fear parental rejection for being forthright. This may be compounded if a male juvenile is alleged to have offended against another male.

A thorough clinical interview is also an important part of sex-offender assessment. Such an interview should include a psychosocial history, particularly focusing on family and social functioning, trauma history, and history of emotional, physical or sexual abuse, or neglect. The adolescent's report of school and social functioning, as well as problems they report that impact their well-being, can greatly assist in evaluating insight, willingness to alter attitudes, and level of maturity and help inform decisions regarding the level of care. Social skill deficits may contribute to sexual offending, which is another topic that may be addressed through both the clinical interview and collateral contact. Evaluation for mental health issues, including developmental disabilities, should be included in the interview. It is difficult to discern the relationship between mental health diagnosis and sexual offending (Saleh & Vincent, 2004), but it is logical that certain disorders may contribute to sexually offending dynamics. An example of this would be bipolar disorder, in which excessive sexual behavior is one way the disorder manifests itself.

Assessment of Substance Abuse

Given that drug and alcohol use may play a role in offending, behavioral control, or general antisocial actions, a drug and alcohol assessment is essential in a thorough assessment. The Substance Abuse Subtle Symptoms Inventory-Adolescent Version (SASSI-A2) (available from www.sassi.com) is an 81-item questionnaire that addresses alcohol and other drug use for use in adolescents ages 12–18. Research has suggested that the SASSI-A2 can be highly accurate (94 %) in distinguishing substance-abusing and substance-dependent adolescents from those without a substance use disorder (Miller & Lazowski, 2001). This accuracy did not appear to be significantly affected by the juvenile's age, gender, ethnicity, education, living situation, or prior history of legal involvement.

Cognitive Assessment

Intelligence testing may be a frequently overlooked aspect of a thorough assessment. It is possible that limited cognitive abilities may contribute to sexual offending. Such individuals may be coerced into sexual activity or may be more drawn to younger peers engaging in inappropriate behavior. They may also have a more difficult time understanding and

interpreting social cues, mores, and perspective taking. Performance and verbal subscales are also helpful in the development of appropriate treatment planning given that those with low verbal skills may struggle in a group environment or those with high verbal abilities combined with lower nonverbal abilities may have difficulty integrating information learned in a treatment context. As mentioned earlier in this chapter, the Wechsler Abbreviated Scale of Intelligence (WASI) can be used with either adults or adolescents, though if a score in the borderline range or lower is obtained, a more comprehensive measure of intellectual functioning is recommended. When a more comprehensive battery is needed, the Wechsler Adult Intelligence Scale-Fourth Edition (WAIS-IV) and the Wechsler Intelligence Scale for Children-Fourth Edition (WISC-IV) are good options. The WAIS-IV may be used for those adolescents aged 16 or older, while the WISC-IV may be used for children between ages 5 and 16 (both available from www.pearsonassessments.com). The identification of learning disabilities or attentional issues may affect how treatment is presented and the manner in which assignments are given or structured.

Personality Assessment

Personality testing may be an additional component of a thorough assessment. The Millon Adolescent Clinical Inventory (MACI) offers information about personality variables and may provide information about emerging personality disorders, while the Minnesota Multiphasic Personality Inventory-Adolescent Version (MMPI-A) assesses psychiatric symptoms (both available from www.pearsonassessments.com).

Sexual History

A comprehensive sexual history is a necessary component when assessing adolescent sex offenders. The evaluator taking the history must have a thorough understanding of normative sexual development. Such an understanding allows one to determine when, if, and in what ways an adolescent sex offender deviated from a normative developmental path. This also provides information about treatment targets and explores the possibility of deviant arousal patterns and paraphilias. Information such as initial exposure to sexual material, pornography, sexual victimization, attitudes about sexual maturation, masturbation, and sexual fantasies greatly informs risk assessments and treatment planning. It is also important to have an awareness of how adolescent offenders may presently access or be exposed to sexual material. Presumptive questioning is generally helpful in eliciting embarrassing information such as masturbation habits. Information about values regarding relationships may illicit information regarding cognitive distortions.

The sexual history should also include information about the current offense. This allows for assessing levels of denial and minimization, empathy, defensiveness, insight, planning, and potentially offense characteristics. The Multiphasic Sex Inventory (MSI) (Nichols & Molinder, 1984) is a 300-item self-report questionnaire that measures psychosexual characteristics of sexual offenders. The MSI was initially developed for adults, and although there is an adolescent form, there is limited data on the reliability and validity of the tool. The subscales include measures of validity of responses, sexual deviance, sexual knowledge, sexual dysfunctions, atypical sexual behavior, motivation for treatment, and cognitive distortions. Again, the MSI may be more useful in providing information regarding treatment direction and severity of disturbance.

Juvenile Risk Assessment

Unfortunately for adolescents, no actuarial assessments exist currently. Worling and Curwen (2001) developed the ERASOR, and 2003; and Righthand et al., (e.g., 2005) developed the J-SOAP and J-SOAP II, which have some initial promise in determining risk. However, neither has been sufficiently studied to have adequate reliability and predictive validity. Both can be useful in assisting in an empirically guided risk and needs assessment. Other tools, such as the Juvenile Sex Offender Recidivism Risk Assessment Tool-Second Edition (JSORRAT-II) (Epperson, D. L., Ralston, C. A., Fowers, D., & DeWitt, J. (2005). Development of a sexual offense recidivism risk assessment tool-II *(JSORRAT-II)*. Unpublished manuscript, University of Iowa, Ames.), Structured Assessment of Violence Risk in Youth (SAVRY) (Borum, Bartel, & Forth, 2003), and the Psychopathy Checklist: Youth Version (PCL:YV) (Forth, Kosson, & Hare, 2003), may also be useful in guiding risk assessment. As stated earlier, such assessments may be central in determining the level of care needed and the areas of dynamic risk which should be targeted through the course of treatment.

The ERASOR is designed to be used with adolescents over the age of 12 to determine the risk of sexual reoffending. It was developed using a comprehensive review of available literature that identified variables found to correlate with sexual offending/reoffending. It is not an actuarial assessment; however, it uses both static and dynamic factors that have been empirically linked to sex offending. The 25 factors include historical sexual assaults; sexual interests, attitudes, and behaviors; psychosocial functioning; family and environmental variables; and treatment status. Risk is based on a combination of the total factors and clinical judgment. This assessment can be completed several times during the course of treatment. Variables such as escalation in negative affect, parental support, and willingness to alter deviant attitudes may relate to treatment targets.

The J-SOAP-II was developed by Prentky and Righthand (2003). It contains significant modifications from the original

version. The J-SOAP-II is an attempt to develop an actuarial assessment; however, it is experimental at this time and not recommended for forensic use, pending additional research to improve reliability and predictive validity. It has been designed for use with males ages 12–18 who have been adjudicated for sexual offenses. An advantage of this assessment is that it can also be used with non-adjudicated youth who have a history of sexually coercive behavior. Similar to the ERASOR, it uses risk factors identified in professional literature as related to both criminal and sexual reoffending. The J-SOAP-II contains 23 items with four subscales. There are two static factors: sexual drive/sexual preoccupation and impulsive/antisocial behavior; and two dynamic factors: clinical/treatment and community stability/adjustment. Cutoff scores do not exist at this time. The J-SOAP-II may be useful in treatment planning and informing the level of care (Calley, 2007). This instrument may be used every 6 months or more frequently if there are relevant changes.

The JSORRAT-II was developed by Epperson and colleagues [(2005). Development of a sexual offense recidivism risk assessment tool-II *(JSORRAT-II)*. Unpublished manuscript, University of Iowa, Ames.]. It contains 12 variables from 7 groups. It is intended to be used as a file review of all official documents for male sexual offenders between the ages 12 and 18. The first 6 items relate to the sexual offense itself, and the seventh item relates to treatment status. Other groups include documented physical and sexual abuse, special education services, school discipline history, and nonsexual offenses. Some items scored as 0 or 1 and others on a 3-point or 4-point scale accounting for various degrees of severity. Initial predictive validity of sexual recidivism is positive. The drawback is that the JSORRAT-II contains no dynamic factors.

The Juvenile Risk Assessment Scale (JRAS) (Hiscox, Witt, & Haran, 2007) is a newer empirically guided risk assessment. It utilizes a mathematical algorithm for determining a risk score, based on risk factors found to be related to recidivism in a standardization study. The 13 items are divided into 3 broad areas (sex offense history, antisocial behavior, and environmental characteristics) and scored on a range from 0 to 28 points. The score is divided into 3 tiers which are related to New Jersey's registration system.

Much has been written about the association of delinquent behavior with risk for both sexual and nonsexual recidivism (Parks & Bard, 2006). Assessment of general antisocial or delinquent behavior may be helpful in assessing a more global risk, and those youths demonstrating delinquent behaviors may benefit from a more intense and specialized interventions (Parks & Bard, 2006). Clearly identifying those youths may allow for a more efficient and effective allocation of resources. Two common global risk assessments are the SAVRY and the PCL:YV.

The SAVRY (Borum et al., 2003) is a general violence risk assessment for adolescents that consists of ten historical variables (e.g., history of violence, early initiation in violent behaviors), seven clinical/individual variables (e.g., substance abuse, anger management problems), contextual variables (e.g., peer delinquency, peer rejection), and 6 protective variables. Like the J-SOAP-II, it is one of the few assessments that take into account protective factors such as social support, positive bonds, and school commitment. The lack of protective factors may also be used as treatment targets to increase if absent. Both static and dynamic factors are considered on the SAVRY.

The PCL:YV (Forth et al., 2003) is completed based on information obtained from structured interviews, observations, and file review. It contains 20 items, with four scales: interpersonal, affective, behavior, and antisocial scored from 0 to 2 for offenders 12–18.

Parks and Bard (2006) found that the Impulsive/Behavior Scale of the J-SOAP-II and the Interpersonal and Antisocial factors of the PCL:YV were significant predictors of sexual recidivism. And, logically, the Behavioral and Antisocial factors on the PCL:YV predicted nonsexual recidivism. Viljoen and colleagues (2008) noted that the J-SOAP-II and the PCL:YV may be less useful for adolescents under the age of 15 due to developmental variables that impact the score, such as difficulty with empathy and impulsivity. The SAVRY and J-SOAP-II were able to predict nonsexual aggression although neither the J-SOAP-II nor JSORRAT-II predicted sexual recidivism (Viljoen et al., 2008).

The purpose of assessment may be related to the level of care recommended for an adolescent to ensure optimal treatment and community safety. The Youth Level of Service/Case Management Inventory (YLS/CMI) is a 43-item instrument designed to measure risk, need, and response to treatment factors in adolescents involved in the criminal justice system. It has been validated for use with both males and females.

More recently, the Child and Adolescent Service Intensity Instrument (CASII) was developed for use with children from ages 6 to 18 (available from the American Academy of Child and Adolescent Psychiatry at www.AACAP.org) to aid in determining the appropriate level of service for an individual. "Initially, the CASII was developed to objectively determine the service needs of children and adolescents with serious emotional disturbances, but the instrument applies equally well to children and adolescents with the full range of presenting problems, including mental illness, substance use disorders, and developmental disorders" (p. 5). It contains six dimensions: risk of harm (which addresses physical and sexual aggressiveness), functional status, coexisting conditions (including developmental and substance use issues), recovery environment (including both environmental stressors and support), resiliency, and treatment acceptance and engagement for both the child/adolescent and the parent. The resulting score leads to one of seven levels of care,

ranging from basic services (e.g., available to the general public) to 24-h secure placement with psychiatric management. The dimensions are scored using all available records. This instrument may be particularly useful with youth who have comorbid issues. The CASII largely addresses dynamic factors that can be reassessed with treatment changes and can provide information regarding what services may be necessary to step-down placement to a least restrictive level.

Polygraph Assessment

Polygraphs have been used with adults as a part of treatment, related to determining honesty regarding offending histories, as well as probation and treatment compliance. There is little information on the use of polygraphs with juvenile sexual offenders (Hunter & Lexier, 1998). It may be common for adolescent sexual offenders to be less than forthcoming when questioned about their sexual behavior and offending history. Rather than as an initial assessment instrument, a polygraph may be better used as an adjunct to treatment, providing feedback regarding progress toward treatment goals.

Offenders with Autism Spectrum Disorders and Fetal Alcohol Spectrum Disorders

While they represent a small minority of sexual offenders referred for assessment, it is important to consider the impact of possible diagnoses of Autism Spectrum Disorders (ASD) and Fetal Alcohol Spectrum Disorders (FASD) when completing assessments of both juvenile and adult offenders. This is crucial because the difficulties associated with these developmental disorders can increase the likelihood of engaging in inappropriate sexual behaviors and can affect their response to treatment. There are some commonalities among these two disorders related to impairment in social reasoning, communication, and awareness, as well as the possible impact on cognitive domains. When considering these two distinct types of developmental disabilities, it is important to recognize that there are varied and differing clinical presentations, including a continuum of functional impairment and severity of difficulties. For this discussion, the most common diagnoses subsumed under the ASD umbrella (e.g., Asperger's Disorder, Autistic Disorder, Pervasive Developmental Disorder Not Otherwise Specified [NOS]) will be grouped together. Similarly, the term FASD refers to the various labels associated with prenatal exposure to alcohol (e.g., Fetal Alcohol Syndrome [FAS], Partial FAS, Fetal Alcohol Effects [FAE], and Alcohol-Related Neurodevelopmental Disorder [ARND]).

Autism Spectrum Disorders

Haskins and Silva (2006) argued that individuals with Asperger's Disorder are overrepresented in forensic criminal settings in general, although rates of sexual offending in individuals with an ASD diagnosis are difficult to determine, and varying proportions have been reported (Allen et al., 2008; Hare, Gould, Mills, & Wing, 1999, Langstrom, Grann, Ruchkin, Sjostedt, & Fazel, 2009). It is believed that the difficulties that are core to an ASD are associated with why individuals with ASD commit criminal offenses, including difficulty understanding social relationships and accurately reading nonverbal cues, poor perspective taking/lack of empathy, being socially misunderstood, demonstrating poor impulse control, difficulty understanding the consequences for behavior, obsessional focus on narrow areas of interest, rigid adherence to rules or expectations, and being vulnerable to being taken advantage of by others (Allen et al., 2008; Haskins & Silva, 2006).

Therefore, identifying whether an ASD diagnosis is present in a sexual offender aids in understanding the possible reasons underlying his behavior. In addition, it aids in tailoring interventions so they are optimally effective. Comprehensive assessment of possible ASD includes obtaining a thorough developmental history, usually involving collateral contact from a parent or caregiver during childhood, assessing possible comorbid conditions, and examining the examinee's cognitive profile. Psychological assessment should include measurement of intellectual functioning to rule out global cognitive delay. However, various areas of cognition, including executive functions (e.g., impulse control, planning, problem-solving, cognitive flexibility), social understanding, communication skills, and adaptive behavior, should also be further assessed if concerns have been identified.

Diagnostic assessment can be supported through the use of various rating scales, structured interviews, and semi-structured observations, most of which involve obtaining ratings and/or observations provided by someone who knows the examinee well, such as a caregiver or teacher. Information about currently available diagnostic instruments and psychometric data for the measures can be found in Lord and Corsello (2005) and Attwood (2007).

Social problem-solving deficits have been identified as a core area of difficulty, with adults with Asperger's Disorder demonstrating less detailed and less effective social problem-solving compared to individuals without ASD (Goddard, Howlin, Dritschel, & Patel, 2007). Social reasoning can be screened using the subtests that exist on measures of general intellectual functioning (e.g., Comprehension and Picture Arrangement subtests from the Wechsler Intelligence Scales). A semi-structured interactive assessment, the Autism Diagnostic Observation Schedule (ADOS) (Lord, Rutter, DiLavore, & Risi, 1999), can also provide helpful information about the child's or adult's social interaction and communication skills. Referral for speech/language evaluation may also be indicated if the examinee is observed to

have difficulty expressing himself/herself verbally, has a history of speech/language delays, and/or demonstrates significantly poorer verbal reasoning abilities. In addition, measuring adaptive behavior (the capacity for translating cognitive ability and potential into real-life skills) is also critical because individuals with ASD often demonstrate a large discrepancy between their potential and their ability to translate skills into actual independent living skills (Klin, Saulnier, Tsatsanis, & Volkmar, 2005). The Vineland Adaptive Behavior Scales-2nd Edition (Sparrow, Cicchetti, & Balla, 2005) and the Scales of Independent Behavior-Revised (SIB-R) (Bruininks, Woodcock, Weatherman, & Hill, 1996) provide an overall adaptive behavior score and normative data regarding socialization and communication skills.

Executive dysfunction has been found to be a common difficulty for individuals with ASD. Sanders, Johnson, Garavan, Gill, and Gallagher (2008) reviewed the research on selected executive functions in individuals with ASD and found deficits in orienting attention, response inhibition, and set shifting, though sustained attention was not impacted. Some of the assessment tools that exist for use with examinees ranging in age from childhood to adulthood include the various tests contained in the Delis–Kaplan Executive Function System (D-KEFS) (Delis, Kaplan, & Kramer, 2001) and the Behavior Rating Inventory of Executive Function (BRIEF) (Gioia, Espy, & Isquith, 2000).

Fetal Alcohol Spectrum Disorders

Rates of sexual offending in individuals with FASD appear higher than rates for individuals without prenatal exposure to alcohol. Streissguth et al. (2004) found 49 % of 415 adolescents and adults with FASD demonstrated inappropriate sexual behaviors on repeated occasions. Similar to individuals with ASD, individuals with a diagnosis of FASD tend to struggle with social communication skills, understanding cause-and-effect relationships, poor judgment, difficulty learning from past mistakes, poor impulse control and planning skills, and naïveté in interpersonal interactions. Individuals suspected of having an underlying diagnosis of FASD are usually evaluated by a multidisciplinary team to determine whether the features indicative of FASD are present currently or historically, including: (1) growth deficiency, (2) malformation of specific facial features, (3) degree of central nervous system (CNS) impairment, and (4) information regarding extent of prenatal exposure to alcohol (Astley, 2004). It is important to note that studies have repeatedly demonstrated that cognitive deficits can be present, even when facial malformations are absent (Mattson & Riley, 1998).

Several researchers have cited FASD as the most common cause of mental retardation (Wacha & Obrzut, 2007). However, even individuals with average to above-average intellectual functioning show marked cognitive difficulties (Baumbach, 2002). Individuals with FASD can also experience difficulties in language, learning/academic, motor, visual–spatial, attentional, memory, and adaptive behavior skills (Mattson & Riley, 1998; Mattson, Riley, Gramling, Delis, & Jones, 1998; Wacha & Obrzut, 2007). Studies of children have identified increased rates of externalizing behaviors, such as alcohol and drug use, hyperactivity, impulsivity, delinquency, poor social skills, and poor communication skills (Mattson, Schoenfeld, & Riley, 2001). These difficulties and the interactions of such difficulties pose increased risk for sexually inappropriate behaviors, among an array of other difficulties.

During assessment of sexual offenders, Baumbach (2002) recommended exploring whether FASD has been suspected or tentatively diagnosed in the past in the examinee or sibling(s); information suggesting maternal alcohol use during the pregnancy; observation of physical features, developmental delays, or neurological problems suggestive of FASD; observation of incongruities between the examinee's presentation and actual performance (e.g., adaptive functioning, communication, and social skills fall lower than expected given measured IQ); and behaviors indicative of FASD. Baumbach (2002) referenced the Fetal Alcohol Behavior Scale (FABS) developed by Streissguth and her colleagues to identify behaviors that commonly occur with FASD and to distinguish these from behaviors of individuals without FASD. Gathering this information can help the examiner to decide whether a referral to a multidisciplinary team that specializes in diagnosing FASD is warranted; the examiner is cautioned against independently making a diagnosis of FASD based on the above information (Baumbach, 2002).

Assessment of general intellectual functioning is needed to determine whether global cognitive delay (e.g., mental retardation) is present. In addition, it is recommended that psychological and neuropsychological evaluation explore possible areas of difficulties cited above. For example, utilization of measures of academic achievement (particularly reading comprehension, as noted earlier in the chapter), executive functions [e.g., attentional abilities (e.g., continuous performance tests), verbal and nonverbal fluency measures, planning and problem-solving tasks, measures of cognitive flexibility, tasks assessing verbal and visual memory], visual–motor integration, and independent living skills/adaptive functioning is recommended (see above for several examples of measures that can be utilized). Screening of language abilities (e.g., receptive and expressive language skills) may also help identify whether further evaluation through a speech/language pathologist is needed. Collateral contact with others who can provide information about the examinee's abilities and behaviors in unstructured, real-life situations, either through the use of rating scales or through an interview, is recommended in order to gather information about the ability–performance gap that is frequently present.

Female Sexual Offenders

Although national criminal justice statistics suggest that less than 10 % of individuals arrested for sexual offense are female, the number of adolescent girls coming to juvenile courts for sex offenses has significantly increased (Female Sex Offenders, 2007). However, currently, there is still very little research on the assessment and treatment of female sexual offenders. Given that limitation, there have been some attempts to identify typologies of sexually abusive women. For example, Mathews and colleagues (1989) identified three subgroups, including women who were coerced by their male partners to commit sexual offenses (often against their own children), women with histories of incestuous sexual victimization and sexually deviant fantasies, and women struggling with age-appropriate relationships who perceive themselves as having a sexually mentoring "relationship" with an adolescent male. Unfortunately, most sex-offender-specific assessment tools were developed for and normed on male sexual offenders, making it questionable to attempt to use them for assessment of female sexual offenders. The Multiphasic Sex Inventory-II (available at www.nicholsandmolinder.com) does have a form for use with women. However, given the low frequency with which women get arrested for sexual offenses, the sample size on which it was normed is very small. There is also a version of the penile plethysmograph developed for women. Vaginal photoplethysmograph measures blood flow through the walls of the vagina as this is believed to increase during sexual arousal, and more recently measures of blood flow in the labia and clitoris have been developed (Gerritsen et al., 2009; Prause, Cerny, & Janssen, 2005), but there is little research available on the validity and reliability of these techniques. Most risk assessment tools have also been developed for use only with male offenders, with the exception of the Level of Service Inventory-Revised and the Youth Level of Service/Case Management Inventory (Andrews & Bonta, 1995; Hoge, Andrews, & Leschied, 2002; Schmidt, Hogue, & Gomes, 2005). Most recently, some early data on the Iowa Sex Offender Risk Assessment (ISORA8) (State of Iowa, 2010) appeared promising for use with women, but much more research in this area is needed.

Assessment of Civilly Committed Offenders for Release

When assessing whether an offender has sufficiently lowered his risk for return to the community, it is crucial to be aware that most actuarial tools focus on static risk factors, so such will not capture the benefit achieved from the treatment program. Civilly committed sexual offenders have already been assessed using actuarial tools and have been determined to fall in the group that presents a high risk for reoffending. Therefore, to assess their progress since the time of commitment, the clinician will need to focus on dynamic (or changeable) risk factors. The STABLE-2007 and the ACUTE-2007 (Hanson, Harris, Scott, & Helmus, 2007) are tools which were designed to assess and track changes in risk status over time. "Stable" dynamic risk factors are deficits, predilections, and learned behaviors that can be changed through involvement in treatment. "Acute" dynamic risk factors are highly transient conditions that can last a very short period of time, such as hours or days. Currently, these are the dynamic risk factor assessment tools that have been researched most extensively, although the Risk for Sexual Violence Protocol (RSVP) (Hart et al., 2003), The Violence Risk Scale: Sexual Offender Version (VRS:SO) (Wong et al., 2003), and the Sex Offender Treatment Intervention and Progress Scale (SOTIPS) (McGrath & Cumming, 2003) show promise as well for their predictive ability related to recidivism (Olver et al., 2007; McGrath et al., 2012).

Summary and Future Directions

There are many different contexts in which an evaluator may be asked to complete an assessment on a sexual offender, each requiring separate skills and knowledge bases and each of which presents potential ethical dilemmas. For some, such as evaluations for those referred for civil commitment, it can seem an almost overwhelming task to keep up with the quickly changing literature regarding risk assessment tools. Relatively little has been written about assessments of sexual offenders for treatment planning purposes. This is somewhat surprising given that there is frequent mention that a "one-size-fits-all" program is insufficient (Hanson et al., 2002; Marques, 1999; Ward, 2002), and effective treatment of sexual offenders, whether they are juveniles or adults, must begin with a comprehensive assessment of their individualized needs. Knowledge of a wide range of tests and assessment tools, and maintaining updated information about those tests and tools, is crucial for clinicians to have the basis to develop appropriate treatment plans. Those offenders with developmental disabilities or significant cognitive deficits secondary to severe and persistent mental illness require special attention and may even need referral for a separate track or program. The presence of severe mental illness, personality disorders, substance abuse, psychopathy, and psychosexual disorders can all influence an individual's sexual behavior and need to be carefully evaluated. One often neglected area is an assessment of Autism Spectrum and Fetal Alcohol Spectrum Disorders, although increasing awareness of these disorders can increase the effectiveness of a therapeutic approach. It is only through such a comprehensive assessment that clinicians can have greater confidence that they are recommending the best treatment to minimize the potential for additional sexual offenses in the future.

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Clinical Strategies for Evaluating Sexual Offenders

Robert J. McGrath

Evaluating Sex Offenders: Practical Clinical Strategies

Comprehensive sex offender evaluations form the foundation for designing and delivering appropriate services to this population. Evaluations provide an opportunity to collate and synthesize information about offenders to inform a variety of important clinical, management, and legal decisions. These include decisions regarding sentencing, institutional placement and treatment planning, civil commitment, release decisions, reentry planning, community supervision and treatment, registration and notification, and family reunification. Assessment is an ongoing process. As offenders move through the criminal justice and mental health systems, later evaluations should build on information contained in earlier ones.

Sex offenders are typically not voluntary clients. Rather, a third party, such as a court, correctional agency, or social service organization, has compelled the offender to undergo evaluation. Consequently, the offender's relationship with the evaluator can be adversarial in nature. This is especially true when what is at stake in the evaluation is at great odds with what the offender considers to be in his best interests. Examples of high stakes evaluations include criminal sentencing hearings and civil commitment trials where the potential outcome includes a lengthy period of confinement. In these cases an offender's interest in freedom may conflict with the community's interest in public safety or exacting just deserts.

On the other hand, the offenders and evaluators often have interests that overlap, such as when their mutual goals concern rehabilitation. Evaluations ideally should help offenders begin to recognize and do something about their problems. The chances of successful rehabilitation are enhanced when the evaluator and offender are able to form a collaborative working relationship.

Collaboration is particularly important when the evaluator also will be the treating clinician or affiliated with the treating clinical team. Although clinicians may distinguish between the evaluation and treatment phase of services, clients may not see it the same way. How they are treated during the evaluation phase of a program likely spills over into how they initially view the treatment phase. This can be critically important because the therapeutic relationship between offender and clinician typically stabilizes in the first few sessions (Miller & Rollnick, 2002).

The manner in which evaluators interact with offenders, however, has received little attention (Shingler & Mann, 2006) and collaboration typically has not been viewed as a necessary endeavor. Early approaches toward criminal justice clients emphasized authoritarian and confrontational approaches (Miller & Rollnick, 2002) and this style has been recommended as well by some of the early writers in the sex offender field (Salter, 1988). This is not to say that evaluators should not challenge offenders and ask difficult questions during an evaluation, nor to ignore the power differential between the offender and evaluator; rather, it is to recognize the importance of the therapeutic relationship which begins with the first contact the offender has with an evaluator.

The general psychotherapy literature is clear that the manner in which a clinician interacts with clients is equally or even more important than the specific treatment techniques that he or she uses (Lambert, 1992; Lambert & Barley, 2001). Therapeutic relationship is enhanced when evaluators are respectful, direct, genuine, and empathic. As well, these factors have been found to be equally important in interacting with correctional clients (Andrews & Bonta, 2010; Dowden & Andrews, 2004). More recently in the sex offender field, a series of studies found that these same clinician characteristics associated with success in other areas of

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mental health practice are the same as with those associated with effective sex offender treatment interventions (Beech & Hamilton-Giachritsis, 2005; Marshall, 2005).

This chapter focuses on evaluation strategies for obtaining information from sex offenders for clinical decision-making activities. It emphasizes throughout the importance of evaluators developing a good collaborative working relationship with clients. Six broad areas are examined: (1) preparing for the clinical evaluation, (2) describing a conceptual evaluation framework, (3) matching evaluation strategies to the client's stage of change, (3) recommending a sequenced interview protocol, (4) identifying discreet interview strategies, (5) identifying offender's treatment needs, and (6) formulating appropriate disposition plans. Because most sexual offenders are male, discussion will be limited to this population.

Preparation for the Clinical Evaluation

Although sex offenders are referred for clinical evaluations for several reasons, this chapter focuses on those that concern known sex offenders' psychosexual characteristics. A known sex offender is defined here as an individual who admits to having committed a sexual offense or who has been determined to have done so by a legal entity such as a court, professional practice review board, or state child protection agency. Clinicians are cautioned against conducting evaluations where the explicit or implicit request involves determining an individual's guilt or innocence.

As the Association for the Treatment of Sexual Abusers (2005) Practice Standards and Guidelines state, "There is no known psychological or physiological test, profile, evaluation procedure, or combination of such tools that prove or disprove whether an individual has committed a specific act" (p. 10). It is the function of the criminal and civil justice system, not the mental health system, to determine guilt or innocence.

Having established that an individual referred for evaluation has committed a sexual offense, obtaining clarity early on in the referral process about the context and purpose of the evaluation is critical. Relevant and common referral questions concern the nature of the individual's sexual deviancy, psychiatric diagnosis, dangerousness, supervision and treatment needs, amenability to services, and disposition recommendations. Referral questions should be clarified with the referral agent at the time of referral. This is a critically important communication, as it is often the case that the clinician will have to educate the referral source about what are and are not appropriate issues to address during the evaluation (McGrath & Purdy, 1999).

Before actually accepting a referral, evaluators need to assess whether they are ethically able and qualified to address the referral request. First, as already noted, clinicians should not conduct evaluations to determine guilt or innocence. Second, evaluators should not accept referrals where they have an irresolvable conflict of interest as defined by their professional code of ethics (e.g., American Psychological Association, 2002; Association for the Treatment of Sexual Abusers, 2005). Last, evaluators in this field, as all mental health professionals, must limit their practice to areas in which they are competent. Professionals who evaluate sex offenders should have education, training, and experience working with this population consistent with professional guidelines (e.g., Association for the Treatment of Sexual Abusers, 2005). Competent professionals also recognize that some types of evaluations in this field require more expertise that others. Civil commitment evaluations, for example, are highly technical and require a determination of whether an individual's risk to reoffend meets a specific statutory requirement. In comparison, evaluations to determine an individual's primary treatment needs may require less exacting professional skills.

Prior to interviewing an offender, the evaluator should review all relevant background documents. These include victim statements, police affidavits, court orders, presentence investigation reports, institutional incident reports, criminal record checks, medical and psychological reports, and relevant treatment notes and progress reports. Reviewing records not only enables one to learn about the offender and what he did, but helps determine how he is describing and making meaning of the offense behaviors for which he has been convicted. Because sex offenders commonly misrepresent their history for a variety of reasons such as embarrassment and fear of unwanted evaluation outcomes, prior records often provide a more objective account of his history than he may report himself. Reviewing prior records helps one strategize how to approach the interview. The interested reader can obtain further guidance about screening offenders referred for assessment using a decision tree that details the recommended steps in this process (McGrath & Purdy, 1999).

Evaluation Framework

To organize the considerable offender data that evaluators typically collect, one should identify and utilize a clear conceptual organizing framework. Three empirically based correctional principles that guide the delivery of effective services for sexual offenders can serve as such a framework. They are the principles of risk, need, and responsivity (Andrews & Bonta, 2010; Association for the Treatment of Sexual Abusers, 2005). Interventions that adhere to these principles are found consistently to be more effective than those that do not, both for general criminal offenders (Andrews & Bonta, 2010) and sex offenders (Hanson,

Bourgon, Helmus, & Hodgson, 2009). These principles provide evaluators a "who, what, and how" framework for organizing and making meaning of information they obtain during the evaluation.

The risk principle concerns "who" will need the most intensive interventions. Treatment and supervision services are more effective when they are applied to higher versus lower risk offenders. Evaluators should employ one or more empirically supported risk assessment instruments to evaluate offenders' risk to reoffend. This approach and several instruments are reviewed in other chapters and are not repeated here.

The need principle helps evaluators evaluate "what" problems an offender has that are directly linked to offending behavior and therefore should be a focus of intervention. The "Treatment Needs" section in this chapter examines this topic in further detail.

The responsivity principle helps evaluators recommend "how" services should be delivered so that the offender can respond optimally to services. Responsivity considerations include an offender's learning style, intellectual ability, personality characteristics, and motivation. The responsivity issues of denial and motivation for change are examined in the following "Stages of Change" section of this chapter.

Stages of Change

The attitude with which an offender begins the evaluation process is an important responsivity consideration. Sex offenders present themselves for an evaluation with varying degrees of engagement. Evaluators should meet clients where they are. The seminal work on stages of change by psychologists Prochaska, DiClemente, and Norcross (1992) is a good starting point for assessing client cooperativeness and readiness to change, and it has been applied to the evaluation and treatment of sexual and other criminal offenders (Ginsburg, Mann, Rogers, & Weeks, 2002; McGrath, 2003; Shingler & Mann, 2006). The basic idea is that different types of evaluation and interview strategies should be used to help offenders at the different stages of change.

Sex offenders, as do other people who succeed in making changes in their lives, typically move through several distinct stages of change (Prochaska et al., 1992). These stages concern the degrees to which individuals recognize that a problem exists and are ready, willing, and able to do something about it. The number of stages of change reported in the literature has varied (Miller & Rollnick, 1991, 2002), and here a five-stage model is examined. It is comprised of the precontemplation, contemplation, preparation, action, and maintenance stages. Although an evaluation is not "therapy" per se, it can help begin to move an offender in the direction of positive change, namely, from the earlier stages of change to later ones. Because it is common for sex offenders to initially deny or minimize having committed a sexual offense or having a current problem, the early stages of change are emphasized.

Precontemplation

In this stage the offender sees no need or reason to make a change. It is often a simple matter for the evaluator to determine prior to the interview whether a sex offender is in this stage. The referral source, be it probation or parole officer, correctional caseworker, or attorney, often knows whether the offender is in denial or refusing to enroll in rehabilitation programs. As is discussed later, knowing this beforehand is helpful so that the evaluator can attempt to prevent the offender from beginning the interview protesting his innocence, thereby further entrenching his denial.

Initially, a sex offender may say he did not commit a sexual offense for a variety of reasons. Setting aside the rare individual who was unjustly convicted, an offender can express denial for several self-protective motivations. An offender may deny to avoid accountability, feelings of personal shame or guilt, and fear of retribution and to keep jobs, spouses, or friends. Some offenders who do admit their offenses often deny having a current problem because they believe or argue that they have resolved the issues related to their sexual offenses, such as alcohol abuse or marital discord.

At this stage, the issue of problem recognition is primary as it is generally viewed as an essential initial condition in the change process (Miller & Rollnick, 2002). In order to change a problem behavior, it is typically necessary to recognize and acknowledge the problem. Once an individual acknowledges that he has a sexual offending problem, it is easier to identify the specific nature of the problem in order to begin developing an individualized treatment plan.

The evaluator should provide information to raise the offender's awareness of the problem and the consequences of not admitting to or being willing to do something about the problem. It is also often helpful to normalize people's tendency to deny or minimize problems and indicate that you as an evaluator understand the many reasons why someone might do so. This all should be done in a direct, matter-of-fact, and respectful manner. Giving advice at this stage is usually counterproductive as it often elicits or magnifies offender resistance and resentment. Rather, this is a time to "plant a seed" and leave the door open for change.

Contemplation

In the contemplation stage, the offender recognizes the problem and is considering change. This stage of change is marked by ambivalence. The offender may vacillate in his

view about the seriousness of the problem. Similarly, the offender may understand the potential positive reasons for tackling the problem, but is conflicted about giving up benefits associated with sexual offending or fears the consequences of admitting to others that he indeed has committed sexual offenses.

An offender who recognizes and admits he has a sexual offending problem is unlikely to be successful giving up the behavior unless he is motivated to do so. The individual needs to perceive that the benefits of giving up offending outweigh the advantages of continuing to offend. Motivation for positive change may include the fear of the negative consequences of getting caught, desire to prevent victim harm, and a general desire to lead a "good life."

The goal of interview strategies at this stage of change is to tip the balance toward change, helping offenders weigh the risks of the status quo and the potential benefits of change. Emphasizing the positive aspects of change and that change is possible is critical, because offenders who have little hope of changing or are overwhelmed at the difficulties of change tend to focus on only the obstacles. Encouragement and support here are key.

To help tip the balance toward positive change, the evaluator can encourage an offender to meet with treatment staff to get accurate information about available programs. They can ask an offender to meet with individuals who have been successful in treatment programs and boost the offender's confidence that he or she can benefit from these programs as well. Helping offenders get accurate information with which to make informed decisions at this time facilitates their moving into the preparation stage. Giving advice at this stage is usually counterproductive, as offenders often become defensive if preached to or if challenged too forcefully.

Preparation

Some sex offenders come to an evaluation session having decided to change. The evaluator's task here is to help the offender develop an effective plan for action. This may include reviewing treatment options and the pros and cons of each. If the program to which an offender will enter has already been determined, the evaluator can prepare him by reviewing the program's expectations and, if appropriate, going over the treatment program's informed consent documents, especially those that describe the actual content of treatment.

Action

In this stage, the offender is actively in the process of doing things to positively modify his behavior. Evaluations here are usually designed to assess client progress during a midpoint or toward the end of a treatment program. The goal of the evaluation here may be to ascertain whether the individual is ready to move on to a more advanced stage in a treatment program or whether he is ready to be moved to a less restrictive environment. Evaluators should focus on encouraging an offender at this stage to continue his good efforts. Evaluators can encourage an offender by positively reinforcing the progress they may have made in identifying and addressing their treatment needs and goals (described in the Treatment Needs section of this chapter). They may highlight an offender's progress since the previous evaluation and reference-positive treatment, caseworker, and probation or parole reports.

Maintenance

Sex offenders in the maintenance stage are in the process of maintaining and solidifying changes that they have made. They may be completing treatment, and the changes appear to be solid. They are living a lifestyle that is inconsistent with offending. They are able to identify factors that place them at risk, have developed strategies to either avoid or cope with risk, and demonstrate behaviors that show that they are using what they have learned in treatment effectively and consistently. The goal of interviewing here is to reinforce offenders' efforts to stabilize change.

Interview Protocol

Each evaluation and offender will present unique challenges but most interviews with this population address common issues. The following protocol, adapted from recommendations previously made by the author (Cumming & McGrath, 2005; McGrath, 1990), suggests a basic format for initial interviews. The interviewer should modify the protocol and strategies as circumstances dictate. The goal is to begin developing a therapeutic alliance with the offender while, at the same time, gathering information necessary for making various clinical decisions. The evaluator, having previously established that an interviewee has committed a sexual offense, clarified the referral questions, determined competence to conduct the evaluation, and reviewed available background records, is ready to conduct the interview.

Establish Credibility

An initial step in the interview process is to establish credibility with the interviewee. If the interviewee perceives you as competent and fair, you are likely to have better rapport with him and be able to obtain information more efficiently and thoroughly than if you are not.

When you meet the individual and introduce yourself to him for the first time, you should provide some information about your background and experience. To the degree that your reputation has preceded you and it is negative, whether this appraisal is fair or not, you will need to do damage control. It is not uncommon for other sex offenders or even an attorney to have told the interviewee information about you or the program with which you are associated. If the information is erroneous, it is important to correct it if possible.

Having prepared carefully for the interview also will help establish your credibility. For example, letting the individual know that you have obtained relevant documents about the case and have reviewed them makes a statement that you are interested and thorough.

Provide Informed Consent

Providing informed consent is an additional way to establish credibility with an interviewee. Taking the time to explain the evaluation process to the offender is a demonstration of respect for the individual. Certainly, offenders who are given a clear explanation of the purpose of the interview and how the information will be used often approach the interview with less anxiety and guardedness.

Providing informed consent is also a professional obligation. Increasingly, professional organizations, including the Association for the Treatment of Sexual Abusers, enjoin evaluators to obtain informed consent not only verbally but in writing as well. This association has detailed the elements of informed consent and its definition provides a good reference for professionals evaluating sexual offenders.

> Informed consent provides clients with information about the purpose, goals, techniques, procedures, limitations, consequences of not consenting, limits of confidentiality, alternatives to the services offered, potential risks, and benefits of services to be performed. Providers ascertain the client's ability to understand and utilize the information. When providing services to persons unable to give informed consent, providers obtain consent from the client's guardian (Association for the Treatment of Sexual Abusers, 2005, p. 52).

Take a Social History

It is recommended that the evaluator begin the data gathering process by eliciting the offender's social history and informing him that the offense itself will be delved into later. By doing so, the evaluator is likely picking the "low hanging fruit" first, that is, inquiring first about information that is likely the least threatening to the individual and most easily obtained. The evaluator then gradually moves on to more sensitive topics. Proceeding in this manner tends to help the person be more at ease and help the evaluator establish rapport.

This approach may also discourage the individual from beginning the interview by denying that he has ever committed a sexual offense. Certainly, at the outset of the interview, the offender may be more guarded, closed, and anxious and less likely to admit to engaging in embarrassing behaviors than later in the interview when hopefully greater rapport has been established. A goal at this stage of the interview is to prevent placing the individual in the dilemma of having already told you a falsehood and then not wanting to lose face later in the interview but perhaps feeling internal pressure to stick to their original story.

Social history interviews are a standard procedure for most mental health professionals and their common content is not reviewed here. With sex offenders, however, certain areas require a more in-depth examination, and detailed outlines have been presented elsewhere (Cumming & McGrath, 2005; Groth, 1979; McGrath, 1993). Recommended topics include information about the individual's developmental history, family of origin and current family, social, relationship and marital history, education, employment, military involvement, criminal history, accommodation history, money management, physical and mental health, alcohol and drug use, social supports, and leisure activities. Deficits and excesses in several of these areas are linked with risk for reoffending and are discussed in more detail in the "Treatment Needs" section of this chapter.

Dispel Myths

After the evaluator has elicited the individual's social history, it is important to prepare the examinee for answering questions about his sexual and sexual offending history. Sex offenders often have the same stereotypes about sexual offending as do other members of the community. Offenders often are confused about why they do what they do and often feel shameful and inadequate. Most have not talked to anyone in detail about their sexual offending behaviors or how they have tried to make sense of their sexual problems. An evaluator who can communicate understanding about the offender's private sexual life is in a good position to create an atmosphere in which the offender can discuss his problems.

The evaluator, during the course of reviewing the offender's records and in the initial stages of the interview, should formulate hypotheses about why the offender was motivated and willing to commit the sexual offenses he did. With this information, and following a strategy described by Yochelson and Samenow (1977), the evaluator can attempt to present an offender with a mirror image of him. The idea is to tailor salient scenarios that resonate with the offender and help him begin discussing his sexual offending. When an evaluator begins to describe certain thoughts and behaviors that the

offender assumed no one knew about, it provides an opening for more honest disclosure.

For example, an evaluator is generally on safe ground reflecting aloud that the offender has probably wondered numerous times why he has committed his sexual offenses. The evaluator can then go to present various hypotheses matched to his particular situation. In the case of an incest offender who is in denial, the evaluators might explain how the general public typically views men who have had sexual contact with children as monsters but that the evaluator knows differently. The evaluator's experience is that many men who have committed these offenses live normal lives in many respects except for their offenses and that most men who have committed these offenses did not intentionally mean to harm the victim. The evaluator may note, if it appears relevant to the individual being interviewed, that many men who commit this type of offense say they were only teaching their daughters about sex or only committed the offenses because they were drunk. Of the men that the evaluator has talked with, however, many recognize that it started for other reasons, such as when they became distant from their wife or began to feel more closeness to their children, and that this emotional closeness led to sexual feelings. And, in the evaluator's experience, most men who have committed these types of offenses acknowledge that they knew it was wrong, but somehow succumbed to those feelings.

The degree to which such accounts match the offender's experience is the degree to which the offender may feel understood and feel more comfortable telling his story. The evaluator presents himself or herself as someone who will not be judgmental and understands the complexity of human behavior.

In using this approach, the evaluator must guard against supporting an individuals distorted excuses. The scenarios should be guided by the evaluator's informed hypotheses, which should be based on the facts of the case and an assessment of the offender's likely modus operandi and motivations. By presenting such scenarios, the interviewer is demonstrating that he or she is well informed about different types of offending behavior, is able to talk about it in a matter of fact manner, can understand the offender's perspective, and expects from the offender an honest description of the offense.

Take a Sexual Offense and Sexual Offense History

The discussion of myths should flow naturally into asking the individual to describe in detail his sexual offenses and sexual history. Evaluators may begin by asking the individual to talk about when he first realized that his sexual interests were of the type that might lead to him getting into trouble, or evaluators may begin by asking the individual to describe the sexual offense that led to the current evaluation and then work backwards to understand the chain of events, thoughts, feelings, and behavior that led up to the most recent offense.

Table 1 Sexual offending history outline

1. Sexual offenses
   a. Charges and convictions
   b. Child protection agency substantiations
   c. Offender self-reports
   d. Other reports
2. Intrusiveness of offenses
   a. Noncontact
   b. Fondling
   c. Oral contact
   d. Penetration
   e. Bizarre or ritualistic behavior
3. Premeditation
   a. Planned
   b. Opportunistic
   c. Spontaneous
4. Victim selection
   a. Age
   b. Gender
   c. Relationship
   d. Situation
   e. Physical characteristics
5. Harm to victims
   a. Level of emotional harm
   b. No physical injury
   c. Injury not requiring medical attention
   d. Treated for injury and released
   e. Hospitalized
   f. Death resulting
6. Method of controlling victims
   a. Verbal manipulation
   b. Bribery
   c. Position of authority
   d. Threats
   e. Incapacitation (e.g., drugs)
   f. Physical force
   g. Weapons
   h. Violence
7. Precipitating and contributing factors
   a. Precursive sexual fantasies
   b. Emotional state
   c. Precipitating stresses
   d. Physical conditions
   e. Psychiatric conditions
8. Course of sexual offending history
   a. Age of onset
   b. Frequency
   c. Duration
   d. Progression
   e. Length of prodromal phase
   f. Previous response to interventions
9. Level of admission and responsibility
   a. Behavior
   b. Fantasy and arousal
   c. Victim impact
   d. Risk to recidivate
   e. Need for treatment

Appropriate areas of inquiry about an offender's sexual history include sex education, formative sexual experiences, victimization history, masturbatory and sexual fantasy history, use of pornography and erotica, sexual outlets and frequency, sexual dysfunction, heterosexual and homosexual experiences, paraphilias, and sexual relationship history. Table 1 lists the topics that the evaluator should examine about an individual's sexual offending history. The evaluator should use relevant court or other official records to challenge individuals who are reluctant to describe in more detail their offending patterns.

Allow Face-Saving

Most sex offenders will not be totally candid about their sexual offending and life history during initial interviews. So, it is important to set the stage for future interviews in which the individual can make further disclosures and still "save face." The goal is to create an atmosphere that will

encourage honesty rather than focusing on how an individual may have been deceitful in initial interviews.

Several strategies can help make it easier for an offender to disclose in the future. The evaluator should acknowledge the difficulty of admitting sexual offending behavior, express approval for disclosures the individual has made already, and grant that complete honesty is rare at this stage of the interview or treatment process. This is especially true if the individual is talking about their sexual and offending behaviors for the first time. The evaluator can also note that it is normal for someone to want to push to the back of their mind unfavorable aspects of their behavior and that by simply being asked questions about his sexual and sexual offending history during the interview, he may begin to find that his memories about these issues begin to become unlocked. It is also important for the evaluator to be clear that he or she would find it typical that an offender would make more detailed disclosures in subsequent meetings and that these would be welcomed as opposed to being viewed as the offender having been resistant.

Instill Hope

Many sex offenders fear that their behavior is out of control and that they cannot change. They promise themselves that they will stop sexually offending and find themselves engaging in abusive behavior again. Client expectations are a powerful determinant in changing behavior and treatment outcome. Sometimes called the "placebo effect," positive expectations are associated with positive treatment outcome in medicine and psychotherapy (Lambert & Barley, 2001; Miller & Rollnick, 2002). Individuals who believe they can change are more likely to do so. Individuals who have service providers who believe they can change are more likely to do so. Clients who are told that they cannot change often do not improve.

By the end of a first interview, communicate reasonable expectations of hopefulness. It can be both comforting and motivating for the offender to know that competent professional help is available. Emphasize again that the first step to resolving a problem is acknowledging the problem. If an offender risks being honest about his behavior, he should know that treatment is available and can be effective.

Additional Interviewing Strategies

In addition to the various approaches previously recommended at different stages of client change and in the interview protocol detailed above, a number of other interview strategies can help evaluators collect important information (Cumming & McGrath, 2005; McGrath, 1990; Miller & Rollnick, 2002). Again, use of these strategies should attempt to balance the dialectic of asking difficult questions for gathering information from the offender and engaging him in a collaborative working relationship.

Do Not Retry the Case

Establish the fact pattern of the case based on the findings of the court or other legal body that determined the individual's guilt. Use that information as the basis for determining the degree to which the individual is openly reporting his offending behavior. It is not the role of a mental health professional, or within his or her expertise, to retry the case. If the offender has issue with a finding of the court, this is something he must take up with the court or his attorney, not the evaluator.

Do Not Tip Your Hand

It is important for the evaluator to convey to the offender that he or she has thoroughly reviewed available background information in the case. This communicates to the offender that you are competent and that his case is important. By being well informed and letting the offender know this, the evaluator decreases the chances that an offender will attempt to distort the facts of the case during the interview. However, do not tip your hand as to all the exact details you know about the case. Some interviewees will attempt to provide only information that they believe the interviewer already knows.

Interview Collaterals Separately

If there are co-defendants in a case, interview them separately. If you are going to interview an offender's family members or significant others, conduct the initial interviews separately. This will put you in a position of being or appearing to be the most knowledgeable person in the system. Just as you should not "tip your hand" with respect to disclosing the content of the documents you have reviewed, you do not need to disclose to the offender everything that collaterals have told you. These circumstances place more pressure on the offender to be honest.

Manage Counter-transference

The behaviors of sex offenders justifiably can elicit strong negative reactions, especially among evaluators who must delve into the details of their offenses.

Nevertheless, evaluators must manage their personal feelings toward the offenders they are interviewing. Gilbar (1998) found that sex offenders were more likely to admit their offenses if they perceived the interviewer's reactions as respectful and nonjudgmental. When one is able to view an offender's behavior from his world view or particular circumstances, it will still not make the behavior right or acceptable, but it may make it more understandable and easier to conduct the evaluation.

Express Empathy

Despite the fact that the offender has harmed others, he has likely suffered a variety of negative consequences as a result of his behavior. He may have lost his job, had to move, had his picture in the paper, received a prison sentence, or been shunned by family and friends. Acknowledging an offender's current difficulties does not mean that one is condoning the offending behavior, but rather that you are viewing him as a person who has made some bad choices and is suffering consequences, as are others, especially the victim. Evaluators who show a genuine understanding of the offender's current circumstances can enhance rapport with him, and this is an important outcome if the offender is to learn from the evaluation process and engage successfully in treatment.

Avoid Arguments

Do not argue with an examinee. Interview questions should push offenders to examine their thinking and behavior, but not in an argumentative manner. When one person argues a position, the natural reaction of the other person is to argue the opposite position. This is generally counterproductive. The more an offender argues in favor of a counterproductive position, the more he will become committed to that position. Client resistance is a signal to respond differently (Miller & Rollnick, 2002). Encourage offenders to present their own arguments for change.

Although the strategies described in this chapter are designed to facilitate open communication with the offender, ultimately, it is the client's choice to cooperate or not. Do not engage in a battle to make him cooperate, as it will likely only invite resistance. Be clear, in a matter of fact manner, your willingness to talk honestly and respectfully with him if wishes. Review with him the potential advantages and disadvantages of his participating in the evaluation.

Ask Open-Ended Questions

Although it is necessary for evaluators to ask some closed questions that require only a "yes" or "no" or other one-word answer, ask mainly open-ended questions. Open-ended questions help draw out and encourage the offender to become more engaged in the interview and disclose more information about his thoughts and behavioral patterns.

Use Behavioral Descriptors

Avoid value laden and imprecise terms, such as "molest" or "rape" when asking the individual about his offending behavior. These terms have different meanings to different people. For example, "sexual assault" in some jurisdictions could mean either forced or cooperative penile-vaginal penetration. An offender who is adamant that he did not "rape" or "sexually assault" the victim may be denying his sexual offense or simply misunderstanding the meaning of the term. Use language that describes behavior in as simple and clear terms as possible. As well, clarify what an examinee means when he uses terms that are ambiguous.

Emphasize What Happened, Not Why It Happened

Although it is important to ultimately understand an offender's motivations, it is generally more important to begin by establishing the facts of the case. Case disposition, treatment planning, and other recommendations are generally based on the facts of what happened, not on issues that one cannot independently substantiate. As the interview progresses, you can ask more questions about how the offender makes meaning about his life and his behavior.

Develop a "Yes Set"

Ask questions or make statements, especially at the beginning of the interview, to which you know the response will be "yes." By getting agreement and cooperation initially, even on small points, the evaluator sets the stage for cooperation later in the interview when more difficult topics are addressed. This strategy is considered the essence of working with resistant clients (Erickson, Rossi, & Rossi, 1976).

Do Not Make Denial Easy

Since the individual has already been convicted of a sexual offense, avoid the mistake of directly asking him whether or not he did so. This would make it too easy for him to simply say "no." Operate with the knowledge that his conviction and guilt already have been established and ask questions that assume these facts. Therefore, ask questions such as "What where you thinking the first time you had sexual

contact with her?" or "What was going on in your life just before you began touching him?" Similarly, avoid questions about other sensitive topics that can easily be answered "no." For example, steer clear of questions that begin with phrases such as "Do you…?" or "Have you ever…?" Instead ask questions that place the burden of denial on the individual, such as "How long have you…?" "How often do you…?" "When did you first…?" Phrasing questions this way assumes that the behavior occurred, increasing the likelihood that offenders will talk about the behavior.

Ignore Untruthful Responses

If you believe an interviewee has lied to you when you have asked a question, simply ignore the answer and move on to another topic. By avoiding an argument, you reduce the chance that the individual will entrench his position. As described in the next section, you can revisit the issue later.

Repeat Questions

Repeating the same question or version of the same question during the interview often results in further disclosures. Return to issues that you believe the individual may have previously answered untruthfully. As well, question offenders about their offending behaviors more than once. If during follow-up questioning his responses are different from his initial ones and appear to be more truthful, accept the new responses in a matter of fact manner. There initially is nothing to be gained by confronting him about the previous lies at this point, if to do so would undermine rapport you may have developed with him.

Accept Some Rationalization and Minimization

Given that one purpose of a clinical evaluation is to understand how the offender thinks, do not challenge his distorted thinking to the degree that it will undermine his trust in you to talk relatively freely. If he feels judged or chastised, he is much more likely to censor his remarks. There will be opportunity to address these issues during the course of subsequent interviews and in treatment.

Use "Successive-Approximation" Strategies

If there is a wide difference between what the offender and official record states occurred, begin interviewing the individual about issues that will be easiest for him to admit. For example, establishing that he was alone with the victim is closer to admitting that he committed an offense than if he denies being alone with her. Questioning can then progress to establish increasing more proximate behaviors associated with the actual offense.

Positively Reinforce Cooperation

Compliment the offender for positive efforts he makes in discussing and understanding his problems. As well, honestly note his personal strengths. Especially with offenders who have developmental disabilities, use some caution in being too reinforcing about their disclosures, least they begin to make up stories about their history to gain more attention.

Test the Limits

Although the emphasis in this chapter is on developing a collaborative working relationship with the offender, by the end of the evaluation, the interviewer should have challenged the offender enough to provoke some emotional responses from him. This is to provide information about how the offender reacts under stress and how he may handle similar situations such as in treatment or correctional supervision.

Treatment Needs

Earlier sections of this chapter focused primarily on the process of conducting evaluations. Here, the content of these evaluations, specifically how to identify treatment needs of individuals, is examined. Treatment needs, also called dynamic risk factors and criminogenic needs, are problems that offenders have that are closely linked to sexual offending. They are the focus of treatment interventions designed to reduce an individual's risk to reoffend (Andrews & Bonta, 2010; Hanson et al., 2009).

Several approaches to assessing treatment needs exist. They include psychometric self-report frameworks (Allan, Grace, Rutherford, & Hudson, 2007; Beech, 1998; Beech, Fisher, & Thornton, 2003) as well as clinician-administered protocols, such as the Sexual Violent Risk: Sexual Offender version (SVR:SO; Olver, Wong, Nicholaichuk, & Gordon, 2007), Stable 2007 and Acute 2007 (Hanson, Harris, Scott, & Helmus, 2007), and Structured Risk Assessment (SRA; Thornton, 2002). The need areas identified in these assessment approaches overlap considerably and are generally consistent with dynamic risk factors identified in a series of meta-analyses of the sex offender recidivism research (Hanson & Bussière, 1998; Hanson & Morton-Bourgon, 2004, 2005; Mann, Hanson, & Thornton, 2010).

In this chapter, another need instrument, the Sex Offender Treatment Intervention and Progress Scale (SOTIPS; McGrath, Cumming, & Lasher, 2012; McGrath, Lasher, &

Table 2 Sex Offender Treatment Intervention and Progress Scale (SOTIPS; McGrath, Cumming & Lasher, 2012) Items

Sexuality and risk responsibility	Self-management
1. Sexual offense responsibility	11. Emotion management
2. Sexual behavior	12. Problem solving
3. Sexual attitudes	13. Impulsivity
4. Sexual interests	Social stability and supports
5. Risk management criminality	14. Employment
6. Criminal attitudes	15. Residence
7. Criminal Behavior	16. Social influences
Treatment and supervision cooperation	
8. Stage of change	
9. Treatment cooperation	
10. Supervision cooperation	

Cumming, 2011, 2012), is used as a framework for identifying and organizing an individual's treatment needs. The SOTIPS is a provider-administered risk measure composed of 16 dynamic risk factors. It is designed for use with a static risk measure such as the Static-99R (Helmus, Thornton, Hanson, & Babchishin, 2011) or VASOR-2 (McGrath, Hoke, & Lasher, 2012).

Each SOTIPS risk factor is detailed in a manual (McGrath, Cumming & Lasher, 2012) and scored using a 6-month recency time frame on a 4-point scale ranging from *minimal to no need for improvement* to *very considerable need for improvement*. Scores are recorded on a scoresheet and summed to yield a total score. Clients are scored at intake and thereafter every 6 months. Item scores are intended to reflect an individual's relative treatment and supervision need on each factor. The total score is intended to provide an estimation of an individual's overall level of need for treatment and supervision. Recent research indicates that it can be scored reliably and predicts sexual reoffending with moderate accuracy (McGrath et al., 2011, 2012; McGrath, Lasher & Cumming, 2012). Combined SOTIPS and Static-99R scores, as well as combined SOTIPS and VASOR-2 scores, have predicted sexual recidivism more accurately than either measure alone when these instruments had similar predictive power. Offender treatment progress, as reflected by reductions in SOTIPS scores, is associated with reductions in sexual recidivism rates (McGrath et al., 2011, 2012, McGrath, Lasher & Cumming, 2012).

The 16 risk factors, shown in Table 2, can be grouped into the following five clusters for collecting information about and reporting on the number and severity of an individual's treatment needs.

Sexuality and Risk Responsibility

Considerable consensus now exists that one of the two broad risk factors consistently associated with sexual reoffending is sexual deviancy. Sexual deviancy is marked by deviant sexual interests, attitudes, and behaviors (Hanson & Morton-Bourgon, 2005; Mann et al., 2010). Deviant sexual interests are those involving children or coercive activities. Offenders who have these interests often evidence offense-supportive attitudes and engage in behaviors that reinforce these interests and attitudes, such as using offense-related pornography and engaging in offense-related masturbation. Because each of these SOTIPS risk factor need areas—sexual interests, attitudes, and behaviors—are linked to sexual reoffending, each is a critical area for evaluation.

A related SOTIPS item concerns sexual offense responsibility. If an individual takes personal responsibility for his sexual offending behavior, as opposed to saying that he is not responsible for committing a sexual offense, it is arguably easier to assess offense-related sexual interests, attitudes, and behaviors. Consequently, acceptance of responsibility is a precondition for admission into many sex offender treatment programs (McGrath, Cumming, Burchard, Zeoli, & Ellerby, 2010). Evaluators must recognize, however, that in recent meta-analyses offense denial and minimization have not predicted sexual recidivism (Hanson & Morton-Bourgon, 2005; Mann et al., 2010). These findings, though, are not without challengers (Lund, 2000). Denial indeed may be a risk predictor for certain types of sex offenders such as incest offenders (Nunes et al., 2007) and some high risk sex offenders (Langton et al., 2008), but more research is clearly needed in this area.

Criminal Attitudes and Behavior

The other broad factor that has been consistently associated with sexual reoffending is having an antisocial orientation (Hanson & Morton-Bourgon, 2005; Mann et al., 2010). Such an orientation is often marked by behavioral problems that manifest themselves in an unstable lifestyle and a variety of self-regulation problems; these are described in following sections. In terms of attitudes supporting crime, these include willingness to justify breaking societal norms and hurting others. Individuals who have both marked deviant sexual interests and an antisocial orientation are at particularly increased risk for sexual reoffending.

Treatment and Supervision Compliance

One item each on the SOTIPS assesses the individual's cooperation with treatment and supervision. A third item in this section is used to identify a client's stage of change, a topic that has been previously covered in more detail.

Self-Management

Sex offenders who manage their emotions effectively and employ solution-focused coping and problem solving skills are less likely to sexually reoffend than those who do not

(Mann et al., 2010; McGrath et al., 2011). Also, those who act with deliberation, thoughtfulness, and planning, as opposed to those who act impulsively, are typically at lower risk to sexually reoffend. Hence, these all are important areas in which an individual's treatment needs should be evaluated.

Social Stability and Supports

Lifestyle instability, marked by problems associated with employment and housing, is clearly associated with increased risk for general criminal recidivism (Andrews & Bonta, 2010). Problems in this area indicate difficulties in general life functioning and have been linked to future sexual offending as well (Mann et al., 2010; McGrath et al., 2011). A related factor that has long been known to predict general criminal behavior and also predicts sexual offending is having an antisocial peer group (Andrews & Bonta, 2010; Hanson & Morton-Bourgon, 2005). Consequently, assessing and encouraging contacts with prosocial family and friends is important.

SOTIPS or other dynamic risk measure results can be shared with offenders to educate them about their dynamic risk factors. This can begin to help the individual map out the goals they can address to reduce their risk of reoffending. The more an individual is able to clearly identify strengths and deficits, the more likely they will be able to target them successfully. To this end, some of our current research with the SOTIPS involves having clients score themselves during treatment sessions and discuss openly how they view their progress in treatment and current needs. As well, involving other group members in this process, especially offenders who live together on dedicated treatment units, has provided useful input and motivational feedback.

Disposition Planning

After conducting the evaluation, the evaluator should have collected and synthesized enough information about the offender to answer the referral questions. Referral questions related to amenability to treatment, sentencing, and treatment progress and completion are reviewed here.

Amenability to Treatment

The courts, correctional agencies, and social service organizations frequently mandate sex offenders under their care to enroll and successfully complete specialized sex offender treatment. Decisions about whether an offender is considered amenable to such treatment typically hinge on three factors. First, the offender must have the ability to engage in the treatment process. If responsivity issues, such as major mental illness or active substance abuse, will prevent the individual from engaging in sex offender-specific treatment, then a first order of treatment intervention should be addressing these issues.

Second, the individual must be willing to enter and participate in treatment. Motivation to enter treatment may be based on a genuine interest in living an offense-free life or a more self-serving interest in having fewer life restrictions, such as getting an early release from prison or community supervision. Whatever the motivation, a reasonable treatment expectation is that the offender must be willing to learn and practice new ways of thinking and behaving that will lead him away from offending. Obtaining written informed consent from the offender about what is expected in treatment is one indication of the individual's intentions as well as being good clinical practice.

The third factor concerns the individual's level of offense admission and responsibility. The Association for the Treatment for Sexual Abusers (2005) advises that, "Clients who completely deny their offenses should not be represented as having successfully completed a sexual abuser treatment program" (p. 20). As has been reviewed previously, the relationship between offense denial and sexual recidivism is complex. Regardless, admitting one's offense behavior certainly makes it easier to examine and modify the factors associated with offending and is a precondition for admission into many sex offender programs. For the evaluator, knowing the admission criteria of the programs to which the offender may be referred is critical for assessing an individual's amenability to local treatment, especially with respect to denial.

Sentencing

When the referral question concerns sentencing decisions, the evaluator should be familiar with what typical sentencing goals judges balance: punishment, deterrence, rehabilitation, and community safety (Cumming & McGrath, 2005). Sentencing recommendations concerning how an offender should be "punished" or made an example of for its "deterrence" effect on others are generally not considered within the purview of mental health professionals (Melton, Petrila, Poythress, & Slobogin, 2007). Evaluators in sex offender cases however often can provide useful information to the court for the purposes of achieving the sentence goals of "rehabilitation" and "community safety." Answers to five critical questions can assist decision makers in crafting sentences to enhance community safety (McGrath, 1992). These are:

1. What is the *probability* of a reoffense?
2. What degree of *harm* would most likely result from a reoffense?
3. What are the *conditions* under which a reoffense would be most likely to occur?

4. Who would be the likely *victims* of a reoffense?
5. *When* would a reoffense be most likely to occur?

Procedures to help evaluators answer these questions are contained in this and other chapters of this volume and elsewhere (McGrath, 1992). How decision makers use the answers to these questions to determine, for community safety reasons, whether to sentence an offender to prison or other secure setting, or what release conditions are appropriate if an offender is placed in the community, vary greatly among jurisdictions and even within jurisdictions over time. What is important however is for the evaluator to provide the referral source with useful information to answer these questions.

From a community safety perspective, offenders most appropriate for community placement are those who score in the low to moderate range on empirically established measures of reoffense risk, have not been convicted of sexual offenses in the past, express a willingness to participate in treatment and modify their behavior, have not failed in prior sex offender treatment, do not have substance abuse or mental health problems that would prevent engagement in treatment, have led a generally prosocial lifestyle, did not use excessive force or violence in the crime, and do not have an established long-term engrained pattern of sexual abusing (Cumming & McGrath, 2005; McGrath, 1991).

Offenders for whom community placement may be contraindicated are those who are considered high risk to reoffend, unwilling to participate in recommended treatment, unable or unwilling to follow conditions of supervision, have committed offenses using weapons or excessive force, and evidence a particularly predatory pattern of offending (Cumming & McGrath, 2005; McGrath, 1991).

Treatment Progress and Completion

Some of the most difficult disposition recommendations involve determining whether an individual has made enough treatment progress to move to a lower level of supervision (e.g., from prison to a community setting) or has "successfully" completed sex offender treatment. Criteria for how these determinations are made vary among jurisdictions, treatment settings, and evaluators, and the offender's individual characteristics and circumstances are critical variables as well. For example, the requirements for successful treatment completion for a first-time statutory rapist referred to a 12-week psychoeducation program will be much less rigorous than for a multi-convicted rapist who has been civilly committed to a sexually violent predator treatment program. Nevertheless, several general criteria are applicable in most situations in which treatment progress or successful treatment completion is the referral question.

A sex offender who is judged to have successfully completed treatment should have meaningfully participated in treatment that is designed to reduce his risk to sexually reoffend. The treatment program or provider should have been approved by the authority responsibility for supervising the offender, which is typically a court, department of corrections, probation or parole authority, or state human service organization. The offender should have substantially accepted responsibility for committing the sexual offenses for which he has been convicted such that he has been able to demonstrate an understanding of the thoughts, attitudes, emotions, behaviors, and sexual arousal that were linked to his sexual offending. The offender should be able to identify when these risk factors are present in his life and has shown a willingness to work diligently on addressing these treatment needs.

The last and arguably most important criterion for successful treatment completion concerns the maintenance of change. The individual should have demonstrated enough sustained change in the thoughts, attitudes, emotions, behaviors, and sexual arousal linked to his sexual offending for the evaluator to conclude that he has reduced his risk to sexually reoffend and has reached maximum benefit from the program. Maximum benefit means that more treatment is unlikely to substantially further reduce the individual's risk to reoffend. Of course, a sex offender may meet all these criteria, but the reduction in risk is not great enough to warrant a reduction in supervision level (e.g., release from civil confinement, release from prison, reduction in community supervision level).

Evaluators can assess treatment progress and completion criteria in a variety of ways. Through interview, an evaluator can assess an individual's knowledge of personal risk factors, adequacy of life management plan, and self-reported use of intervention strategies. Appropriate offender responses to inquiries about these issues are necessary but not sufficient evidence of treatment benefit. Evaluators must also use other sources of information.

Increasing evidence exists that offender scores on treatment progress measures are associated with reductions in reoffending rates (e.g., Hanson et al., 2007; McGrath et al., 2011, 2012, McGrath, Lasher & Cumming, 2012; Olver et al., 2007) and provide a method for assessing treatment gain. To score these progress measures, evaluators should obtain collateral information from those who know how the offender has been functioning. Depending on the setting in which the offender is supervised, collateral informants include facility security staff, treatment staff, and probation and parole officers. Correctional and treatment records can also be helpful. Absence of disciplinary reports in residential settings and violations of release conditions in community settings also provide indications of appropriate behavior management. Most sex offender programs in the United States require clients under their care to undergo periodic polygraph exams to verify that they are successfully managing risk factors (McGrath et al., 2010) and evaluators should

consider this information as well. For programs that use the penile plethysmograph, evaluators should consider the offender's sexual arousal profile (McGrath et al., 2010). Taken together, all of these sources of information should provide a comprehensive picture of the individual's progress in treatment.

Conclusions

Evaluators are in a unique position to effect positive change in offenders' lives and provide decision-makers information that will enhance community safety. The relationship an evaluator develops with an offender during the evaluation process often influences the individual's decisions to take responsibility for his offenses and to engage in treatment. Evaluators are also in a position to begin to educate offenders about issues that they can start to address that will reduce their risk to reoffend. Evaluators who approach the interviewing process in a direct, firm, fair, and respectful manner are typically most successful in obtaining useful information and helping offenders to lead offense free lives.

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Structured Psychological Assessment in Evaluations of Sexual Offenders: Nature and Applications

Harry M. Hoberman and Robert G. Riedel

Introduction

Structured psychological assessment should be an essential component of any evaluation of a sexual offender that has significant implications for the individual or the community. *Structured Psychological Assessment* should be understood as a deliberate, ordered means of collecting and organizing both subject self-report and professional ratings that allows a comparison of a particular individual to standards (e.g., diagnostic criteria) and/or normative group data. *SPA* is a critical component to any formal psychological evaluation in that it is an informed, intentional process that involves the collection and integration of information from multiple methods or sources (e.g., life history, collateral data, and clinical observations) specific to the goals of a particular evaluation of an individual. SPA could be viewed as an example of evidence-based assessment (e.g., Hunsley & Mash, 2007) that emphasizes the use of research and theory to inform the selection of assessment targets and methods as well as the process of evaluations. As in other areas of forensic and clinical evaluation, specific components or elements of psychological assessments—particularly, psychological testing and structured clinical ratings and interviews—should constitute a *central* component of any significant comprehensive evaluation of a sexual offender. Typical or conventional assessments based predominantly on either unstructured self-report of suspected or identified sexual offenders and/or unstructured clinical judgments by evaluators are inadequate at providing meaningful information about offenders and are lacking reliability, validity, and predictive accuracy.

Evaluations of sexual offenders may be requested by an offender (or his/her attorney) or mandated by a judicial entity or a treatment program. *Structured Psychological Assessment (SPA)* will almost always be valuable in clarifying the nature and degree of psychosocial and psychiatric issues related to evaluating sexual offenders and in providing the bases of decision-making by others. Such assessments can include understanding the nature and options of an individual voluntarily seeking sexual offender treatment, opinions regarding treatment amenability (in general or for a particular sexual offender treatment program), pre- or post-sentencing evaluations for sexual offenders already involved in the criminal justice system (including the presence of mitigating or aggravating factors or qualification as patterned or repeat offender), determination as a so-called sexually violent predator, potential aspects of the outcome evaluation of participation in a treatment program, appropriateness for release from incarceration or parole/probation status, and/or qualification for a less restrictive status under civil commitment. As a standardized, typically norm-referenced (nomothetic) approach to collecting and organizing self-report and/or professional ratings, *SPA* is critical for both forensic and clinical evaluations of persons suspected of, or convicted of, committing a sexual offense and their dispositions. SPA possesses particularly unique and significant value in any assessment of such offenders. Following the principles of evidence-based assessment, evaluation methods should be standardized, utilize normative data, and possess appropriate levels of reliability and validity; this is the essence of SPA.

The purpose of this chapter is to characterize the nature and role of *SPA* measures in both clinical and forensic evaluations of sexual offenders; to identify the multidimensional personality tests, structured rating scales, and structured diagnostic interviews available to be utilized in such evaluations; and finally to provide a discussion of the particular application of such measures in providing information relevant to

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various issues of significance in the appraisal of sexual offenders. Such an approach regards "assessment" as an information-collection and decision-making process in which the evaluator formulates conclusions and opinions by iteratively considering and integrating various sources of information obtained via optimal, available structured means.

Historically, some elements of formal psychological assessments have been common in many evaluations and related dispositions for sexual offenders [e.g., Psychosexual or Sexual Deviance Evaluations, Pre-Trial Evaluations, Pre-Sentence Investigations (PSI), etc.]. Such psychological assessment components of sexual offender evaluations have typically been utilized both to gauge the relative honesty of the offender's presentation and to provide measures of relevant psychosocial characteristics of an offender that could be compared to one or more normative groups. *SPA* has also played an essential role in risk assessment and management by providing a basis for hypotheses and potential explanations in understanding the nature of particular sexual offenders for assistance in case formulation. Summarizing more specifically, Lanyon (2001) suggested that psychological assessment of sexual offenders could be useful relative to several areas of concern. First, impression management: to what degree is the individual engaging in "self-serving misrepresentation" at the time of the evaluation? Second, deviant sexual interests: to what degree has the person been characterized by the range of deviant sexual ideation (including fantasies), motivational urges, and/or behaviors? Third, general psychological or psychiatric characteristics: what types of personality traits and/or symptoms of various mental health conditions are present? Fourth, treatment amenability: in what ways and to what degree does the individual appear to be amenable to available treatments? Fifth, risk assessment: what type and degree of dangerousness does the individual pose to the community and what aspects of the individual contribute to his risk?

As the field of both clinical and forensic sexual offender evaluation has broadened over the past 20 years, the relative value of *SPA* has actually increased as the issues in the field of sexual offending have become both psychologically and legally more complex and sophisticated. Psychologically, an expanded body of research has identified a subset of static and potentially more mutable (e.g., dynamic) risk factors for sexual offense recidivism. Beyond their role in providing estimates of sexual offense recidivism, such risk factors include characteristics of individuals that have been identified as or inferred to be causally related to an increased propensity for sexual offending. Consequently, such factors can be understood as providing a significant perspective in developing an explanation about why a given person has or may commit sexual offenses as well as serving as elements of a risk assessment. Prominent among these domains of risk factors are particular dimensions of personality, sexual ideation and behaviors, social functioning, psychosexual attitudes, dimensions of self-regulation, and specific psychiatric diagnoses. From a legal or forensic perspective, statutory language regarding patterned or "predatory" sexual offenders and "sexually violent predators" (e.g., mental abnormality, serious difficulty in control, emotional and volitional impairment, etc.) can also be informed by the methods and information provided by SPA. In particular, psychological tests and their interpretations can provide particularly useful measures of an individual's self-report that can speak quite directly and objectively to those issues.

From the perspective of meta-analyses and other multivariate studies, the primary identified risk factor pathways to sexual offending are a deviant sexual interest/preoccupation and a set of "antisocial" and other personality-related characteristics. Further, the most recent development in the past 10 years of sexual offender research can be seen as the research into what has been known as "dynamic" risk factors (e.g., Allan, Grace, Rutherford, & Hudson, 2007; Hanson & Harris, 2001; Hanson, Harris, Scott, & Helmus, 2007; Knight & Thornton, 2007) or "psychologically meaningful risk factors" (PMRF; e.g., Mann, Hanson, & Thornton, 2010). Thus, the Sex Offender Treatment Evaluation Project (STEP) test battery (Beech, Fisher, & Beckett, 1999), the Initial Deviance Assessment (IDA) [related to Thornton's Structured Risk Assessment (SRA) model (Thornton, 2002)], and the Structured Risk Assessment-Forensic Version (Knight & Thornton, 2007) were developed as means of advancing case formulation, treatment planning, and risk assessment. Conceptualized around psychologically meaningful behavioral dimensions, these procedures and models involve the measurement of psychological and social factors that are presumed to predispose individuals toward sexual offending. In addition, Hoberman (2015) has indicated a set of nonsexual predisposing psychological/psychiatric conditions [categorized as motivators and dimensions of disinhibition (broadly, deficits in executive functioning, self-regulation, and/or self-control)] that appear to act either individually, cumulatively, or interactively to increase the likelihood of sexual offending particularly given permissive contexts or situations. More generally, there is increasing evidence that the conditions of most interest and significance regarding psychological and psychiatric characteristics are dimensional in nature (e.g., presenting across a continuum of polarity and/or severity) and may be best captured by dimensional measurement tools. Most of the identified risk factors (including deviant sexual interests/preoccupation and nonsexual predisposing conditions) can be measured and informed by one or more measures of *SPA*. Thus, these models and procedures for the identification and measurement of so-called psychologically meaningful risk factors for sexual offense recidivism invite—if not demand—the application of *SPA* to identify and quantify the presence and degree of many psychological and social factors predisposing individuals toward sexual offending.

Both clinical and forensic questions regarding the nature and disposition of sexual offenders have increasingly been

discovered to be complex as more research accumulates regarding sexual offenders. Given the largely adversarial context of sexual offender evaluations, the importance of multiple sources of information, quantified and norm referenced, and informed by gauges of impression management expands the scope of the information collected and interpreted about a particular person. Further, the implications for the individual (e.g., extended detention and registration) and for costs to society (e.g., potentially preventable recidivism and its multiple ramifications, the high costs of possibly ineffective psychosocial treatment) dictate that *SPA* occupies an increasingly important and central role in the evaluation of sexual offenders. In fact, we would argue that the scientific study of sexual offenders has, in effect, swung full circle from an early emphasis on psychological characteristics of such individuals, then away from the presumed centrality of such dimensions, and now is characterized by a return to a renewed interest and significance of the measurement of such characteristics (albeit now under a different rubric such as criminogenic or dynamic "needs" or psychologically meaningful factors). Consequently, *SPA*, as the preferred means of obtaining standardized information regarding such needs/conditions, seems increasingly important as a central component of any multifaceted approach to the evaluation of sexual offenders.

Evaluations of Sexual Offenders: Almost All Evaluations Are Effectively Forensic Evaluations

As Hoberman and Jackson (2015) have suggested, forensic evaluations of sexual offenders have generally been viewed as ones that speak to their consideration by and mandate by the criminal justice legal system (e.g., pre-plea evaluations and presentencing evaluations, determinations of enhanced sentencing), treatment amenability, release from detention, and, in certain jurisdictions, identification as a so-called sexually violent predator (SVP) or some similar designation. While historically, some or many of such evaluations have been viewed as "clinical" evaluations, as Hoberman and Jackson emphasize the *reality* is that many or most assessments of sexual offenders are either directly or indirectly of a forensic nature. "Forensic" is generally defined or conceptualized as the application of scientific, technical, or professional information or procedure for the courts, legal system, and/or for the purpose of community protection. Consequently, any evaluation that occurs as a result of or in anticipation of a judicial process or within a "judicial context," such as court-mandated sexual offender treatment or conditional release recommendations, is by definition a forensic evaluation. Per this view, any evaluation of a potential sexual offender that occurs for considerations of public safety and/or as a result of a judicial, law enforcement, or child protective services process is necessarily of a *forensic* nature. As a result, almost all evaluations regarding "sexual deviance" or "psychosexual" issues, treatment amenability, risk assessments, initial treatment assessments, treatment progress reports, and treatment summaries, where that treatment results from a sentencing condition or other judicial disposition, are inherently "for the court." In fact, perhaps the only type of evaluation of a sexual offender not to be considered as forensic relates to those relatively uncommon assessments of sexual offenders who voluntarily seek treatment relative to a self-defined problem (e.g., distress with paraphilic experiences) and prior to actual or anticipated legal involvement. If the only "duty" is to a particular client, such an evaluation can be considered as a "pure" clinical evaluation rather than a forensic one. However, since almost all other evaluations of sexual offenders take place either as a result of or in anticipation of a legal context, various "duties" and obligations exist, as Monahan (1981) noted that the evaluator serves not just the individual but, in all likelihood, many others as well (e.g., the court, the community, and the attorneys involved).

Thus, as Hoberman and Jackson emphasize, following Greenberg and Shuman (1997), Heilbrun (2001, 2003), and other similar writers, virtually all evaluations of sexual offenders should be guided by "forensically informed" practices: a goal of providing assistance primarily to the identified decision-maker; an objective or quasi-objective perspective regarding the individual or examinee; an assumption of possible unreliability of response style and a skeptical view of information provided by the evaluation subject; and a comprehensive assessment process and product, with detailed findings, reasoning, and conclusions to be viewed by others. A primary issue in most evaluations of sexual offenders is that significant motivation may exist for the person being evaluated to consciously present a distorted self-presentation for an "obvious, identifiable, secondary gain" (Goldstein, 2003, p. 8), commonly called a "fake-good" response set. Consequently, most types of evaluations of sexual offenders performed by mental health professionals (MHPs), traditionally considered of a more purely "clinical" nature, should truly be informed and even governed by forensic principles: objectivity with regard to outcome; skepticism relative to the self-report of a subject and concern for potential impression management; and a comprehensive, standardized, and norm-referenced approach to collecting and organizing information.

The Limitations of Unstructured Self-Report Among Sexual Offenders and Unstructured Judgment by Mental Health Professionals

For the purposes of evaluations, significant issues exist in relying on unstructured self-report of alleged or suspected sexual offenders as well as the unstructured "clinical" judgment of

evaluators. One potential source of information when evaluating sexual offenders is their own self-report regarding themselves and their potential risk factors for reoffending, what might be referred to as "unstructured self-report" (USR). In general, but even more specifically in forensic evaluations, there may be obvious contextual motivations for persons to present themselves with one or more particular ends in mind. Generally, persons who have committed criminal behavior have been shown to recognize socially acceptable responses and are likely to respond to assessments in ways that are self-advantageous and that minimize their involvement in criminal behavior (e.g., Rogers, 2003; Rogers & Dickey, 1991); such responding is often accentuated in sexual offenders (who are being asked not just about illegal behavior per se but sexually atypical or "deviant" behavior and typically in an adversarial context with important negative consequences for themselves). In addition, dispositional factors common to persons who commit antisocial and/or violent offense also affect the veracity of their self-report. As Logan (2009) noted both insight and honesty are likely to be questionable in the assessment of egocentric or narcissistic individuals and thus are likely to be more meaningfully assessed via record review or other collateral sources.

The extant scientific literature, in general, indicates that dissimulation, particularly lying and defensiveness, is a highly common, if not, endemic characteristic of both alleged and convicted sexual offenders. Sewell and Salekin (1997) provided a summary of understanding and detecting dissimulation among sexual offenders. Numerous writers have commented on the tendency of sexual offenders to dissimulate, particularly when queried about their sexual offense history (e.g., Beckett, 1994). Marshall and Barbaree (1989) noted that general reliance on the self-report of sexual offenders regarding their offenses is "unwise" because such reports are so unreliable. Similarly, as another writer stated, "… sexual aggressors have a marked propensity to lie about, deny, and minimize information concerning their deviant sexual behavior" (McGrath, 1990, p. 507). Earls (1992) noted: "The reticence on the part of the offender is different from most clinical situations … it also poses difficulties when attempting to determine the nature and magnitude of the problem" (p. 233). Per Vitacco and Rogers (2009): "sexual offenders often engage in gross misrepresentations of their offending behavior," (p. 137) including denial and minimization. Similarly, Clipson (2003) wrote:

> The evaluation of sexual offenders offers a challenge unlike that found in either a general clinical practice or even in a forensic setting. All forensic assessments must address the possibility that the person being interviewed may minimize, deny, exaggerate, or feign a psychiatric disorder to obtain a desire outcome. The sexual offender in particular is prone to be dishonest about his behavior for several reasons. (p. 128)

Gudjonsson (1990) showed that "other deception," or impression management, was particularly characteristic of violent and sexual offenders in a forensic evaluation, indicating that they underreported undesirable personality characteristics and psychopathology. He speculated that such persons attempted to give the impression that they were basically considerate people in contrast to or irrespective of what their alleged offenses suggested.

A related notion concerns the degree to which personality traits and psychosexual characteristics are experienced as ego-syntonic or ego-dystonic by the offender. The latter, for example, refers to an individual's experience of a personality characteristic and/or sexual preference as in conflict with that person's self-image or desire (e.g., experiencing distress about their recurrent anger or sexual interest in children). In contrast, the former, for example, refers to an individual's experience of a personality characteristic and/or sexual preference as consistent with that person's self-image or desire or acceptable to their goals or desires. It appears that a significant portion of sexual offenders evidence little or no distress about their own experience of maladaptive personality characteristics or deviant sexual behaviors nor are they conscious of or concerned by social disapproval or judgment of those aspects of themselves (e.g., Vitacco & Rogers, 2009).

In addition, contextual aspects (e.g., setting, nature of interviewer) of the evaluation of a sexual offender can greatly influence the information obtained. Kaplan, Abel, Rathner, and Mittleman (1990) compared reports of sexual offenders on parole in two different settings. In a criminal justice setting, offenders disclosed only 5 % of the sexual offenses that they later admitted to in a mental health setting (where confidentiality was provided); that is, under conditions of confidentiality, sexual offenders disclosed a much higher frequency of perpetrated sexual offenses. Abel, Becker, and Skinner (1983) reported that offenders revealed approximately 20 % more types of sexual deviancy when reinterviewed by an experienced relative to inexperienced interviewers. Consequently, as Earls noted: "… there is surprisingly little empirical research concerning the reliability and validity of the information obtained in a clinical interview…we can expect the validity of data obtained in the initial interview is fairly low" (p. 234). Unstructured interviews by relatively inexperienced evaluators appear to have little reliability and little construct and predictive validity.

Just as the self-report(s) of sexual offenders has profound limitations as valid sources of information so do the "typical" assessment methods and decision-making of MHP across varied settings. Historically, "clinical" judgment has taken the form of a MHP reviewing information regarding a sexual offender and then applying their own "experience" in making findings, assessments, predictions, and recommendations. However, unstructured "clinical" approaches used in either clinical or forensic settings have been repeatedly demonstrated to be unreliable and inaccurate, with high rates of error even among more "experienced evaluators" (e.g., Garb, 1998). This has clearly been demonstrated in the clinical

research purposes (Feighner et al., 1972; Spitzer & Endicott, 1978). For both forensic and clinical evaluations, the increasing importance of differential diagnosis (given overlapping symptoms among presumptively different disorders) has placed a greater emphasis on accurate and normative data-based assessment utilizing structured assessment methods. In an early study of the nature of disagreement among clinicians, Ward, Beck, Mendelson, Mock, and Erbaugh (1962) found that information variance (differences among clinicians in the scope and type of questions asked and observations made) accounted for 33 % of the differences, while criterion variance (differences among clinicians in applying uniform standards of the nature and degree of symptoms/problems present) accounted for 63 % of those differences. Variability in the client's "presentation" accounted for only 5 % of the differences in clinician disagreement. Further, Blashfield (1992) also showed that clinicians' utilizing unstructured methods often did not systematically apply available diagnostic standards; such an example of criterion variance resulted in misdiagnosis in over 50 % of the instances studied. Rogers (2003) concluded that the failure to use structured interviews leads to MHPs missing a significant proportion of both Axis II and Axis I diagnoses present for an individual. More generally, even in attempts to formalize practice, many or most practitioners base their practices on an "intuitive" sense of what was appropriate (e.g., Garland, Kruse, & Aarons, 2003) and ignored the results of formal assessment procedures. Thus, the structure (e.g., number, scope, and degree of questioning) and process of an interview experience and the scrutiny and analysis of information collected produced enormous differences in the findings of evaluators. As a consequence of such practices, traditional unstructured clinical interviewing has long been recognized as lacking in both test–retest and inter-rater reliability and, as a result, in validity. In general, then, in "traditional clinical evaluations," evaluators are likely to miss or underdiagnose a significant percentage of present problematic psychological or psychiatric conditions; more specifically, in forensic settings (with a contextually distorted self-report by the subject of an assessment), the likelihood of underdiagnosis would likely be substantially greater.

Similarly, for various forensic purposes [e.g., questionable allegations of child sexual abuse (Kuehnle, 1996, 2003) and the risk assessment of sexual offender (Hanson & Morton-Bourgon, 2004)], unstructured clinical or professional judgment has been demonstrated to be no better or even worse than "chance." Historically, "intuitive" clinical judgment dominated assessment processes. Such intuitive judgment typically involved a qualitative approach in which beliefs of experienced clinicians provided the sole basis for evaluation conclusions. However, such inferences typically lacked a scientific or empirical basis and/or were developed in an unstructured, asystematic manner. Studies have indicated that clinicians (clinical judges) were often uncertain or disagreed on relevant variables to be considered, the relative importance of variables and/or how to combine such factors (Garb, 2005). In an earlier review of research, Garb (1998) pointed out that clinicians are often uncertain of the variables on which a judgment should be based (or at least the relative importance of relevant factors related to a judgment) and more commonly rely on factors with little demonstrated relationship to the decision at hand. An extensive body of research has accumulated that clearly suggests that *unstructured* clinical assessment and judgments are problematic, particularly in comparison with more structured methods of assessment and decision-making. Meehl and Grove (1996) conducted a meta-analysis of clinical judgment and originally found that "mechanistic" or actuarial methods significantly outperformed clinical decision-making. However, more recently, Grove, Zald, Lebow, Snitz, and Nelson (2000) conducted a similar set of analyses with rather different results: "On average, mechanical-prediction [e.g., actuarial] techniques were about 10 % more accurate than clinical predictions. Depending on the specific analysis, mechanical prediction substantially outperformed clinical prediction in 33–47 % of studies examined…in only a few studies (6–16 %) were [clinical predictions] substantially more accurate…Clinical prediction performed relatively less well when predictors included clinical interview data" (p. 19). Grove et al. elaborated that general interview data (likely of an unstructured nature) tended to *degrade* the accuracy of the evaluator's judgment, perhaps by providing excessive, unnecessary information and by cuing various common errors in human judgment. To their credit, Grove et al. significantly modified earlier claims regarding the relative advantage of mechanistic methods: "…our results qualify overbroad statements in the literature opining that such superiority [for mechanical prediction] is completely uniform; it is not. In half of the studies, we analyze the clinical method is approximately as good as mechanical prediction and in a few scattered instances, the clinical method was notably more accurate" (p. 25). A similar set of findings was reported by Ægisdóttir et al. (2006). However, Weiner (2012) summarized the results by noting that the increase in accuracy of statistical over clinical judgments was modest, with statistical judgments being 13 % more accurate on average than clinical judgments in the Ægisdóttir et al. (2006) study and 10 % more accurate in the Grove et al. (2000) study. Garb (2005) reviewed studies that demonstrated that clinicians are no better than laypersons in making judgments regarding personality and based simply on face-to-face interactions. Widiger (2002), in a review of 35 studies, found that convergent validity improved as the degree of structure in assessment methods increased. Further, Garb (2005) identified that specialized training, not experience, is critical to increased reliability and validity, particularly for specific professional tasks. Overall, then, in certain circumstances, certain clinical approaches to assessment may be acceptable for particular

types of tasks (and less acceptable to the degree that they rely on unstructured interview data with a subject); however, structured, mechanical, and/or actuarial approaches will generally be more accurate. Given their relative rigorousness, structured, norm-referenced psychological tests, which are rooted in actuarial findings, are preferred for most forensic and/or "high-stakes" evaluations.

The utilization of formal structured psychological and psychodiagnostic methodology has come to be the sine qua non of scientific research into the nature of and treatment of mental conditions generally. Empirical research lacking such elements is neither funded nor published. Consequently, evidence-based evaluation procedures such as psychological assessment methods should be the practice or aspiration of all clinical and forensic evaluators in all cases. Consequently, for some period of time, there has been an increased emphasis for MHP in both clinical and forensic settings to utilize available and scientifically validated structured psychological assessments. Certainly, SPA now occupies a central role in almost all types of forensic evaluations, including those in the criminal area [competency to stand trial (e.g., Goldstein, Morse, & Shapiro, 2003) and mental status at the time of a crime (e.g., Stafford, 2003), parenting and child custody matters (e.g., Otto, Buffington-Vollum, & Edens, 2003), and personal injury cases (e.g., Greenberg, 2003)]. As each of those authorities indicates, psychological testing involving multiscale or multidimensional inventories and/or professional ratings are useful if not essential, even if they do not always provide a definitive answer to the specific forensic questions. Such instruments provide critical perspectives on a litigant's self-report (ones interpreted relative to standardized norms or structured professional ratings) for the range of issues that must typically be addressed to provide useful information for court-related matters. Relative to sexual offenders, in the UK, standardized batteries of assessment methods have been and continue to be utilized routinely both in the community and institutional forensic evaluation of sexual offenders (Quackenbush, 2003). In addition, most Sex Offender Management Boards and the Association for the Treatment of Sexual Abusers (ATSA) Practice Standards endorse or mandate the use of various structured psychological assessment measures.

Heterogeneity of Sexual Offenders

The purpose of both clinical and forensic evaluations of specific sexual offenders is to identify both the common and unique characteristics of those offenders as they relate to the assessment goals. The three central meta-analyses of risk factors associated with sexual offense recidivism (e.g., Hanson & Bussière, 1996, 1998; Hanson & Morton-Bourgon, 2004, 2005; Mann et al., 2010) have consistently identified common psychosocial characteristics associated with repeat sexual offending (to be distinguished from those characteristics which might be associated with initial or onset of sexual offending). Several things are important to consider relative to these research findings. First, they identify a set of variables which show significant association with sexual reoffending that fall into several categories: for example, deviant sexual interests; antisocial orientation, including antisocial attitudes; personality disorder(s) and varied maladaptive personality characteristics; indices of rule violations (e.g., parole/probation and institutional violations); and issues in intimate relationships (e.g., absence of or conflicts in such relations). Second, as meta-analyses, they necessarily ignore or minimize the importance of variables that may be difficult to measure or may only apply to subgroups of offenders. Third, none of the variables identified by the meta-analyses demonstrates a uniquely potent or dominant relationship with sexual offense recidivism. As with other etiological studies of different mental health conditions (i.e., major depressive disorder, eating disorders), no one risk factor on its own accounts for a predominant percentage of the variance associated with the appearance of that condition; thus, the strongest single risk factors for sexual recidivism typically have *d* values between .15 and .35 (Hanson & Morton-Bourgon, 2005). Rather, it appears that a number of factors must be present and function in concert for an individual to commit a sexual offense. As Susser (1966) emphasized some time ago, the most common causes of pathological conditions may be contributory, and not necessarily or by themselves, sufficient. In addition, and one set of particular risk factors may be more critical for one specific offender committing a sexual offense, while another set of factors may be critical for another sexual offender's actions. In short, persons commit sexual offenses, even similar sexual offenses, for multiple and different reasons and/or based on varying degrees and combinations of risk conditions. Thus, in considering one or more sexual offenses perpetrated by a particular sexual offender, an evaluator is attempting to identify the degree to which common characteristics (i.e., nomothetic ones, similar to the larger group of sexual offenders) are present as well as more unique characteristics (i.e., idiographic ones, which may be more uniquely related to a particular individual's sexual offending). There appears to be no absolutely prototypical sexual offender. For each sexual offender, a goal of utilizing SPA in the evaluation is to identify those factors that are common as well as those which may be unique or difficult to identify in the larger body of research, which may be of special explanatory value relative to a particular offender.

Psychological Tests and Rating Scales: Definitions

An objective psychological test is the one that measures an individual's characteristics in a way that is independent of rater bias or an examiner's own beliefs, usually by the administration of a set of questions that are answered by the individual

(self-report) and then scored, scaled, and interpreted by standardized procedures. On a psychological test, the person being evaluated responds to a fixed set of questions or self-referential statements using a fixed-response format. Several things are worth emphasizing. Self-report tests obviously rely on the responses or endorsed statements of the person being evaluated at a particular time and in a particular context. Self-report tests require some cooperation, some degree of literacy and reading ability, and theoretically, some limited self-insight on the part of the individual.

Standardization is a critical component of psychological testing and assessment. Standardized tests are administered under relatively uniform conditions (e.g., in a similar way, regardless of the subject or setting), scored objectively (the procedures for scoring the test are specified in detail so that the test or scale ratings by trained scorers produce the same score for the same set of responses), and designed to measure relative performance (e.g., standardized tests are interpreted with reference to a comparable group of people, the standardization, or normative sample). Such psychological tests (sometimes referred to as psychometrics) involve procedures where samples of behavior (e.g., typically self-report or ratings by others) are collected from an individual to measure one or more constructs or characteristics of interest; this information is typically scored, and the responses are compared to the responses of normative samples or groups. That is, psychological tests are interpreted in a *norm-referenced* or *criterion-referenced* manner where the sample norms are considered to be a representative of a population.

Sometimes referred to as a *nomothetic approach*, a norm-referenced score interpretation compares an individual's results on a test or rating scale with presumably representative samples of the population which provides a group norm or set of norms. [This does not mean that the results of the test are necessarily always "true" since individuals can choose not to be open about his/her personality or past behavior. Sometimes a person can attempt to misrepresent himself in their responding to test items, and the test results will not accurately reflect the nature of that individual.] The administration and interpretation of psychological testing becomes a central part of SPA, which entails a more comprehensive assessment of an individual beyond just test results. Similar to risk assessment instruments, the results and interpretation of most psychological testing are essentially actuarial in nature. That is, the development and application of a psychological test is based on the process of collecting information from observations of samples with particular responses to test items; test development allows conclusions to be made about response patterns which then allow an evaluator to infer and make conclusions about a particular individual's test response patterns. Consequently, a particular psychological instrument's interpretation provides hypotheses about individuals who endorse particular responses. Test statements are based on behavioral probabilities. Each interpretive statement can be viewed in the following light: in one or more research studies, a clinically significant number of people who had similar answers exhibited the stated characteristic(s). The fact that one is applying data from a group to an individual should always be noted. However, as Weiner and Greene (2008) point out: "the fact that statistical judgments concern a group of individuals rather than any specific, unique individual does not preclude their providing accurate information about a persons who has been examined. To the contrary, although reliably information from other sources may indicate that certain statistically based interpretations do not apply in a particular case, a set of carefully developed statistical rules is likely to include many that describe most persons" (p. 59).

Evaluation Assessment: The Integration of Sources of Information

Assessment as part of an evaluation of an individual not only includes psychological testing and/or rating scales but also involves a more comprehensive assessment of the individual, typically involving multiple sources and methods of information about an individual. Evaluation assessment is a process that involves the collection, analysis, and integration of information from various sources, including multiples tests of variables of interest (e.g., several personality tests), information from direct structured and unstructured interviews, and collateral information about the person being evaluated. Most commonly and most importantly, archival records are the primary collateral sources of information that serve as the backbone of evaluation assessment; they represent a collective body of collateral or external observations. In one sense, archival records also provide the basis for what methods of SPA are necessary in a particular evaluation by establishing potential questions for further inquiry; they also provide a central basis for structured rating scales providing a primary source of data for answering existing questions. Thus, standardized psychological tests provide a structured, norm-based source of data provided by the individual being evaluated at the time of the evaluation; structured interviews and clinical rating scales provide a standardized means of collecting both current and past information and quantifying that information about the person being evaluated. By necessity and by professional standards, SPA is a complex, detailed, in-depth process that seeks to use multiple norm-referenced means to collect and interpret information about an individual in conjunction with existing materials about that individual.

An important concept in SPA for both clinical and forensic evaluations is the importance of what is known as multi-trait, multi-method evaluations (MTMME) (e.g., Campbell

& Fiske, 1959). This involves collecting information about multiple aspects of an individual (e.g., varied personality, social and psychosexual characteristics) from multiple perspectives (e.g., sources of information). MTMME recommends or requires that an evaluator utilizes multiple methods of self-report (records, self-report testing, current interviews) and collateral or "other" reports (records, especially those of previous evaluators, institutional, or other observers). Convergence and divergence within a complex and extensive set of data can provide a valuable perspective and may direct additional evaluation methods.

Moreover, a MTMME involving SPA offers a significant opportunity for incremental validity in the process of evaluations of individuals. This seems particularly true regarding the assessment of sexual offenders, given the aforementioned limitations of non-standardized self-report of such offenders or non-standardized clinical judgment by evaluators. Incremental validity is the concept that the use of psychological tests and structured clinical ratings adds to the clarification of the presence and nature of psychological/psychiatric conditions above what results from other available data (e.g., Hunsley, 2007; Hunsley & Meyer, 2003). Typically, the available data regarding a sexual offender is their potentially self-serving self-report, the report of potential victims and various collateral sources (e.g., police, previous observers), and an unstructured "clinical" interview. The addition of standardized, norm-referenced psychological assessment approaches to an evaluation would, on its face, seem to offer unique and potentially rigorous data about individuals for comparative purposes.

Garb (1984, 1998) reviewed the incremental validity of sources of information. He found that in general, biographical data and objective psychological testing (e.g., the MMPI) each had incremental validity for assessing the psychological functioning of adults in prediction contexts. Of note, Garb (1998) found that unstructured interview data tended to add little incremental validity; however, Garb (2005) noted that diagnostic results were improved by the use of self-report inventories in conjunction with interviews. Following Garb (2005), Carlson and Geisinger (2009) stated:

> In terms of personality and psychopathology, incremental gains were evident when a variety of assessment information was collected, including information from interview data, personality inventories, projective techniques, and self- and clinician-rated measures. Using a multi-faceted assessment approach provides the most complete understanding of the clinical symptom picture. (p. 75)

In short, it seems clear that appropriate interviews (e.g., structured) in conjunction with standardized psychological tests and rating scales provide incremental validity to the evaluation process.

With regard to the "routine" clinical/forensic context of sexual offender evaluations, most authorities in the field recommend MTMME evaluations, involving record review informed by standardized testing and formal interviews (e.g., SPA) [e.g., Association for Treatment of Sexual Abusers (ATSA), 2014; Center for Sex Offender Management (CSOM), 2008, 2014; Clipson, 2003; McGrath, 1993]. CSOM (2008, 2014) emphasizes that many varied concerns direct that sexual offender evaluations be comprehensive and rely on multiple sources of data, highlighting the unreliability of unstructured self-report of and heterogeneity among sexual offenders. Thus, ATSA (2014) Practice Standards for Psychosexual Assessments indicates that members rely on multiple sources of information when conducting such assessments, noting that "ideally" those sources include "Psychometric testing." Further, various jurisdiction statements regarding "Elements of Comprehensive Sex Offense Specific Evaluations" mandate the inclusion of standardized psychological testing (e.g., Illinois's Administrative Code from their Sex Offender Management Board) among other sources of information for Presentence Evaluations (among other assessments). Similarly, relative to "Mental Health Sex Offender Evaluations," the Colorado Sex Offender Management Board (2000) recommended the use of multiple assessment instruments and techniques, including psychological testing and structured interviews. The San Diego County Sex Offender Management Council that approved the standards for forensic psychological evaluations for adult sexual offenders endorsed the "use of multiple assessment instruments and techniques" and "a structured clinical interview"; in particular, they recommended the use of a number of broadband multidimensional personality tests.

Oddly, in the realm of what is presumably the highest level of forensic evaluations, those related to SVP commitment evaluations, limited available research indicates that relatively few evaluators utilize either multiscale inventories (or other standardized testing) or structured/semi-structured interviews (e.g., less than 10 % of evaluators in Washington State per Jackson & Hess, 2007). However, select writers (e.g., Hoberman, 1999a, b) have long advocated for the essential importance of conducting forensic evaluations of sexual offenders—particularly in the civil commitment context—with the same comprehensiveness of methodological rigor and information collection as is commonly obtained in more general forensic evaluations of parties in legal contexts (e.g., those for child custody, competency to stand trial, personal injury, and so on) by relying on structured self-report tests and rating scales. Thus, as in virtually all other forensic realms, forensic evaluation and reports are strongly recommended to include the results of structured, direct evaluations [e.g., psychological testing, ratings scales, formal (structured) interview formats] in developing opinions regarding key constructs and issues related to the range of litigation involving psychological issues. Currently, several factors seem likely to increase the utility of MMTE in SVP

commitment procedures. First, as noted, they are commonly relied upon in more general sexual offender evaluations. Second, with the increased emphasis on dimensions of psychological functioning and psychiatric symptomatology [as per the psychiatric realm (DSM-5, APA, 2013) and the legal realm (e.g., issues of "serious difficulty in control" and "volitional impairment")], such tests and rating scales are likely to become increasingly relied on to obtain standardized self-report of current impression management, psychosocial characteristics, and psychiatric symptomatology.

Formal Issues Regarding Psychological Testing as Part of SPA

In 1985 a set of standards was published that have guided test development over the last two and a half decades; the most recent version was published in 1999 (American Educational Research Association, American Psychological Association, & National Council on Measurement in Education, 1999). This set of standards concerns the development of tests and their psychometric properties. In addition, the standards identify who may use tests, how they may be used, and how results are to be reported. Issues such as test security are crucial since knowledge of test contents and items can invalidate a testing session. Many psychological tests are generally not available to the public, but rather have restrictions both from publishers of the tests and from psychology licensing boards that prevent the disclosure of the tests themselves and information about the interpretation of the results. Generally, the overwhelming majority of licensing boards in the USA and Canada prohibit professionals other than psychologists from conducting psychological testing; approximately 90% of such jurisdictions restricting the use of the term "psychological."

Further, test publishers consider both copyright and matters of professional ethics to be involved in protecting the secrecy of their tests, and they sell tests only to people who have proved their educational and professional qualifications to the test maker's satisfaction. Purchasers are legally bound from giving test answers or the tests themselves out to the public unless permitted under the test maker's standard conditions for administration of the tests or, in select cases, by court order. Under the requirements of the standards, test publishers should provide a professional manual that presents a description of test development, norms, and the basis for scoring, reliability, and validity as well as proper interpretation. Test manuals are typically available from the publishers for all published psychological tests and rating scales. The application of a test is generally limited to persons sharing similar characteristics to that of the normative samples.

Some tests are more restricted than others so that professional standards identify who is deemed qualified to administer and/or interpret psychological tests, including graduate degree status and/or specific graduate level coursework. Some forms of SPA, particularly psychological tests and structured professional judgment or rating scales, require extensive specialized training for interpretation and/or scoring (e.g., the MMPI-2, the MCMI-III, the Psychopathy Checklist-Revised) even though their application in an evaluation might appear ostensibly simple. The accepted basis for interpretation of SPA requires appropriate understanding of the development of, psychometric properties of, basis for, and satisfying the established qualifications for test scoring and interpretation. It is the responsibility of the MHP administering and "using" such psychological measures (e.g., applying the test or scale results via interpretation) to ensure that they possess the requisite knowledge of and/or training for the test or rating scale. It is also their responsibility to ensure that the conditions under which the measures are administered are appropriate.

Clearly, psychological tests and rating scales as elements of SPA must be scientifically acceptable in order to provide meaningful measurement of their intended foci. In particular, such instruments must have demonstrated psychometric properties, particularly reliability, validity, and well-defined norms. As Rogers (2003) and others (e.g., Heilbrun, 2001, 2003) have noted that psychological tests (which were originally developed for traditional clinical purposes) are commonly utilized for forensic purposes, such tests are viewed as providing reliable and valid, norm-referenced information about various constructs that have relative bearing on the psycholegal issue but do not completely or specifically address the focal forensic issue in a particular case. Nonetheless, the results of those tests, properly interpreted, provide important perspectives that contribute to or strongly direct a particular psycholegal perspective.

The ability of a test to give consistent results is known as its reliability. One form of test reliability is internal consistency, which refers to how well the set of test items relate to one another. Such consistency is commonly measured as Cronbach's alpha or intra-class correlation coefficient (based on inter-item correlations of the specific items on the scale or subscales) and ranges between 0 (low) and 1 (high). Test–retest reliability refers to how well results from one administration of the instrument are correlated with the results from another administration of the same test at a later time. In a similar, although an analogous manner for clinical rating scales, inter-rater reliability is the correlation between scores assigned by different raters based on the same information and is highly related to training and supervision. Test–retest reliability reflects the stability of an instrument and the extent to which a test is *repeatable* and yields *consistent* scores across time and across raters.

Validity is the extent to which a test measures what it is supposed to measure and how well does the operational definition

of the test or subscale match the conceptual definition? To create a measure with construct validity, the developer must first define the domain of interest (i.e., what is to be measured) and then identify or create measurement items that are designed in an attempt to adequately measure that domain. Subsequently, a scientific process of rigorously testing and modifying the measure is undertaken. Validity can refer to the usefulness or accuracy of an instrument. In order to be valid, a test must be reliable; it is a necessary and sufficient condition. However, reliability does not guarantee validity. In addition, a test or rating scale may be valid for some situations and not for others as well as for some individuals or groups and not for others.

The validity of SPA is of particular importance in the context of adversarial settings such as forensic evaluations. Particularly in forensic evaluations, which most evaluations of sexual offenders are, it seems clear and likely that individuals may or will affect particular presentations related to their "goals" or secondary gain. In certain contexts, the "press" is to appear more maladaptive or impaired (e.g., personal injury evaluations, criminal responsibility evaluations), and as a result there is likely a tendency to endorse test items so as to appear to have more symptoms or negative characteristics (e.g., to "fake bad" or negative impression management) than may be the case to secure compensation or a preferred disposition (e.g., treatment versus prison). Conversely, and more commonly in sexual offender evaluations, a motivation to appear less symptomatic or deviant leads to a "press" to respond to test items or present information in such a way as to minimize maladaptive personality traits or deviant sexual behaviors or interests (e.g., to "fake good" or positive impression management).

A related point is that in forensic or clinical/forensic settings, one must be aware that there is evidence that a significant number of attorneys may attempt to "coach" or advise their clients in responding to standardized psychological assessment. For example, in one study, almost half of a sample of practicing attorneys and a somewhat smaller percentage of law students surveyed believed that when clients were to participate in psychological testing, they should "always" or "usually" be given information about the nature of validity scales used in such testing, as well as coaching as to what types of answers to provide or to avoid (Wetter & Corrigan, 1995). In addition, information about psychological tests and clinical ratings scales is now available on websites and anecdotally in most institutional settings. The Internet supports the spread of this information so that attempts at "test sophistication" are no longer limited to those who have technical assistance from their attorneys. Consequently, there is always reason to be concerned that some individuals who are provided with or obtain information about the nature of tests and rating scales may be able to and/or attempt to affect their presentation style on a test or to manipulate detection of maladaptive or deviant characteristics or traits.

Practically speaking, it is typically important to ask an offender in what ways he has prepared for the evaluation; many forensic evaluators include language in their informed consents in which the examinee is asked to acknowledge if they have obtained or prepared for the administration of psychological testing. Specifically, an offender should be asked what he has read or been told about the proposed nature, content, or approach for the evaluation, whether he has read or been told about any material regarding the specific tests chosen for administration (e.g., books about the MMPI-2 or MCMI-III), whether he has received advice from any person on responding to the specific tests or ratings chosen for administration, or if he has sought or obtained information from the Internet about evaluations or specific tests and what he knows about how responses to the particular tests or ratings are used. This may become a particularly important concern if an offender's most recent test results are markedly discrepant from the results of previous testing or if the offender seems unusually "prepared" with circumscribed, seemingly "pat" descriptions of his sexual offense history.

Key Elements in the Evaluations of Sexual Offenders

In conducting both forensic and "forensic-like clinical" evaluations of sexual offenders in almost all settings, certain elements are ubiquitous from the perspective of MTMME: a thorough record review, the administration of psychological tests and rating scales, one or more structured and other interviews of the offender, and, if possible and relevant, collateral sources of information beyond the records. Effectively, these are the common elements of clinical and forensic evaluations across almost all domains or subjects of such assessments.

Commonly Utilized Multidimensional Psychological Tests

In practice, many of the commonly recommended and utilized psychological tests in the clinical and forensic evaluation of sexual offenders are comprehensive or "broadband" tests, typically personality tests, that include questions and produce results about numerous relevant areas for the evaluation of sexual offenders, including response style (e.g., impression management, such as defensiveness) and multiple substantive areas of interests (e.g., likely personality traits, psychiatric symptoms, information about attitudes, and nature of deviant sexual interests and sexual preoccupation). Such instruments generate information about clinical symptoms and personality dispositions (including maladaptive personality traits), as well as response styles, that can be

integrated without sources of information to optimize decision-making about psycholegal issues. We would term such tests as multidimensional psychological tests (MDPT). Consequently, each of these MDPT will be reviewed initially in terms of its history, relative psychometric properties, and use.

According to Archer, Buffington-Vollum, Stredny, and Handel (2006), a survey of forensic psychologists indicated that several of MDPT were used frequently in several different types of forensic evaluations of adults, including those involving sexual offenders. The purpose of these measures was to examine underlying psychopathological constructs, including maladaptive personality traits. Further, Davis and Archer (2010, 2013) provided a critical analysis of the ability of multiscale inventories to distinguish between sexual offender and non-offender control groups as well as to discriminate sexual offenders from other types of offenders and reported favorable results. Similarly, an article in a psychiatric journal stated: "Properly used, many psychological tests are very useful diagnostic and clinical tools. They often clarify ambiguous information, elicit previously unavailable data, and add objective, validity, and reliability to patient interactions and record reviews." (Rogers, 2003, p. 316) However, Rogers raised questions about the use of MDPT by MPH lacking in specialized psychometric training. He also noted that they typically do not provide definitive answers to specific psycholegal issues, stating, "They perform well for severity of purposes but do not excel at any highly specialized tasks" (p. 16). That is, they provide information that may or may not go toward the presence or severity of psychiatric symptomatology, personality characteristics, and/or response style but are best used as components of an evaluator's final opinion.

All current MDPT are essentially self-report instruments with a majority of the items having obvious, face valid content that can be influenced easily by the accuracy of an examinee's self-report. Virtually any person being evaluated can easily use a general strategy to report more or fewer problematic personality characteristics, behaviors, or symptoms. Scores on these tests are thus heavily influenced by whether the subject is willing to report problematic behaviors, personality characteristics and symptoms of psychopathology, and the ability of validity scales to correct for these potential distortions in the admission of undesirable qualities and behaviors. Thus, "… in both civil and criminal forensic settings, there may be a reasonable expectation for increased reporting of problematic behaviors and symptoms of psychopathology (e.g., monetary compensation for personal injury, competency to be executed) and decreased reporting (e.g., child custody, personnel screening, parole, or probation hearings)" (Greene, 2007, p. 85). In addition, as writers such as Greene (2007) has noted, research specifically in the forensic context has demonstrated that examinees may describe their problematic personality characteristics, behaviors, and symptoms differently depending on their perception of the allegiance of the evaluator (e.g., perceived as whether acting on behalf of their defense or the "state"). That is, they are more likely to report a decreased degree of maladaptive personality characteristics and problem behaviors to an evaluator perceived as not allied with their interests. Consequently, in most evaluations of sexual offenders, reports to such evaluators should be considered as potentially distorted and a likely underestimation of an individual offender's likely characteristics.

Currently, it should be noted that most test interpretations of self-report MDPT are obtained from computerized interpretation programs. The concept of computer-based test interpretations is based on the view that tests will be more accurately and substantively interpreted via an actuarial manner than through unstructured clinician-based interpretation strategies. As Caldwell (1997) noted, narrative computer-generated reports are actuarial in the sense that the interpretive material is case based; as he writes "the contents of the sentences come from thousands of cases seen over many years and inconsistencies of behavior that have emerged in each of the 'code types'… There is also a large literature on the meanings of different patterns on the MMPI that is integrated into the interpretations…" (p. 57). Further, "The computer-generated report or 'actuarial function' is a delineation of what is typical or characteristic of a person with the same or a sufficiently similar pattern of scores.... The sentences are probabilistic in wording…" [Caldwell distinguishes that from a 'clinical function' of how a person came to that likely pattern of psychological states and attitudes]. Per Butcher (1995), a computer-generated interpretation report consists of objectively applied personality and clinical symptom descriptions that have been established for the specific test scales or patterns of scales and are more accurately combined by machines than reports derived by individual practitioners. For the most part, computer-generated clinical reports can be viewed as predetermined statements that are applied to individuals who obtain particular psychological test scores or test patterns. Butcher (1995) and Caldwell (1997) offer several reasons for the widespread use of computer-based objective test interpretation. First, computer-based interpretation systems usually provide a more comprehensive and objective summary of relevant test-based hypotheses than a clinician has the time or resources to develop. Second, in interpreting profiles, a computer will attend to all relevant scores; the computer cannot ignore or fail to consider important information, whether through simple bias or error, as might be the case when an evaluator faces a large set of complex information (e.g., several hundred test responses). Third, computer-assisted test interpretations are also typically more thorough and better documented than those typically derived by clinical assessment procedures.

Fourth, the use of computer-based test results avoids or minimizes subjectivity in selecting and emphasizing interpretive material. Fifth, computer-based psychological test interpretation of results offers a particularly efficient means of obtaining information since they can be obtained quite rapidly. The computer interpretation systems are considered to be almost completely reliable, according to Butcher (1995), which is to say that they always produce the same results for the same set of scores for similar responses by an examinee to the same test items.

However, it is always important that computerized interpretive reports be utilized in conjunction with other sources of information about an individual obtained from other sources. In forensic contexts when computer-based testing is used, it is very important to be able to establish the chain of custody for the test protocol in question. Typically that means being able to document that an individual has taken the tests in the evaluator's (or their professional designee) presence and that the evaluator has been responsible for either scoring the test responses on a computer or in submitting the answer sheet to a testing service.

MMPI-2 The revised and re-normed Minnesota Multiphasic Personality Inventory-2 (MMPI-2) (Butcher et al., 1989) and its predecessor, the original MMPI (Hathaway & McKinley, 1943), are and were the most commonly used multiscale, self-report tests across various clinical and forensic settings. The MMPI was and remains the most frequently studied psychological test (e.g., Butcher & Rouse, 1996; Sellbom & Anderson, 2013); per Sellbom and Anderson, the number of journal articles, book chapters, and textbooks regarding the MMPI-2 likely exceeds 3,000. The original MMPI was the most frequently used self-report inventory measuring personality and psychopathology for many years (Lubin, Larsen, & Matarazzo, 1984; Piotrowski & Keller, 1989) as well as the most researched psychological test (Reynolds & Sundberg, 1976). The MMPI was re-standardized on a stratified, national, randomized sample of adults in the USA and released in 1989 as the MMPI-2. The MMPI-2 (Butcher et al., 2001) has been and continues to be used in a variety of settings (Camara, Nathan, & Puente, 2000). Since its availability, the MMPI-2 has been and remains the most frequently studied psychological test (Butcher & Rouse, 1996; Otto, 2002).

The original MMPI was developed in 1939 using an "empirical" approach; it was not theoretically based. Rather, items were selected by statistically comparing those endorsed by a clinical or diagnostic group to those of a "normal" comparison group, who were predominantly white, rural, blue-collar, Protestant males. Items that discriminated between and among the "diagnostic" groups and the non-patients were selected for inclusion in the clinical scales (e.g., Hathaway & McKinley, 1943). Consequently, since the construction of the MMPI was atheoretical and empirical in nature, a particular advantage of the MMPI is it is not always possible for an individual to know why a specific item might distinguish a criterion diagnostic group from so-called normal individuals.

A limited number of services are licensed to *score* the MMPI-2, including Pearson Assessments, the Caldwell Report and Psychometric Software (www.psychometric.us). Beyond scoring, however, *test interpretation* is available from several sources. The most commonly used MMPI-2 test interpretation is that of Pearson Assessments. Psychological Assessment Resources (PAR) (www.parinc.com) publishes an interpretive program by R. L. Greene et al. (2006) that is quite useful in providing a broader set of possible interpretations for the results (including diagnostic impressions and treatment prognosis). The PAR program is also valuable because it "deconstructs" the narrative interpretation and allows an evaluator to identify the specific scale scores that account for particular interpretative statements, as well as a detailed breakdown of possible interpretations subscale by subscale. These subscale interpretations are useful to "fine-tune" an interpretation relative to what aspects of personality appear to "drive" a particular elevation on a clinical scale. Test interpretation is also available from Psychometric Software (www.psychometric.us) and the Caldwell Report (www.caldwellreport.com). Both Graham (2006, 2011) and Greene (2010) have produced increasingly updated interpretive handbooks for configural interpretations of MMPI-2 scores as well as for actuarial interpretations of elevations on specific clinical, supplementary, and content scales.

The MMPI-2 consists of ten clinical scales, a number of validity scales, and 21 content and supplementary scales; the test consists of 567 items. Typically, the MMPI-2 takes between 1 and 2 h to complete; it is generally utilized with persons with at least a sixth-grade reading level. Scale *T*-scores greater than 65 are considered to be high scores although inferences about persons with scores at different *T*-score levels can often be made as well. As Graham (2006) noted: "It should be understood that the *T*-score levels specified have been established somewhat arbitrarily and that clinical judgment will be necessary in deciding which inferences should be applied to scores at or near the cutoff scores for the levels" (p. 65). Similarly, he points out that it is likely that not every inference presented will apply to every person with a *T*-score at a specified level, but that greater confidence should be placed in inferences based on more extreme scores and pairs of scores. Similarly, Caldwell (1997) wrote: "Qualitatively, the behavioral tendencies and emotional dispositions measured by the MMPI/MMPI-2 scales change very little between the 'normal' and 'abnormal' ranges. Rather, the changes are mostly in terms of the range of symptoms, their severity and the general level of impairment"

(p. 36). He argues that profile patterns or code types in the normal range essentially identify stylistic patterns of domains like inhibition, responsibility, unusual attitudes social conformity, tendencies to take advantage of others, and so on. That is, when scores are in the nonclinical range, they reflect personality tendencies or features. The research literature regarding the MMPI translated well to the MMPI-2 [e.g., for correctional inmates, Megargee (1994)]. Most recently, Sellbom and Anderson (2013) reported that the MMPI-2 remains the most studied psychological test; they noted that it was unparalleled in the number of validity studies that it has generated, indicating that well over 3,000 journal articles existed regarding the test. They noted: "The strengths of the MPPI-2 include the vast research literature on the scales supporting their convergent validity as well as effectiveness in detecting a variety of clinically relevant problems…" The most prominent limitations of the MMPI-2 include some degree of intercorrelation among the clinical scales and the fact that the scales do not cover the full range of clinical symptomatology.

One finding should be emphasized about the MMPI-2's utility and admissibility with regard to evaluations of criminal offenders and sexual offenders more particularly. An accumulation of studies has clearly determined that the MMPI-2 cannot be used to determine if an individual denying a specific offense has committed that particular offense (e.g., by virtue of fitting a "pattern" of responses), and, consequently, it lacks a basis for evidentiary admissibility for the specific purpose of determining guilt or innocence.

Present forensic applications of the MMPI-2 are extensive and considered appropriate for almost all forensic questions (Sellbom & Anderson, 2013). Certainly, there is data that indicates that the MMPI-2 has many uses for evaluations of criminal offenders generally (e.g., Grover, 2011; Megargee, 2006; Megargee, Carbonell, Bohn, & Sliger, 2001; Megargee, Mercer, & Carbonell, 1999) and more specifically among identified sexual offenders (e.g., Kalichman, Dwyer, Henderson, & Hoffman, 1992; Schlank, 1995). Clearly, the utility of the MMPI-2 is widely or generally accepted; as noted above, it has consistently been admitted in legal proceedings for various types of information that it can provide about the characteristics of a sexual offender and their implications. Otto (2002) reported that the MMPI-2 was the most widely used psychological test generally, while Graham (2006) has noted that it is the most commonly used test in mental health assessment and treatment centers, typically utilized to identify clinical conditions, personality traits, and their implications for functioning and treatment. Sellbom and Ben-Porath (2006) noted: "Present forensic applications of the MMPI-2 are extensive" (p. 28); they pointed out: "The MMPI-2 is unparalleled in terms of the number of validity studies that it has generated." (p. 25). Several surveys have indicated that the MMPI-2 is more frequently used in forensic settings than any other test (Lees-Haley, 1992) and is considered appropriate for most forensic questions (Lally, 2003). More specifically, in their sample of 131 forensic psychologists, Archer et al. (2006) found that 129 mentioned the MMPI-2 as a test that they used in their work and that 60 of those used the test either "almost always" or "always."

Meloy (1989) identified the MMPI as the forensic evaluator's "workhorse" in adult forensic evaluations "due to the enormous amount of research available concerning its clinical use, and the sensitivity of its various indicators of distortion" (p. 333). Weiner (1995) in reviewing the psychometric properties of the MMPI-2 for forensic use concluded:

> The MMPI-2 is a basically sound instrument that can readily be defended in the courtroom with regard to it standardization, reliability, and validity… The MMPI-2 can be used most effectively in forensic, as well as clinical assessment when combined with other sound instruments to provide opportunities to compare and contrast indications of problems, complaints, and characteristics as manifest on both relatively structured and relatively unstructured assessment instruments. The issues considered in arriving at these conclusions are by no means unique to the MMPI-2; rather, they are applicable to all psychological assessment procedures, each of which has its own particular blend of strengths, applications, limitations and aspects in need of further study. (pp. 78–79)

Greene (2007) stated that "The MMPI-2 is well-suited for forensic examinations because of the extensive number of validity scales and indexes to assess whether the examinee may have increased or decreased reporting of problem behaviors and symptoms of psychopathology. There is a long history of empirical research that validates its use. Such research can be used to provide the scientific evidence needed for specific cycle legal issues that are being evaluated in the forensic examination" (p. 93). While the MMPI-2 or in fact any psychological test can determine guilt or innocence, they can support many aspects of a decision such as the typical second prong in SVP proceedings of the presence of a mental illness or personality disorder. Sellbom and Ben-Porath (2006) noted that, in general, the MMPI-2 meets both the criteria of evidentiary admissibility under both *U.S. v. Frye* (1923) and *Daubert v. Merrell Dow Pharmaceuticals, Inc*. (1993). While certain states have slight variants on these admissibility criteria (e.g., Minnesota's Frye-Mack standard), such rules appear more similar than different, and we are aware of a few (if any) admissibility failures to date.

Otto (2002) reported that the MMPI-2 is the psychological testing instrument most frequently used in forensic treatment and evaluation contexts "and likely reflects the empirical derivation and rich research base of the instruments. Given its use and acceptance by psychologists, expert testimony based on the MMPI-2 has rarely been excluded from legal proceedings." (p. 71). Lally (2003) found that the MMPI-2 was rated as acceptable for an assessment of risk of

sexual violence by 81 % of a group of experienced forensic psychologists. Per Bow, Flens, and Gould (2010), forensic [AU16] psychologists view Scale 4 as the most useful of the MMPI-2 clinical scales. Clinical scales 4 and 9 and ASP, as well as RC4 and RC9 and ASP, are viewed as providing useful assessment of antisocial personality traits (e.g., Lilienfeld, 1996; Sellbom, Ben-Porath, & Stafford, 2007).

More recently, Davis and Archer (2010) provided a critical analysis of the ability of multiscale inventories to distinguish between sexual offender and non-offender control groups as well as to discriminate sexual offenders from other types of offenders. They found that the MMPI-2 was "clearly the most widely used instrument … in sex offender populations" (p. 1255); in particular, the "Pd scale has shown moderate to large effect sizes when distinguishing between sex offender and nonsex offender groups" (p. 1254), and Davis and Archer's review noted that such elevations appear to be associated with a greater chronicity of offending and was most frequently elevated among sexual offender samples; while Pd is often elevated, they also point out that not all offenders produce high scores on Pd and that Pd elevations did not discriminate among subsets of sexual offenders. Coxe and Holmes (2009) found that for sexual offenders identified as "high risk," three clinical scales were typically elevated [e.g., 4 (Pd, Psychopathic Deviate scale), 6 (Pa, Paranoia), and 8 (Sc, Schizophrenia)] and concluded that the high-risk group was characterized by a greater degree of psychological maladjustment than the lower-risk group. Greer et al. found that elevated scores on Scale 4 (Pd) characterized persons who failed to complete sex offender treatment. Grover (2011) in a review of the application of the MMPI with correctional populations (and convicted sexual offenders more specifically) noted that the test was the most widely used objective personality measure in all settings and was particularly useful in correctional settings. They wrote: "In evaluating it's use with sexual offenders, it seems that certain scales including the L [Lie], F [Infrequency], Pd, and Sc scales are elevated with this population of offenders" (p. 641); they also concluded that there was a heterogeneity of personality styles found in populations of sexual offenders.

MMPI-2-RF An alternate version of the MMPI-2 has been developed employing particular statistical methods that were used to develop the restructured clinical (RC) scales in 2003 (Tellegen et al., 2003). The MMPI-2 Restructured Form (MMPI-2-RF; Ben-Porath & Tellegen, 2008) is also owned by the University of Minnesota and published by Pearson Assessments. The goal in developing the restructured clinical scales was to preserve the valuable predictive features of the existing clinical scales while attempting to improve their distinctiveness; the MMPI-2-RF reflects an attempt to reduce the effects of general negative affect and item overlap on clinical scales. However, as Greene (2011) and Nichols (2006) have pointed out that the numbers of items that are scored on a single clinical scale are still outnumbered by the number of items on the RC scales that overlap with at least one other clinical scale. Thus, the RC scales did not seem to eliminate the problem of overlapping items that characterizes the MMPI-2 clinical scales, raising questions about the relative success of identifying a "distinctive substantive core" within each clinical scale. In addition, the MMPI-RF has also been criticized as less ecologically valid given that persons with mental health issues, in fact, typically present with complex patterns of symptoms. Further, as Greene (2011) noted "*…because the MMPI-RF scales are direct/obvious measures of problematic behavior and symptoms, it is relatively easy for the client to present an inaccurate self-description*" (emphasis added); he pointed out that low scores on the MMPI-RF can be true or simply reflect "the client's reluctance to acknowledge the presence of such symptoms" (p. 328). MMPI-2 experts such as Caldwell (on his blog/website) have pointed out the problem with the transparency and face validity of the items on MMPI-2RF and opined that such characteristics render the newer version of the test as potentially problematic for forensic evaluations. Thus, the context of the administration for the MMPI-RF takes on increased importance and concern in the interpretation of its results; given its greater face validity, this form of the MMPI-2 may be less useful for forensic or forensic-like evaluations of sexual offenders. Pope et al. (2006) have reviewed and discussed the utility of the MMPI-2 in forensic psychological evaluations across three editions of their volume. Ben-Porath (2012, 2013) has recently written about the empirical research and applicability of the MMPI-2-RF to forensic work. He noted that the RC-4 scale (Antisocial Behavior) was most strongly associated with a measure of psychopathy.

MCMI-III The Millon Clinical Multiaxial Inventory-III (MCMI-III) is also a multiscale self-report test intended to provide information on psychopathology, particularly diagnoses related to personality disorders. According to Weiner and Greene (2008), the MCMI-III "is the self-report inventory most widely used to assess personality disorders. The MCMI-III should be considered any time the presence of a Personality Disorder is expected in an individual…" (p. 279). The original MCMI was first published in 1983. The test is now in its third iteration, and the MCMI-III developed by Millon, Davis, and Millon (1997); Millon, Millon, and Davis (1994); and Millon, Millon, Davis, and Grossman (2006, 2009) and the other versions are no longer available for use. This test was constructed by a combination of theoretical and empirical approaches. The MCMI-III consists of 175 true–false questions, included to parallel the substantive nature of the then-new DSM-IV (American Psychiatric Association,

1994). Raw scores are converted by computer analysis to Base Rate scores in a complex manner. The test has a total of 28 scales including 5 response style scales, 14 personality disorder scales, 10 clinical syndrome scales, and the relatively new Grossman Personality Facet scales (Grossman & del Rio, 2005). The Grossman facet subscales were derived via factoring of the clinical scales; they provide a perspective on the particularly salient dimensions of clinical scales endorsed by the individual. The administration of the MCMI-III typically takes approximately 30 min and requires an 8th-grade reading ability. The test was normed on samples of persons assessed and/or treated in a variety of mental health settings (e.g., the normative group was clinical populations, including 998 male and female patients in psychiatric hospitals or persons with existing mental health problems). Per Craig (2006), this pool was divided into a group of 600 clinical patients (who composed the developmental sample) and a group of 398 other patients that were used for cross-validation. Of note, correctional inmates made up approximately 9 % of the samples.

The MCMI-III is scored and/or interpreted by Pearson Assessments. In addition, as with the MMPI-2, PAR (www.parinc.com) publishes an interpretive report written by R. J. Craig, which relies on the score report from Pearson Assessment. Various writers have written regarding interpretive strategies for the MCMI-III (e.g., Choca, 2004; Choca & Van Denburg, 1996; Craig, 2005; Jankowski, 2002; Jankowski & Millon, 2002; Millon et al., 1997; Strack, 1999, 2002).

Historically, there has been greater debate about the appropriateness of the MCMI, in its earlier forms, for forensic as opposed to "purely" clinical applications (e.g. Schutte, 2001). McCann and Dyer (1996), Dyer (1997), Dyer (2005), and Craig (2006) have advocated for its use in forensic settings, while Rogers et al. (1999) have offered a more critical view of the test in such settings. Dyer and McCann (2000) have pointed out that the criterion for personality disorders per the MCMI-III satisfies criterion for most scales and may be viewed as better than the MMPI-2. Craig (2006) wrote:

> The strengths of the MCMI include these: (a) test development was anchored to theory, (b) the scales are reliable and internally consistent, (c) there are precise cutting rules for the classification of personality disorders, (d) and there is more research on all versions of the MCMI than on all other self-report personality disorder assessment instruments combined. (p. 35)

Borum and Grisso (1995) found that the MCMI was the second most frequently used test in criminal forensic proceedings; over 10 years later, Archer et al. (2006) found that, in addition to the MMPI-2, the MCMI-III was clearly the most widely used instrument in evaluations of sex offender populations. Several authorities have written about the MCMI and the evaluation of sexual offenders (e.g., Chantry & Craig, 1994; Lehne, 2002). In a study of sexual offenders on community probation in the UK, Craissati, Webb, and Keen (2008) utilized the MCMI-III; they found that 73 % of the sample reported a high level of personality difficulty and 37 % reporting personality dysfunction "sufficient to warrant possible diagnoses of personality disorder" (p. 129). Most recently, Craig (2013) notes that the MCMI-III various advantages and issues related to forensic cases remain the second most commonly used personality test (after the MMPI-2) in both civil and criminal forensic evaluations.

Personality Assessment Inventory Published in 1997 and later revised in 2000, the Personality Assessment Inventory (PAI) is also a broadband measure of the major dimensions of psychopathology found in Axis I disorders and two Axis II disorders of the DSM-IV-TR (APA, 2000). The PAI has demonstrated increasing use in both clinical and forensic evaluations. The PAI is also a multiscale self-report inventory consisting of 344-items. Rather than simply responding to an item as true or false, individuals rate themselves as to the degree to which statements are true of themselves based on a four-point scale (very true, mainly true, slightly true, or false). This format provides the opportunity for individuals to self-report in a more nuanced manner. The test is published by Psychological Assessment Resources (PAR) (www.parinc.com).

The PAI items are utilized to form 22 *non-overlapping* scales, including 4 scales for assessing test-taking validity or response bias, 11 scales for assessing clinical syndromes, 5 scales for assessing treatment considerations, and 2 scales for identifying interpersonal style. There are also 3–4 subscales for 9 of the 11 clinical scales and for one treatment consideration scales. Unlike the MMPI-2 and the MCMI-III, each scale consists of 20 items, and there is no item overlap between scales. However, since the PAI was originally developed as an instrument for purely clinical purposes, most PAI items are relatively obvious in terms of what they are attempting to measure; they have high face validity or transparency (in contrast to the MMPI-2). Consequently, on a number of the PAI scales, individuals can easily produce lower scores if motivated to do so; for example, it is quite common for sexual offenders who have been or are being considered for civil commitment to manifest "normal range" scores on the antisocial scales, despite relatively long histories of criminal behavior. Nonetheless, for Morey and Hopwood (2006): "… it has been suggested that the PAI has particular utility in forensic contexts as a screener, diagnostic instrument, and descriptive tool for describing offender populations…" (p. 108). More recently, Morey and Meyer (2013) have further discussed the nature and issues with the PAI for forensic purposes; they conclude by noting that more research on the PAI in forensic contests "would be helpful" (p. 162). Lally (2003) found that the PAI was rated as acceptable by 55 % of experienced forensic psychologists for sexual violence evaluations. Edens, Cruise, and

Buffington-Vollum (2001) discussed forensic applications of the PAI; later, the PAI and its use in forensic settings per case law have been discussed by Mullen and Edens (2008). Mullen and Edens pointed out that the PAI rarely appears to be utilized in forensic cases in isolation but rather in conjunction with other MDPT including the MMPI-2 and/or the MCMI-III.

The Multiphasic Sex Inventories The Multiphasic Sex Inventory (MSI) includes two measures specially designed to assess psychosexual characteristics of sexual offenders (rapists, child molesters, and exhibitionists). The original MSI (Nichols & Molinder, 1984) and the more recent MSI II (Nichols & Molinder, 1996, 2000) were designed to measure the sexual characteristics of adult male sexual offenders and can be used both to as part of psychosexual or sexual deviance evaluation and also to measure treatment progress. Information about the MSIs is only available from the tests' developers (www.nicholsandmolinder.com). A particular value of the MSIs is that they can provide information that is independent of the broadband personality and psychopathology tests, which essentially contain no specific sexual deviancy items.

Per the developers of the MSI:

> Research toward the development of a sexual test began in 1977 at a state hospital sex offender program. The original Multiphasic Sex Inventory (MSI) designed for adult male sex offenders and was published in 1984; 2 years later a form designed for adolescent male sex offenders was published. The MSI is formatted much like the MMPI, but is a sexual inventory and not a personality test. It may be used routinely with other tests for the evaluation of sexual offenders and may also be used during the treatment process to determine the degree of openness and progress that an offender may be making in treatment. The MSI was specifically developed for use by clinicians who evaluate and treat admitting sex offenders.

The original MSI is a 300-item self-report questionnaire of true–false questions. Those items are utilized to provide six types of scales: validity, accountability, attitudes toward treatment, paraphilias (select atypical sexual outlets), sexual dysfunction, and sexual knowledge and beliefs. It requires a 7th-grade reading level and typically takes approximately 45 min to complete. A 50-page manual is available. Kalichman, Henderson, Shealy, and Dwyer (1992) reported that in studies of five independent samples "the MSI provides information not tapped by traditional psychological tests … the MSI demonstrates moderate to high levels of internal consistency, considerable convergence and divergence with other measures" (p. 384). Thus, the MSI provides significant information that is not tapped by a test like the MMPI. Kalichman, Henderson, Shealy, and Dwyer (1992) also noted that the MSI is characterized by high face validity or transparency; the possibility of response bias on some MSI scales allows for denial and faking of sexual deviance. In particular, they found that high correlations between higher scores on scale F and lower scores on scale K were associated with increased reporting of sexual deviance. They recommended that the interpretation of scale scores on the MSI be interpreted with "careful consideration of the assessment setting and respondent motivation." Kalichman, Henderson, Shealy, and Dwyer (1992) found that while the MSI Sex Obsessions and Cognitive Distortion/Immaturity scale tended to covary with MMPI general psychopathology, analysis showed that only 30 % of common variance or overlap could be accounted for between the MSI and MMPI. This study concluded that "Thus, the MSI contributes a substantial amount of information that is independent of the MMPI" (p. 394). They also pointed to earlier research that had provided evidence corroborating an association of MSI scale scores with physiological indices of arousal.

Multiphasic Sex Inventory II The MSI II (Nichols & Molinder, 1996, 2000) was designed to measure the sexual characteristics of an adult male alleged to have committed a sexual offense or sexual misconduct. Interpretations can be obtained for both a "sexual deviance evaluation" and to measure treatment progress. It can be useful in the evaluation a person who has been alleged to have engaged in sexual misconduct but who denies any such behavior. The MSI II is an expanded and updated version of the original MSI, with a larger number of items (560 true–false items); the test typically takes 90 min to administer. The MSI II requires a 7th-grade reading level. The current MSI II data was nationally standardized using approximately 2,000 subjects (drawn from a pool of 7,000) who had been census matched to the 1990 census on variables of age, ethnicity, education, occupation, marital status, and coming from 1 of 5 geographic regions. Both the original MSI and the MSI II include a number of validity scales as well as scales that allow comparisons with reference groups of identified child molesters and rapists. The MSI II test responses provided by the offender on an answer sheet are submitted to Nichols and Molinder as the primary source of data in conjunction with information provided by the evaluator regarding details of the criminal sexual history of the sexual offender. Nichols and Molinder provide a detailed computerized, norm-referenced interpretive report specific to the offender subject. An extensive test manual for the MSI II is available which documents the test's psychometric properties among other domains. Independent investigators have also confirmed the validity of the MSI II. Tong (2007), Stinson and Becker (2008), and Stinson, Becker, and Sales (2008) all found good concurrent validity, and Stinson and Becker (2008) also found good predictive validity of the MSI II. These studies indicated that the MSI II appears to measure similar phenomena to the penile plethysmograph, and Abel Screen for Sexual Interests, in some instances, showed stronger associations with a past history of particular sexual offending.

The Multidimensional Inventory of Development, Sex, and Aggression (MIDSA) The Multidimensional Inventory of Development, Sex, and Aggression (MIDSA, 2007) is a computerized, self-report inventory whose stated goal is to provide a report to support therapeutic interventions with juveniles and adults who are identified as having committed a sexual offense. Developed by Knight and various colleagues, the MIDSA is copyrighted and available via Augur Enterprises (www.midsa.us). It was normed on adult sexual offenders. The MIDSA represents a unique psychological assessment instrument in that it was originally developed for theory development about the nature of sexual offending in both adult and juvenile sexual offenders but has now been made available for the identification of criminogenic needs or PMRF that might be the appropriate target of treatment for specific sexual offenders. The MIDSA was normed on sexual offenders from several states and normed on community (e.g., adults and adolescents who have committed sexual offenses and a community sample of adult males). All of the samples were originally administered versions of the MASA (Multidimensional Assessment of Sex and Aggression, Knight and Cerce, 2001), typically over a number of years. Currently, the MIDSA has been transformed into a contingency-based questionnaire that can only be administered by a computer. It includes questions that (1) allow the development of a developmental history, (2) provide life history information, (3) form duplicity and compliance measures relative to social desirability issues, and (4) form unique questions appropriate for and only administered to child molesters. The language of the MIDSA has been simplified to a 4th-grade reading level for all offenders. In addition to developmental and life history items, the MIDSA computerized report presents the result of 53 and 51 scales for adult and juvenile sexual offenders, respectively, that assess "constructs that have been found important in the etiology and continuance of sexually aggressive behavior" (p. 11). Most of these scales were developed through factor analyses, but a small number of scales were developed through rational means. The test must be administered by a "session manager" familiar with the technical aspects of administration and with the computer used to administer the test and various procedures to follow in initiating the testing and monitoring the test through the session and with content of the inventory, so as to be able to respond adequately to any questions that a respondent might have.

The MIDSA report provides information about 14 "overarching domains," with numerous subscales of items that compose or are subsumed by those domains. A total of 53 scales and subscales currently exist for the MIDSA, and a detailed manual is available. Because the MIDSA was developed for and is being utilized in current research efforts, the manual provides a truly unique perspective on the empirical work to date regarding the identification, interrelationship, potential risk, and therapeutic meaning of the various scales.

Measures of Psychopathy

As noted, the broad category of antisocial behavior and attitudes has been identified as one of the primary pathways to repeat sexual offending. An assessment of psychopathy should be central to any evaluation of a sexual offender. Per Hare (1993), psychopathy, or being a psychopath, is described as having a distinct personality pattern, involving interpersonal, affective, and behavioral characteristics:

> Interpersonally, psychopaths are grandiose, egocentric, manipulative, dominant, forceful and cold-hearted. Affectively, they display shallow and labile emotions, are unable to form long-lasting bonds to people, principles, or goals, and are lacking in empathy, anxiety, and genuine guilt and remorse. Behaviorally, psychopaths are impulsive and sensation seeking, and they readily violate social norms. The most obvious expressions of these predispositions involve criminality, substance abuse, and failure to fulfill social obligations and responsibilities. (p. 5)

Hare (1985) developed the Psychopathy Checklist (PCL) which was revised in 1991 as the Psychopathy Checklist-Revised (including scoring sheet, rating booklet, and technical manual) and appeared in a second edition in 2003 (along with an updated form of the PCL-R rating scale scoring sheet, a new interview guide and a significantly expanded technical manual, all published by Multi-Health Systems). The PCL-R is a structured professional rating scale designed to assess the personality traits and behaviors related to traditional concepts of psychopathy. In accord with Hare's description, the PCL-R measures psychopathy in terms of 20 interpersonal, affective, and behavioral characteristics, including such domains as impulsivity, lack of empathy, lack of remorse, conning/manipulative, etc. Ratings are based on the degree [e.g., not at all (No), applies to a certain extent or degree (maybe/in some respects), applies or a reasonably good match in essential respects (Yes)] *to* which an offender has manifested the traits or behaviors covered by the checklist *over his entire lifetime*. That is, per Hare (2003a), PCL-R items are rated on the basis of the person's lifetime functioning as revealed by the collective assessment data. Items should not be rated solely or primarily on the basis of present state or relatively recent behavioral history; per Hare and others, for example, PCL-R scores would not change simply as a result of completion of some type of treatment program or as a result of confinement in detention, and the PCL-R cannot be utilized as measure of treatment progress (e.g., Hare, 2003a). The PCL-R is considered to be the best exemplar of structured professional judgment, used with a combination of archival (records) data and interview. However, Hare (2003b) also concludes that substantial research validates the use of the PCL-R being rated on the basis of sufficient archival records alone.

Per the 1991 manual, exploratory factor analyses of the PCL-R produced two correlated factors: Factor 1 (interpersonal/

affective features) and Factor 2 (social deviance features). In 2003, Hare utilized both exploratory and confirmatory factor analysis to identify a four-factor model of psychopathy. Under Factor 1, two facets [(1) interpersonal and (2) affective] were identified, and under Factor 2, two facets [(3) lifestyle and (4) antisocial] emerged. Total scores continued to range from 0 to 40. The higher the score, the more the individual being rated is considered to be similar to the "prototypical" psychopath. Thus, the PCL-R can be used dimensionally to determine the degree of psychopathic traits to characterize an offender; the higher the score, the greater the degree such traits have characterized an individual. In addition, scores on the PCL-R can be used categorically via cut-scores or ranges to classify individuals as a "psychopath." Per the technical manual (Hare, 2003a), a cut-score of "30" is used to identify an individual as a "psychopath." However, it should be clear given the research on dimensional scoring of the PCL-R that such a cut-score is a heuristic strategy and that there is no sharp dividing line in predictive accuracy among scores close to a score of 30. In studies that have relied on scoring the PCL-R based on only archival records (e.g., when subjects of evaluation refuse or are unavailable for a direct evaluation), several studies have demonstrated that a cut-score of 25 identifies offenders as a "Psychopath" (e.g., Harris & Rice, 2003; Rice & Harris, 1997); Hare (2003a) noted that a cutoff score of 26 (designating "psychopathy") is utilized by both the UK and Swedish criminal justice systems.

Regarding reliability of scoring of the PCL-R, although concerns have been raised about the reliability of the instrument in adversarial sexual offender proceedings (e.g., Murrie, Boccaccini, Caperton, & Rufino, 2012), Harris, Rice, and Cormier (2013) showed that file-only scoring of the PCL-R based on good archival material closely matched the clinical scoring typical of routine forensic practice. Harris et al. (2013) also found that "file-only" (e.g., no interview) total scores were significantly higher than file-plus-interview scores. Agreement was best for PCL-R Factor 2 and Facet 4 scores (e.g., the more behavioral items). Harris et al. indicated that lower agreement in "clinical" use of the PCL-R were related to (1) lower degrees of training and practice regarding the PCL-R (leading to measurement error), (2) "partisan allegiance" to outcome, and (3) the effect of more psychopathic subjects to contaminate the interview data and experience (as a result of their psychopathic traits) to affect a reduced psychopathic impression. In support of this last point, it should also be noted that, in their large updated meta-analysis, Leistico, Salekin, DeCoster, and Rogers (2008) also found that the association between violence and file-alone PCL-R scores were significantly larger than scores based on file plus interviews.

Some studies have shown that PCL-R scores are "strongly correlated with other conceptually relevant clinical assessment tools including symptom counts of ASPD, Scale 4 of the MMP-2, the antisocial scale of the MCMI-III, and the ANT scale of the PAI" (Book, Clark, Forth, & Hare, 2006). However, Douglas, Guy, Edens, Boer, and Hamilton (2007) found that the PAI ANT scale and other subscales did not add incremental validity to the PCL-R and concluded that their results offered limited evidence of convergent validity between the PAI and the PCL-R. There was more evidence of correlation with Scale 2 of the PCL-R, but Douglas et al. concluded that the ANT scale could not serve as a proxy for PCL-R scores. Thus, some studies show that the PCL-R is only moderately correlated with select self-report measures of psychopathy. Edens et al. (2001) pointed out that such poor convergence of particular self-reported and professional-rated psychopathy may stem from greater dissimulation on self-report on particular measures such as the PAI as well as limited insight on the part of more psychopathic individuals relative to their own personality characteristics.

Salekin, Roger, and Sewell (1996) reviewed the extant literature on the PCL-R via a meta-analysis of 18 studies; they found adequate reliability and moderate to strong effect sizes for validity. They concluded that the PCL-R represents a good predictor of violence and general recidivism. Barone (2004) referred to the PCL-R as the gold standard for the measurement of psychopathy. In 2005, the Buros Mental Measurements Yearbook review listed the PCL-R as "a reliable and effective instrument for the measurement of psychopathy" and also noted that it "is considered the 'gold standard' for measurement of psychopathy" (Burros, 2005, p. 5). Widiger (2006) also concluded that "Psychopathy, particularly as measured by the PCL-R, has established itself as an important clinical construct, especially within forensic, prison settings. The ability of the PCL-R to predict future violence, substance use, and recidivism clearly has implications for making decisions related to sentencing, conditional release, and institutional placement." (p. 167) In a meta-analysis of risk factors by Hanson and Morton-Bourgon (2004), they found that higher PCL-R scores were associated with an increased risk of sexual offense recidivism. More recently in another meta-analysis, relative to the by Hanson and Morton-Bourgon meta-analysis, Hawes, Boccaccini, and Murrie (2013) found even stronger associations between PCL-R scores and sexual offense recidivism, particularly for Factor 2 and Facet 4. Lally (2003) found that the PCL-R was rated as recommended for sexual violence evaluations (and violence evaluations more generally) by 62 % of experienced forensic psychologists; it was the only psychological measure that was recommended by the majority of those psychologists surveyed. DeMatteo et al. (2014) reported that challenges to the admissibility of the PCL-R in court were rare and typically unsuccessful.

Narrowband Measures of Constructs Potentially Related to Sexual Offending

Numerous studies have attempted to determine if psychological measures can be effectively utilized to measure specific constructs believed to be clinically or etiologically related to sexual offending. Such domains have included offense responsibility, offense-supportive attitudes, intimacy/relationship skills, social skills more broadly victim empathy, self-monitoring, emotional regulation, and problem-solving. Quite recently, Grady, Brodersen, and Abramson (2011) reviewed the available literature regarding such instruments, particularly ones that might be applied as measures of treatment outcome for primarily cognitive-behavioral forms of treatment. Unfortunately, they found few instruments that could be shown to be either reliable or valid or effective measures of core treatment targets. Grady et al. (2011) concluded that while many instruments had been studied relative to their applicability to sexual offenders, "This study demonstrates that there are few valid and reliable instruments as available to research and clinicians to accurately measure sex offender's deficits areas, either prior to or after treatment" (p. 237). Rather, than to repeat such a recent and comprehensive review, later in this chapter, select instruments will be discussed that have been demonstrated to be useful measures of relevant domains in the assessment of sexual offenders.

Interviewing Sexual Offenders: The Need for Structured and Semi-structured Interviews

Clinical interviews are attempts to collect information from a respondent, both via direct questions and observations of the individual's behavior, in the course of discussing the topics and issues presumably related to the context of the questioning. They vary both in the structure of the questions (e.g., unstructured, semi-structured, and structured) and in the degree of judgment or interpretation that an evaluator applies to the information that is provided by an individual.

From a practical perspective, the most thorough assessment of a sexual offender through interview can only be accomplished through considerable contact time with the respondent. This is of particular importance in conducting an interview within a forensic context and is similar to evaluations in other forensic contexts. Thus, forensic interviews should be comparable in length and rigor to interviews conducted where significant issues are at stake, including to such domains as possible insanity defense, personal injury, sexual harassment, or civil commitments of persons as "mentally ill and dangerous." Further, as in all forensic or clinical interviews, the length of the respondent's sexual history, the complexity and severity of his psychological and psychiatric characteristics, and his manner of presentation at interview times further guide the actual length of time of interview contact. Ideally, the actual face-to-face contacts with the respondent should consist of longer evaluation sessions (e.g., multiple hours) and, ideally, should take place over several days depending on the respondent's defensiveness, cognitive capacity (including intellectual and attentional abilities), and the extent of his sexual offending and other criminal, correctional, and treatment history.

Information acquisition can be greatly facilitated by multiple interviews over a number of days, as just noted; this allows for multiple questions directed at similar areas of behavior, framed in somewhat different contexts to facilitate information comparison across interviews. In addition, evaluation over several days provides opportunities to administer and score psychological tests (e.g., obtaining computerized scoring of standardized tests can take up to 2 weeks) and then to use interview time to seek to confirm or disconfirm hypotheses generated by these tests. Finally, multiple interviews provide a much greater opportunity to observe a respondent's interpersonal style over time and across substantive domains of the interview.

To the extent that interviews with sexual offenders occur within a forensic evaluation—or any "clinical" evaluation that occurs within an adversarial context—the evaluator should maintain a skeptical perspective on the veracity or truthfulness of the information provided by an individual. Within the mental health realm, there is a large body of data that indicates that both interviews by MHPs and the interpretation and conclusions that they apply to the information can be significantly flawed by various biases. Such issues are especially applicable to the behavior of sexual offenders in interviews as well as the behavior of sexual offender evaluators both in conducting and interpreting interviews. As noted previously, Earls (1992) concluded that little empirical research exists concerning the reliability and validity of the information obtained in a clinical interview and that the validity of interview self-report by sexual offender is likely to be low. Despite—or even because of—these potential or likely limitations, the same standards for psychosocial and diagnostic interviews applicable in other clinical and forensic settings should apply in evaluations of sexual offenders.

Generally, particular strategies for the structure of the interview process in evaluating sexual offenders, many of which were suggested by McGrath (1990), are ethical and useful to the goals of such interviews; such strategies can work to minimize denial and maximize self-disclosure and discussion. These are actually quite similar to other interventions recommended by Meloy (1989) to "ferret out" distortion in forensic interviews in general.

In the 1970s, psychiatric researchers began to examine the use of research diagnostic criteria and structured diagnostic interviews to determine if specified and systematically collected information from patients would itself increase the reliability of identifying psychiatric symptoms and maladaptive personality traits. Initially for research purposes, Helzer, Clayton, Pambakian, and Woodruff (1978) utilized a structured diagnostic interview with psychiatric inpatients and found the concordance of diagnoses to be high in most cases. They concluded that the validity of a structured interview was high and that such an approach was useful not only for research but also for the clinical evaluation of psychiatric patients. Further, as Garb (2005) pointed out, the quality or predictive accuracy of interview data collection is most dependent on training and supervision and not experience.

Formal Interviews Regarding Background Information Relative to obtaining background information about individuals, one useful means of using a semi-structured interview to collect select about an individual is to utilize the *Interview and Information Schedule* (IIS), which is included in the kit (www.mhs.com) provided for administering and scoring the Hare Psychopathy Checklist-Revised (PCL-R). This IIS is designed to elicit much of the information necessary to make the judgments required for scoring the PCL-R (Hare, 1991) by providing select coverage of educational, occupational, family, marital, and criminal history ensuring that each of these areas is covered by the evaluator and in sufficient detail. Interviews such as the IIS, as semi-structured instruments, allow for flexibility that allows an individual's potentially characteristic interactional style to emerge. However, there are areas that the IIS does not cover which include developmental and sexual history; these components should be addressed as well in this part of the evaluation. Further, to most effectively use the IIS, an evaluator should be familiar with and experienced in the background and scoring procedures of the PCL-R to allow for sufficient information to be obtained to score the PCL-R using the norms that include interview-derived information. According to Hare (1991), the IIS will take 90–120 min. Other potential areas of questions for the evaluation of personal and social history in sexual offenders are provided by Beckett (1994).

Diagnostic Evaluation: The Value of Structure The formal structured or semi-structured diagnostic evaluation of an alleged sexual offender follows quite naturally from questions concerning general areas of their personal and social history. This is particularly true when assessing potential personality traits utilizing thematically organized structured interviews. Thematic areas of interest concerning an individual's mood, interpersonal relations, reactions to stress, and so on are an effective bridge to more specific questions about episodic psychiatric symptoms. Further, in utilizing a more structured approach, the subject is introduced to what they may experience as unusual questions. However, as in other forensic evaluations, the evaluator can point to the fact that they are using a structured instrument and must ask the same questions because of the structural requirements of the interview. Such interviews also provide continuity in the development of the limited rapport and cooperation that can hopefully characterize forensic evaluations.

Traditional assessment among MHP has typically relied upon unstructured interviews, where individual clinicians pose questions they select based on their experience or "intuition" and/or which "occur" to them in response to particular individuals; they may record t individuals' responses to those asystematic questions and note behaviors demonstrated during the interview according to the clinician's personal perception and judgment. A crucial problem among MHP, affecting clinical and forensic work (as well as research), is the generally low reliability of such common unstructured psychiatric diagnostic procedures. Thus, in an early study of the nature of disagreement among clinicians, Ward et al. (1962) found that information variance (differences among clinicians in questions asked and observations made) accounted for 33 % of the differences in outcome (e.g., diagnosis), while criterion variance (differences among clinicians in applying uniform standards of the degree of clinical symptoms present) accounted for 63 % of those differences. Variability in the client's "presentation" accounted for only 5 % of the differences in clinician disagreement. Blashfield (1992) also showed that clinician's utilizing unstructured methods often did not systematically apply diagnostic standards; such an example of criterion variance resulted in misdiagnosis in over 50 % of the individuals studied. As a consequence of such non-standardized practices, traditional clinical interviewing has long been recognized as lacking in both test–retest and inter-rater reliability and in validity.

Based upon findings such as those of Ward et al. (1962) and Blashfield (1992), researchers have long understood and utilized both diagnostic criteria and more structured interviews directed by those criteria to obtain reliable and valid diagnostic assessments. Such approaches have also been recommended for forensic evaluators as well (e.g., Hoberman, 1999a, b; Hoberman & Jackson, 2015; Nicholson, 1999). For example, as Nicholson (1999) pointed out investigations incorporating the use of structured diagnostic interviews that yield substantially higher reliability estimates for most psychiatric diagnoses. He wrote that "… studies have demonstrated substantial discrepancies between research diagnoses based on structured interviews and diagnoses given in typical clinical practice… moreover, the discrepancies are greater for patients diagnosed in state hospitals and community mental health centers and for those diagnosed in University-affiliated hospitals…" (p. 130). That is, research involving structured/semi-structured

interviews and assigning diagnoses based on formal criteria are typically considerably more accurate and reliable than diagnoses provided for clients diagnosed in naturalistic, community clinical settings.

Structured/semi-structured diagnostic interviews allow the interviewee to provide their own perceptions or opinions of aspects of themselves to standardized sets of questions and allow professional judgment by the evaluator as to whether symptoms or personality traits characterize the individual. As Rogers (1995) stated:

> The essence of structured interviewing is its standardization of the interview process…structured interviewing standardizes (a) the clinical inquiries and subsequent probes, (b) the sequencing of clinical inquiries, and (c) the systematic ratings of patients responses. The resulting uniformity allows for direct comparison across psychologists, clinical settings, and diagnostic groups. (p. 1)

He identified a number of advantages of structured interviews including increased reliability, reduction of information and criterion variance, and comprehensiveness (more diagnostic possibilities are covered, and diagnoses, particularly those of less frequency, are not missed as often). A primary disadvantage of existing structured diagnostic interviews is that existing interviews may not cover all of the diagnostic possibilities of interest.

Rogers (1995, 2001) presented a relatively comprehensive review of many of the available systematic diagnostic interviews for assigning diagnoses previously identified as Axis I and Axis II disorders. Regarding such interviews, a distinction is made between structured and unstructured interviews; in the former, *only* the prespecified questions are asked, while in the latter, evaluators are allowed to utilize their own questions to *supplement* (but not replace) standard, required questions and optional probes.

What were previously known as Axis I psychiatric disorders may well be important to assess as part of an evaluation of sexual offenders, as such disorders appear more common among persons identified or referred for sexual issues (Kafka, 2010; Marsh et al., 2010; Raymond, Coleman, Ohlerking, Christenson, & Miner, 1999). Consequently, particularly for clinical purposes, an example of a structured interview is the Structured Clinical Interview for Diagnosis (SCID) (Spitzer, Williams, Gibbon, & First, 1990a, 1990b), while an example of a semi-structured interview is the Schedule for Affective Disorders and Schizophrenia (SADS) (e.g., Spitzer & Endicott, 1978). Rogers (1995, 2001) has expressed concern that the SCID system involves such brief inquiries that both reliability and validity are compromised. Reliable and valid use of both the SCID and the SADS, evaluators are required to receive an extensive formal training.

Diagnostic Interviews: Paraphilic Disorders It is noteworthy that no structured, standardized interview for any of the paraphilic disorders exists, particularly one that has established reliability and validity. An argument can be made that the lack of such procedures speaks significantly to the issues of veracity regarding self-report of deviant sexual interests (e.g., fantasy, arousal, urges, or behavior). No formal method for inquiring about the presence of atypical sexual fantasies, urges, or behaviors has been developed, scientifically tested, or disseminated (even in a proprietary manner). One surmises that there is no or little expectation that persons in general, let alone identified or alleged sexual offenders, might volunteer reliable and valid information about those aspects of their past or present atypical sexual experiences, such as fantasies, urges, and/or behaviors.

Diagnostic Interviews: Personality Disorders For both clinical and forensic evaluations, a formal assessment of relevant personality disorders is essential, both for treatment planning and in identifying PMRF. Per the DSM-IV-TR and DSM-5, a personality disorder is defined as an enduring pattern of inner experience and behavior that deviates markedly from the expectations of the individual's culture. This pattern is manifested in two or more of the following areas: (1) cognition, (2) affectivity, (3) interpersonal functioning, or (4) impulse control. The enduring pattern is relatively inflexible and pervasive across a broad range of personal and social situations and leads to clinically significant distress or impairment in important areas of functioning. A particular issue regarding the assessment of personality disorders is that such conditions are often "ego-syntonic" for the individual; that is, the individual does not experience that their behaviors or traits are maladaptive, problematic, or impairing (relative to themselves, they lack insight and self-understanding). Such persons experience their particular cognitions, emotional style, social relations, and/or self-regulation as acceptable parts of their identity. Ten specific personality disorders are identified in the DSM-IV-TR and DFSM-5, as well as a category formerly known as mixed personality disorder, later termed personality disorder NOS (not otherwise specified) and now identified as other specified (or unspecified) personality disorder per the DSM-5. It is noteworthy that several studies cited by Rogers (1995) indicated that research studies have typically found that a very significant percentage of clinical samples receive four or more personality disorder diagnoses when systematically assessed and that virtually none of clinical samples studied meet criteria for just one personality disorder diagnosis. In particular, if an individual satisfies the criteria for one diagnosis within the so-called dramatic–erratic–emotional cluster, he or she is likely to satisfy the criteria or have other maladaptive personality traits for other diagnoses within that cluster. Similarly, Verheul, Bartak, and Widiger (2007) noted that PDNOS is the most commonly diagnosed personality disorder in clinical practice.

Several formal diagnostic interviews have been developed to assess the presence of maladaptive personality traits and personality disorders. The Structured Interview for DSM-IV Personality (SIDP-IV) (Pfolhl, Blum, & Zimmerman, 1995) is a clinical interview to determine the presence of the individual symptom that in clusters define the personality disorders described by DSM-IV. Using questions that are grouped on a "thematic" basis (e.g., self-concept, social relations, etc.) to minimize response sets, this semi-structured interview allows for the systematic assessment of *all* elements or traits that compose the range of the DSM-IV/5 personality disorders. Although the SIDP was developed to take approximately 90 min to administer, in actual assessments, it is rarely possible to administer the SIDP in less than several hours, particularly if a respondent is quite talkative or there is a need for elaboration (something more common in forensic interviews). Per Rogers (1995), the SIDP's earlier versions (e.g., that for DSM-III-R) demonstrated good inter-rater reliability, relatively clear boundaries for specific personality disorders, and clarity in the assignment of the diagnosis of mixed personality disorder or personality disorder NOS.

Other systematic diagnostic interviews for Axis II disorders include the Structured Clinical Interview for Diagnosis on Axis II (SCID-II) (Spitzer et al., 1987) and the Personality Disorder Interview-IV (PDI-IV) (Widiger, Mangine, Corbitt, Ellis, & Thomas, 1995). On the SCID-II (a structured interview), for each diagnostic criteria, the individual is typically asked 1–2 standard questions and, if affirmative responses are received, to provide examples. As Rogers (2001) pointed out, the major limitation of the SCID-II is "the transparency of the interview format lends itself to manipulation and distortion" (p. 238). [Of note, the SCID-II questionnaire doesn't even include questions about the adult criteria for antisocial personality disorder but only conduct disorder "based on the apparent assumption that patients are more likely to acknowledge childhood than adult antisocial behavior" (Rogers, 2001, p. 239).] Rogers concluded, "The SCID-II is not recommended for the assessment of od key symptomatology." (p. 241). The PDI-IV (Widiger et al., 1995) is identified as a semi-structured interview; it assesses diagnostic criteria for ten established and two proposed personality disorders. The companion book provides detailed information about the personality disorders, their relevant traits, and the interview itself. It can be administered in one of two formats: by thematic area (e.g., the questions regarding personality disorders are organized by nine topical areas, similar to the SIDP) or by disorder. Each personality trait or criterion is assessed by at least two and generally three or four standard questions, and there are a small number of branching questions as well. Given the number of questions, the complete PDI-IV can take up to 2 h to administer. Consequently, its optimal use can be in the application of questions to those disorders of greatest clinical and forensic interest in a particular case or as suggested by available archival information. The section on antisocial personality disorder should always be administered for sexual offenders, with additional utilization of sections on borderline, histrionic, avoidant, schizoid, and/or schizotypal personality disorders as indicated by history or earlier interview responses. There is mixed evidence for the reliability of the PDI-IV relative to the presence or absence of particular personality disorders, with antisocial personality disorder having the highest level of reliability. While the earlier version of the PDI-IV was originally studied using graduate student ratings, experience has demonstrated that "the more talented, dependable, and insightful the interviewer, the better these results" (Widiger et al., 1995, p. 10).

Structured Psychological Assessment and the Appraisal of Key Areas for Evaluation Criminal Responsibility for Sexual Offending

It is important to emphasize that the available research literature and professional standards are clear in indicating that no methods of psychological assessment (e.g., MDPT, structured rating scales, semi-structured interviews), just as no method of physiological assessment, can determine whether or not an individual has committed a specific, alleged sexual offense (Becker & Quinsey, 1993). No psychological tests can indicate whether a particular individual has engaged in specific acts of illegal sexual behavior. Further, as sexual offenders are a heterogeneous group with multiple factors either primarily or in combination resulting in sexual offending, to date, there are no scientific studies that definitively identify specific profiles or patterns of testing or rating results that are definitively associated with specific incidents of sexual offending.

Structured Psychological Assessment and Impression Management

Impression Management Multiple contributors in Rogers (1997) have noted the frequency and issues related to deception in traditional clinical assessment of persons with identified with specific issues and typically seeking treatment ostensibly for their own benefit. In forensic or forensic-like evaluations generally, there is an even greater likelihood of distortion in self-report given the context of such evaluations and the significance of secondary gains for manipulating information provided during the evaluation. As Greene (2007) wrote: "…in both civil and criminal forensic settings, there may be a reasonable expectation for increased reporting of problematic behaviors and symptoms of psychopathology (e.g., monetary compensation for personal injury, competency to be executed) and decreased reporting (e.g., child custody, personnel screening, parole, or probation

hearings)" (p. 85). Personality, dispositional, and situation characteristics can play a significant role in impression management. Thus, Logan (2009) noted that narcissistic or self-centered individuals are not particularly useful sources of information about themselves relative to both defensiveness about recognized weaknesses and (often compensatory) grandiosity. More specifically, Jackson and Richards (2007) indicated that sexual offenders' ability to accurately report on their personality characteristics may likely be hampered by any emotional and/or affective deficits such as those measured by Facet 2 of the PCL-R. Sellbom and Anderson (2013) note that individuals seeking early release from a psychiatric institution are particularly prone to defensiveness on the MMPI-2 as an example; the same would most likely be true for persons seeking to avoid admission to treatment or detention settings. As noted, substantial evidence exists that the self-report of sexual offenders generally tends to be distorted in the direction of minimizing their maladaptive traits and behaviors and describing themselves in more positive terms than their criminal histories might otherwise suggest. Thus, more often than not, sexual offenders are likely to self-report a relatively "self-favorable" presentation. Consequently, obtaining one or more explicit measures of the manner and degree to which sexual offenders do, in fact, represent themselves is a key component to any evaluation of such persons. Paulhus' model of social desirability (e.g., Paulhus, 1984, 1999) distinguished between self-deception and impression management. Per Paulhus, self-deception reflects a motivated unawareness of conflicted thoughts or beliefs about oneself; such persons are thought to believe their positive self-evaluation is an accurate description of themselves (i.e., it is ego-syntonic). Particularly in situations with obvious demand characteristics, impression management is thought of as a "strategic simulation," where a person is consciously motivated to create a favorable impression for others (e.g., Paulhus, 1984, 1999). Scores relative to impression management have implications for both the specific test of which they are a part of and for the broad consideration of the veracity of information provided by the individual. Similarly, it has implications for their amenability to treatment and to a lesser extent their degree of antisociality (e.g., their acceptance of responsibility for their own behavior and its consequences for their victims). Each of the broadband psychological tests (MDPT) discussed above, as noted, includes a variety of validity scales that speak to different dimensions of test-taking attitudes and impression management. Other individual scales can also be useful in providing a measure of impression management. In addition, another indicium, for possible intentional distortion of test results, is a longer than usual time to respond test items and/or to complete a standardized test. Several writers have noted that in experimental settings, individuals assigned to "fake groups" took longer to respond than "control" groups; it appears that the task of inhibiting a response and developing an alternative generally requires "processing time" (e.g., Davies & Hepworth, 2009; Holtgraves, 2004). Based on the findings of Nicholson et al. (1997), Vitacco and Rogers (2009) recommended the use of multiple psychological tests in the assessment of sexual offenders as a means of identifying the degree of defensiveness present in a particular evaluation by an offender. Similarly, Rogers (2003) identified that the value of MDPT, particularly the MMPI-2, was in evaluations where there were specific concerns with an individual's response styles (such as defensiveness).

MMPI-2 The MMPI-2 contains several validity scales, which make the measure of particular value in assessing the response style of an individual taking the test in an adversarial context. VRIN consists of 67 pairs of items that have similar or opposite content. For items of similar content, an individual's responses should be the same, and for those of opposite content, it should be opposite. The TRIN scale consists of 23 pairs of items that must be answered in opposing manner. Consistent (reliable) responding is a fundamental aspect of a valid test. Per most writers, the most common issue in the evaluation of sexual offenders is the underreporting of symptoms and maladaptive personality characteristics. Three MMPI-2 validity scales provide a means to assess this likelihood. The Lie (L) scale consists of items that deal with minor personality flaws and weaknesses to which most are willing to admit. Persons deliberately attempting to present themselves in a highly favorable manner may not be willing to admit to even minor faults and may produce high L scores (e.g., high scores reflect impression management). Elevated L scores suggest the likelihood that the individual has not responded to the test honestly, trying to appear as a particularly virtuous and well-adjusted person. Such elevated scores may also indicate an unsophisticated defensiveness in which persons are denying negative characteristics and claiming positive ones because they believe that it is in their best interest to do so. Thus, as Greene (2007) wrote, the L scale is a key impression management scale and typically "reflects that the examinee understands that the nature of the forensic context is not to report any type of problematic behaviors or symptoms of psychopathology and responds accordingly" (p. 87). The K (Correction) scale was developed as a more subtle measure of attempts by persons to deny psychopathology and to present themselves in a favorable light (or the opposite). The K scale items are subtler than the items on the L scale, making it less likely that defensive persons will understand the purpose of the items. As a measure of self-deception, elevations on the K scale typically reflect, "the examinee actually believes that he or she does not have any problematic behaviors symptoms of psychopathology, and consequently there is nothing to be reported regardless of the forensic setting" (p. 87). Higher scores on the K scale are indicative that the individual approached the test in a more defensive manner than would

be typical; particularly, in clinical/forensic contexts, the higher the score, the more likely that the approach to the test was one of unconscious defensiveness or, per Paulhus (1998), self-deception. [As a note, K scores are also employed in a statistical manner to "correct" scores on some of the MMPI clinical scales.] Regarding the higher likelihood of "faking good" for sexual offenders, Graham, Watts, and Timbrook (1991) found that L and K scale scores were typically much higher than the F scales but noted that the detection of fake-good profiles was more difficult than detecting fake-bad profiles. In a meta-analysis, Baer and Miller (2002) found that traditional indices of underreporting yielded a mean effect size of 1.25, suggesting that underreporting respondents differ from those responding honestly by more than 1 standard deviation, on the average, on these scales. However, they also found that when test takers had been coached about the presence and/or the purpose of validity scales, underreporting is more difficult to detect. Per Greene (2007), the F (Infrequency) scale consists of 60 items that are answered by less than 10 % of the normative population in the scored direction. A high F score or scale score is most often an indication of responding indicative of a person attempting to "fake bad" or exaggerate symptomatology or maladaptive personality traits in their self-presentation. [However, it should be noted that high F scores could also be produced by persons who are very psychologically disturbed and wanting to accentuate their maladjustment, as in a "cry for help" for intervention.] Consequently, elevated F scale scores in evaluations of sexual offenders also provide a useful perspective on the offender but are relatively infrequent.

MMPI-2 RF The validity scales in the MMPI-2 RF are largely minor revisions of those contained in the MMPI-2, which includes three basic types of validity measures: those that were designed to detect nonresponding or inconsistent responding (CNS, VRIN, TRIN), those designed to detect when clients are overreporting or exaggerating the prevalence or severity of psychological symptoms (F, Fb, Fp, FBS), and those designed to detect when test takers are underreporting or downplaying psychological symptoms (L, K).

MCMI-III The modifying indices of the MCMI-III consist of 4 scales—the Validity scale (V), the Disclosure scale (X), the Desirability scale (Y), and the Debasement scale (Z). They are used to determine a patient's response style, such as whether they attempted to present themselves in a positive light (indicated by an elevation on the Desirability scale) or exaggerate the negative aspects of themselves (indicated by the score on the Debasement scale). Scale Y (Desirability) assesses the individual's tendency to appear socially attractive and emotionally "put together"; with higher scores, the person is likely attempting with some diligence to not report any type of maladaptive personality traits or interpersonal difficulties. The Disclosure scale (X) provides a measure of measure whether the test taker was open in the assessment or if they were unwilling to disclose details about themselves; it indicates whether an individual was frank and revealing or, in contrast, provided too little information about himself (presenting as essentially secretive and withholding of personal information). Obviously, in particular cases, the elevated scores on the Debasement scale provide information that may be notable.

PAI The Inconsistency scale and the Infrequency scale measure consistency of item endorsement on the PAI. A Negative Impression scale (NIM) consists of items that were endorsed infrequently either by normal or clinical samples. Self-favorable descriptions of problems on the PAI can be assessed by the Positive Impression Management (PIM) scale; these are items endorsed infrequently either by normal or clinical samples but endorsed more frequently by normal individuals than by clinical patients. It is notable that research has suggested that a lower cutoff score on PIM may be more appropriate as an optimal cutoff for determining positive impression management (Morey & Meyer, 2013; Weiner & Greene, 2008). Further, increasing evidence suggests that the PIM on the PAI can be affected by both self-deceptive enhancement and other deception (impression management). Thus, persons who engage in self-deceptive enhancement are those who view themselves typically more favorably than others perceive them by virtue of decreased awareness of negative characteristics and over-attending to perceived positive characteristics; however, such individuals may not be adequately identified by the PIM or show scores lower than the formal threshold. Such findings were identified by Peebles and Moore (1998). A Defensiveness Index is available for computer-scored versions of the PAI, based on configural features more likely to be found in persons simulating a positive impression.

MSI The original MSI includes several measures that can be related to impression management, generally and with specific regard to sexual issues. The Social/Sexual Desirability scale identifies whether clients are responding in a socially desirable way and the Lie scale, which measures the extent of denial and minimization. Haywood et al. (1994) compared fake-good and fake-bad orientations on the MMPI with psychological distortion on the MSI in 59 alleged child abusers. They found that distortion on the MSI indices of minimization and exaggeration was significantly associated with response bias on the MMPI. Cognitive-distortion indices were highly influenced by response bias where respondents attempt to present in favorable light minimizing any negative psychological aspects. In a recent review of forensic assessment of sexual interest, Kalmus and Beech (2005) noted that while the MSI "remains open to fakeability.... The

MSI's utility is that it is good at identifying when it is being faked. Thus, the MSI is most effective in discerning offender's presentation, for example, level of denial…" (p. 208).

MSI II The MSI II has shown similar properties regarding dissimulation as the original test. Scales measure consistency of responding, openness versus defensiveness, infrequent responses, social desirability, dissimulation, and a Lie scale for admitting sexual offenders. For the MSI II, in addition to the Justifications scale present in the original MSI, there are the added Accountability Scales of Dissimulation (D), Scheming, and Superoptimism. The Social Sexual Desirability (SSD) scale is designed to evaluate a person's attempt to present himself and his sexuality in a highly desirable light. The Dissimulation (D) scale is most promising in that it appears to tap into an offender's denial system in which he defines what his sexual behavior occurred in such a way as not to see it as hurtful or serious enough to be an offense but possibly to see it as "inappropriate." The SSD and D scales both correlated with other standard validity scales. For example, per Nichols and Molinder (2002), the SSD scale significantly correlated with MMPI 2 Lie scale (.47), the Marlowe–Crowne scale for Social Desirability (.75), and the MSI II Dissimulation (D) scale (.78). In addition, the MSI II Dissimulation (D) scale was also correlated significantly with the MMPI 2 Lie scale (.53) and the Marlowe–Crowne scale for Social Desirability (.72). These results confirm the effectiveness of these two MSI II validity scales.

MIDSA The MIDSA includes four Lie scales. All respondents are scored on the Positive Image scale that captures attempts to appear in a positive light to others; item content suggests conscious manipulation that is not apparently believed by the respondent. Three other Lie scales can be obtained from those offenders who take the Attitudes and Behavior Change portion of the MIDSA. These include a Negative Emotion Denial scales (to assess persons tendency to deny negative characteristic, primarily emotional or reluctance to admit that emotions affect heir behavior), an Improbability scale (a small number of items that are highly unlikely to occur), and a Sexual Denial scale (which assesses that the individual is denying engaging in sexual behaviors and having sexual thoughts).

Structured Psychological Assessment and the Identification of Psychologically Meaningful Risk Factors

There are several ways of considering the most relevant domains to be assessed in evaluations of sexual offenders. On the most simplistic level, meta-analyses and other multivariate studies (e.g., Hanson & Bussière, 1998; Roberts, Doren, & Thornton, 2002) have consistently identified that there are two primary pathways related to sexual offending: an antisocial or psychopathic path and a deviant sexual interest/behavior. More recently, a later meta-analysis and other studies of risk factors for sexual offending (e.g., Barbaree et al., 2006; Hanson & Morton-Bourgon, 2004) as well as studies of potentially dynamic risk factors (e.g., Hanson & Harris, 2002; DSP) have suggested an expanded but converging domain of variables related to sexual offense recidivism beyond antisociality and deviant sexual interests to include more general problems with authority and rules, problems in social relations, distorted cognitive attitudes, and deficits in self-regulation and problem-solving.

The most recent model for considering the types of information that one might endeavor to understand via SPA of a sexual offender would be to consider what have been termed psychologically meaningful risk factors (PMRF: e.g., Mann et al., 2010). As noted previously, this approach is derived from earlier work by Beech et al. and by Thornton relative to an Initial Deviance Assessment (IDA) which was converted to a criminological model of "criminogenic" or "dynamic" risk factors before reverting back to a more psychologically based model in more recent conceptualizations such as the Structured Risk Assessment: Forensic Version (SRA: FV; Thornton & Knight, 2014). PMRF focus on individual characteristics that appear to be plausible causes of sexual offending and that scientific evidence has linked to sexual offending, particularly sexual reoffending—what has been termed "long-term vulnerabilities." The notion is that PMRF represent "propensities" or "enduring characteristics that leads to predictable expressions of thoughts, feelings, or behaviors" but which may or may not be manifested during any or all particular time periods or across all situations. The conceptualization of PMRF suggests that sexual offending arises through interactions of these propensities (long-term, enduring psychological vulnerabilities) with aspects of an individual's environment (e.g., actual aspects of or interpretations of environments). Beech and Ward (2004) suggested that static risk factors have predictive significance because they are *proxies* or *markers* of the past operation of dynamic risk factors; that is, static risk factors are the behavioral manifestation of underlying psychosocial vulnerabilities, some of which may be mutable and susceptible to change. Per Mann et al. (2010), the identification of these propensities provides the basis for the assessment, understanding, risk assessment, and treatment of sexual offenders, with some long-term vulnerabilities perhaps being amenable to change or management.

Thornton (2002, this book) has articulated a particular set of PMRF that generally converge with earlier versions of models of dynamic risk factors and so-called criminogenic needs (e.g., Hanson & Harris, 2000; Hanson et al., 2007). These "need" or risk factor domains fall into the following

four areas: sexual interests (sexual preoccupation, sexual preference for children, sexualized violence, and multiple paraphilias), distorted attitudes (offense-supportive attitudes such as hostility toward women and Machiavellianism), relational style/status (conflict in or lack of emotional intimacy in relationships, emotional congruence with children), and self-management (e.g., impulsivity/recklessness, problems with authority, negative social influences, poor problem-solving). It seems useful to consider the utility of SPA with regard to the identification and measurement of such PMRF.

Sexual Interests and Preoccupation

Per Mann et al. (2010), the PMRF domain of sexual interests includes paraphilias, more specifically sexual preference for children, sexualized violence, and sexual preoccupation (including hypersexual behavior, pornography use, etc.). As Marshall (2007) has indicated, "The aspect of comorbidity that has received the most attention the sexual offender literature concerns the possible presence of multiple paraphilias in the same person" (p. 23). Several lines of research have informed this issue, which is sometimes referred to as the "crossover" phenomena among sexual offenders. In a community-based study where protection of confidentiality had been obtained from the US government, Abel, Becker, Cunningham-Rathner, Mittelman, and Rouleau (1988) found that a significant percentage of persons engaged in one type of paraphilic behavior also engaged in other paraphilic behavior (e.g., persons with child victims also had adult victims and persons with exhibitionist and/or voyeuristic behavior also had hands-on contact offenses in addition to non-contact offenses). Convergently, a series of studies involving polygraph administration to sexual offenders being supervised in the community (e.g., Ahlmeyer et al., 2000; Heil, Ahlmeyer, and Simons, 2003; Weinrott & Saylor, 1991) identified that a significant percentage of persons committing one type of sexual crime (e.g., child molestation) also committed another type of sexual offense (e.g., rape or voyeurism). While some sexual offenders may be typified by just one paraphilia (per DSM-5), a significant group of others appear to be characterized by multiple paraphilias and/or multiple paraphilic disorders. Such findings suggest the importance of a comprehensive and dimensional approach to identifying and quantifying paraphilic interests.

MSI

This test provides one of the stronger measures of both sexual interests and sexual preoccupation. The Social/Sexual Desirability scales assess "normal" sex drives and interests, while the Sexual Obsession scale measures an offender's obsession with sex. The Sexual Deviance scales (Child Molest—Gender, Rape, and Exhibitionism) are based on the notion that a sexual offender goes through an identifiable cognitive and behavioral progression leading up to a sexual offense. The offender's cognitions are considered to (a) begin with the thought or fantasy of committing a sexual assault (antecedent thought) (b) through a series of self-justifying positions on to planning and executing the assault. The MSI contains Child Molest and Rape Indices that compare the sexual offender's self-report to samples of known child molesters and rapists.

The *Paraphilia* (Atypical Sexual Outlet) *scales* (five subtests) provide the opportunity for a sexual offender to indicate the nature and degree of select paraphilic behavior including fetishism, voyeurism, bondage/discipline, and sadomasochism and telephone scatalogia (obscene phone calling). Several studies have found that scale scores on the MSI identified deviant sexual interests. Bernard, Fuller, Robbins, and Shaw (1989) used the MSI to help confirm sexual interest and arousal to female child stimuli using the MSI and PPG with molesters of female children. Day, Miner, Sturgeon, and Murphy (1989) compared penile plethysmograph and MSI discriminant analysis findings and found "…that the MSI scales used as self-reports measures were superior to the physiological measures of arousal…classified on the basis of the characteristics of past criminal (sexual) behavior" (p. 122). Thus, the MSI has been found to provide data that generally correlates with physiological indices of arousal. Schlank (1995) found that the MSI was more effective than the MMPI in determining clinically different subgroups of sex offenders and concluded that "The MSI, however, appeared to be better suited for understanding the specific psychological constructs of sex deviance and was effective in distinguishing clinically different subtypes…" (p. 192).

MSI II

The MSI II paraphilia scales and subscales parallel the DSM criteria. For example, the MSI II Child Molest, Rape, and Exhibitionism scales provide a means for offenders to indicate their recognition or admission of various aspects of deviant sexuality: (a) deviant fantasies (deviant arousal), (b) pre-assault experiences and behaviors (i.e., urges), and (c) deviant sexual behaviors (both sexual assault and aggravated/advanced assault subscales). The MSI II also provides an opportunity for individuals to indicate the degree to which they have been preoccupied, currently or in the past, with sex or pornography more specifically.

More specifically, the Child Molest (CM) scale of the MSI II assesses an individual's level of recognition and understanding of the pattern of his molesting behavior.

Scales based on an offender's responses allow a comparison of the offender's scores to the scoring levels of nationally standardized samples of adult male child molesters. The Child Molesting scale is based on the following subscales that assess underlying features of paraphilia disorders related to child molesting or pedophilic behavior: (1) *Sexual Fantasies (Deviant Arousal)* is considered a precursor step in which sexual themes involving children have been used for sexual stimulation and examines the degree to which an individual recognizes or acknowledges ever having been sexually aroused by deviant sexual desires or having been sexually aroused by fantasies involving a child. (2) *Sexual Urges (Pre-Assault) examines* an offender's progression that involves planning, anticipation and targeting, and manipulation of a victim so that a sexually desired outcome (i.e., molest) could occur. (3) *Sexual Behaviors (Sexual Assault)* examines the degree to which an offender reports "a final step in which a purposeful and willful decision has been made to act out latent deviant sexual desires involving touching, fondling, oral contact, and penetration between an adult and a child" (per the language used in the typical interpretive report). A similar scale exists for exhibitionism. Thus, these scales assess the style, magnitude, and duration of various categories and elements of sexually deviant behavior.

The Rape scale of the MSI II assesses a client's level of recognition and understanding of the pattern of his use of force or coercion during a sexual encounter. Scales based on responses allow a comparison of the offender's scores to the scoring levels of nationally standardized samples of adult male rapists. The Rape scale is based on the following subscales which assess underlying features of paraphilia disorders related to rape behavior: (1) *Sexual Fantasies (Deviant Arousal)* provides the opportunity for an offender to indicate a precursor step in which thoughts of using force and threat to control a victim are empowering and stimulating; (2) *Sexual Urges (Pre-Assault)* examines a progression which involves planning, anticipation, and stalking in which there is a determined search for a victim to rape; and (3) *Sexual Assault Behaviors* examines the "final step in which a purposeful and willful decision has been made and acted on involving physical assault, force, intimidation, and threat to get a victim to capitulate and engage in a sex act" (per the language used in the typical interpretive report).

In addition to child molesting issues, the MSI II also can provide information regarding other paraphilic and deviant sexual behavioral issues including "peeping," child pornography, sexual harassment, frottage, fetishism, Internet solicitation of a minor, and obscene phone calling.

Recent research has obtained findings that suggest that both the original MSI and the MSI II provide good measures of deviant sexual interests. In a small sample, Tong (2007) found that the Sex Deviance scales, the Child Molester, and the Rape Comparison scales were consistent with the results of PPG findings as well as those of the Abel Sexual Interest Screen (albeit in a sample of men accused of intrafamilial sexual abuse). However, Stinson and Becker (2008) studied men who had been civilly committed in terms of their sexual history, the PCL-R, and four measures of sexual interest [PPG, Abel Sexual Interest Screen (ASSI), PCL-R, and MSI II]; these variables were studied using external criteria of prior sexual offending behaviors (child molest, rape, exposing, voyeurism). [It was noted that a 1/3 of all failed to evidence any sexual arousal (normative to deviant) on the PPG.] Approximately 2/3 of the men had diagnosis of pedophilia, and 2/3 had a diagnosis of paraphilia NOS (obviously there were offenders with dual or overlapping paraphilias). Stinson and Becker (2008) found that "the MSI II Child Molest scale followed by the PPG had the highest correlations with subjects having engaged in sexually inappropriate behaviors with a child" (p. 383). Additionally they found that "…the MSI II (Rape scale) had the strongest correlation with rape behavior, followed by a modest correlation with the overall score on the PCL-R (factor 2)" (p. 383). Both a history of exhibitionistic behavior and voyeuristic behavior were significantly related to scores on those scales on the MSI II. Additionally, Stinson and Becker (2008) performed a logistic regression analysis using those same four instruments (PPG, ASSI, PCL-R, and MSI II)—to determine which combination of these measures would best identify sexual offense behaviors of molest, rape, sadism, and exhibitionism. The researchers performed a forward stepwise logistic regression that found that only one measure, the MSI II Child Molest scale, correctly classified or predicted 92 % of the child molesters in the sample. Of interest, they found that the combined (four) measures, plus a self-report test of sexual fantasies involving children, identified 98 % of their molester sample. On the other hand, using a logistic regression analysis, the MSI II (significance level >.001), and the PCL-R (significance level >.05), it was "confirmed that only these two tests were the most significant indicators of rape behavior… with 85 % predictive accuracy." The authors conclude that "Overall, the strongest predictor of specific sex behavior in this research was the MSI II…" (p. 387).

Further, the MSI II also includes the Molester and Rapist Comparison scales that were empirically developed to identify nontransparent test items that discriminated between persons who identified themselves as molesting children or raping persons and a control group of census-matched "normal" males.

MIDSA

As might be expected, a number of scales on the MIDSA pertain to deviant sexual interests. The *Child Sexual Arousal* scale consists of items that assess being sexually aroused by

children and fantasizing sexual activity with them. The *Child Sexual Sadism* scale consists of items that assess fantasies and behaviors involving hurting or frightening a child during sex. Two additional scales assess *Sexual Sadism*, one focusing on sadistic fantasies (report becoming aroused by thoughts of scaring, hurting, humiliating, or killing women during sex) and the other on sadistic behaviors (report having scared, hurt, or humiliated women during sex). Responses to each of these scales are standardized against community sample adults. Additionally, there are two also Expressive Aggression scales: *Expressive Aggression Fantasy* (reporting having felt angry toward women and had thoughts of hurting or frightening them in nonsexual situations) and *Expressive Aggression Behavior* (reporting they have beaten or harmed women in nonsexual situations). [Sexual Sadism and Expressive Aggression scales are correlated, but a greater percentage of adult and juvenile males endorse Expressive Aggression toward women than who endorse Sexual Sadism in fantasy or behavior.] In addition, there are *Offense Planning scales* (Intimacy-Seeking Sexual Fantasies, Aggressive Violent Fantasies, Explicit Planning, and Eluding Apprehension). Several scales measure specific *Paraphilias* including voyeurism, exhibitionism, transvestism, (telephone) scatologia, and fetishism.

On the MIDSA, *Sexualization* is considered a heterogeneous domain comprising multiple facets such that deviation can occur in the frequency or intensity of fantasies or behaviors, in the age preference of the partner or victim (e.g., pedophilia), or in the arousal target or preferential arousal behavior (e.g., the paraphilias). Consequently, several scales on the MIDSA address this domain. Three scales in this section focus on the frequency and intensity aspects of Sexualization, including Sexual Compulsivity (reporting being a slave to their sexual urges/being unable to control their sexual urges), Sexual Preoccupation (reporting that they think, daydream, and dream about sex frequently), and Hypersexuality (reporting frequent sexual activity and/or the need to have sex frequently). On the MIDSA, five factor scales that describe an individual's experiences with use of, and attitudes toward, pornography assess Pornography. Among these scales are Early Exposure to Pornography, while three scales are related to the person depicted in the pornographic material (e.g., children, men, and women), and the fourth scale focuses on the amount of violence in the material (Violent Pornography). Responses to each of these scales are standardized against community sample adults.

Other Measures

The Screening Scale for Pedophilic Interests (SSPI) was developed and studied by Seto and Lalumiere (2001). It consists of just four items (male victim, number of victims, victim's age 11 or younger, and unrelated victim). Seto and Lalumiere demonstrated that higher scores on this measure "were significantly related to phallometrically measured responding to stimuli depicting children and identified pedophilic interests among child molesters" (p. 23).

The Sexual Fantasy Questionnaire (SFQ) was designed to measure paraphilic and non-paraphilic fantasies (O'Donohue, Letourneau, and Dowling, 1997). It includes scales measuring bondage, sadism, masochism, rape, child fantasy, and normal hetero/homosexual fantasies. Initial results indicated adequate to good internal consistency and good test–retest reliability. Child molesters were shown to have a higher score on the child fantasy scale relative to college students, indicating some validity for the SFQ.

Self-Report Sexual History Measures

Clarke Sexual History Questionnaire-Revised

The Clarke Sex History Questionnaire-Revised (SHQ-R; Langevin & Paitich, 2003; Paitich, Langevin, Freeman, Mann, & Handy, 1977) "is a comprehensive assessment of an individual's sexual history. It is specifically created to assess male offenders and help evaluate the offender's risk to others and his potential for rehabilitation by determining his specific history of various forms of sexual experiences" (p. #). The SHQ-R consists of 23 scales; it is published by MHS (www.MHS.com), and technical manual and scoring keys are available. An individual responds to 508 questions about that history over 60–90 min; their responses are scored via proprietary software, and report scoring their responses with accompanying narrative is obtained. Key areas measured by the SHQ-R included sexual fantasy, pornography use, fetishism, transvestism, courtship disorders, the nature of sexual outlets, and childhood and adult sexual experiences. With the MHS Scoring Services, respondents complete the SHQ-R questionnaire using item booklets and response sheets. Once completed, the response sheets to MHS for scoring, a report is provided. With the software format, an evaluator can generate reports on their own. Details from the printout allow the examiner to evaluate the truthfulness of the examinee not only for the current evaluation but also in his records and treatment, and to use this to patch "holes" in the history presented in interview or to reinterview with this data.

Psychosexual Life History

The Psychosexual Life History (Nichols & Molinder, 1999) provides another means for an individual to provide information about their criminal sexual history in the context

of a broader set of questions about one's personal history. It is 19 pages in length.

Antisocial History and Orientation (Attitudes, Values, and Traits)

Many sources have identified antisocial attitudes and behavior as one of the primary "paths" or causal factors associated with sexual offending (e.g., Barbaree et al., 2006; Doren, 2005; Roberts et al., 2002), and models of sexual offending also indicate the importance of these characteristics (e.g., Ward & Beech, 2006; this book). Consequently, the assessment of such personality dimensions has particular importance. Antisocial and/or narcissistic, self-interested behavior is often ego-syntonic, and, consequently, persons with such traits and behavioral histories are often unaware of or minimize the presence of such characteristics in themselves. Alternately, they may be well aware of such traits but attempt to present a positive impression, via defensiveness or denial, as a means of manipulating an evaluator's perception of them. As a result, when persons with highly antisocial or psychopathic histories self-report minimal maladaptive personality traits, it can be quite useful to examine their specific responses to the items which compose MDPT that are targeted to identify antisocial, narcissistic, or aggressive behaviors and tendencies, particularly relative to their formal criminal history. Not surprisingly, a significant number of persons with extremely antisocial pasts simply respond "false" to the specific items that, per history via records (including previous testing), are or have been highly characteristic (e.g., mostly or very true).

MMPI-2

In Hanson and Morton-Bourgon's (2004, 2005) recent meta-analysis of predictors of recidivism, measures of antisocial characteristics were among the best predictors of sex offense recidivism. In particular, elevations on scale 4 (Pd; Psychopathic Deviate) on the MMPI-2 were associated with future sexual offending. The Pd scale reflects a range of personality dimensions ranging from constricted social conformity to antisocial, acting out impulses and appears directly related to the tendency to express or inhibit aggressive and/or hostile impulses. It is a characterological scale that intends to assess general social maladjustment, failure to appreciate the interpersonal dimensions of life, complaints about family and authority figures in general, social alienation, and emotional shallowness toward others.

Graham (2006) and Greene (2011) and others have produced interpretive guides for the MMPI and MMPI-2 that include bases for examining both individual elevations on clinical scales and combinations of the two highest clinical scales typically known as "two-point codes" (used for configural or pattern interpretation). Scale 4 (Psychopathic Deviate) on the MMPI-2 was developed to identify persons with antisocial, asocial, or amoral characteristics. Persons included in the original criterion group verse were characterized in their everyday behavior by antisocial behavior; however, of note, no major criminal types were included. All the 50 items in the original scale were maintained in the MMPI-2, so significant compatibility exists with the extensive research on these scales conducted on the original MMPI.

Graham (2006) provides the most clear and concise description of prototypic persons with elevations on individual scale scores and two-point code types, and the following descriptions follow largely from his work. Higher scorers on Scale 4 (particularly those showing a "peak" 4, where their score on the Psychopathic Deviate scale is the single most elevated scale of the ten clinical scales) show characteristics associated with various difficulties in incorporating these values and standards of society and are likely to engage in a variety of a social, antisocial, and even criminal behaviors. Higher scorers on Scale 4 tend to be rebellious toward authority figures and are often in conflict with such authorities. Underachievement in school employment settings and significant relationships are also characteristic of high scores. Higher scorers on the Psychopathic Deviate scale are typically very impulsive persons who strive for immediate gratification of impulses. Such individuals typically do not plan their behavior very well and may act without considering the consequences of their actions. They tend to be very impatient and have a limited frustration tolerance. Their behavior may involve poor judgment and considerable risk-taking. They tend not to profit from experiences, and they find themselves in similar difficulties on repeated occasions. In addition, higher scorers are often described by others as immature and childish. They are often viewed as narcissistic, self-centered, and egocentric. They tend to be insensitive to the needs and feelings of other people and are more interested than others in terms of how such people persons can be used for their own benefit. Often these individuals seem likable, and they create good first impressions. However the relationships tend to be shallow and superficial. They seem to lack the ability to form warm or close attachments with others. Higher scorers on Psychopathic Deviate scales tend to be more extroverted and outgoing and adventurous. However, they tend to lack definite goals, and their behavior may lack clear direction. Higher scorers are likely to be hostile and aggressive. They are resentful, rebellious, antagonistic, and refractory. Their attitudes are characterized by sarcasm, cynicism, and lack of trust, and they often feel that others mistreat them. It has been noted that when persons with higher scores on Scale 4 may appear to show guilt and remorse when their behavior gets them into trouble (e.g.

often at the time of a subsequent evaluation), such responses typically are short lived and disappear; an immediate crisis has passed. Higher scorers tend to receive personality disorder diagnoses of antisocial or passive-aggressive personality disorders occurring most frequently.

As Graham (2006, 2012) notes, among the characteristic descriptors associated with elevated scores on Scale 4 are the following: difficulty incorporating the values and standards of society engaging in antisocial and antisocial behavior, rebellious toward authority figures, problematic relationships with families for which they blame family members, being impulsive and striving for immediate gratification of impulses, not planning their behavior well, act without considering the consequences of their actions, are impatient and have limited frustration tolerance, show poorer judgment and take risks, and not profiting from such experiences. They are also reviewed as narcissistic self, self-centered, selfish and egocentric, or insensitive to the needs and feelings of others, but show interest in others in terms of what they can provide for them. Additionally, they act in aggressive ways, exhibit naysaying guilt and remorse when in trouble, may not be overwhelmed despite stress, and frequently feel empty and bored.

Somewhat similarly, Greene (1999, 2008), both in his books and in his PAR Adult Interpretive System, provided a standard interpretation for persons who produced clinically significant scores on Scale 4 (Psychopathic Deviate):

> He is characterized as angry, belligerent, rebellious, resentful of rules and regulations, and hostile toward authority figures. He is likely to be impulsive, unreliable, egocentric, and irresponsible. He often has little regard for social standards. He often shows poor judgment and seems to have difficulty planning ahead and benefiting from his previous experiences. He makes a good first impression, but long-term relationships tend to be rather superficial and unsatisfying.

One of the more recent meta-analyses of predictors of sexual recidivism found that the median and mean (weighted) values for Scale 4 (Psychopathic Deviate) were among the strongest predictors of repeated sexual offending (Hanson & Morton-Bourgon, 2004). Additionally of note, Davis and Archer (2010) found that the Pd scale was clearly the most frequently elevated scale in the sexual offender samples, although they note that not all offenders produced high Pd scale scores. However, they noted that the Pd scale has shown moderate to large effect sizes when distinguishing between sex offender and nonsex offender groups. To be clear, while elevations on the Pd scale are common among many sexual offenders, such elevations do not necessarily distinguish sexual offender from other criminal offenders. Relative to the Harris–Lingoes subscales for Pd, McCreary (1975) concluded that rapists endorsed more items on the Social Alienation and Authority Problems subscales, while child molesters typically endorsed more items associated with Self-Alienation and Familial Discord in early childhood.

In addition to a peak score on Scale 4, there are several two-point codes that can occur more frequently among sexual offenders although as noted there is no "sex offender profile." The first of the more common profiles is the 34/43 profile. Per Graham (2006, 2011), the most salient characteristic of persons whose scores result in a 34/43 profile is chronic intense anger. Such persons harbor hostile and aggressive impulses and have difficulties expressing their negative feelings appropriately. When the score on Scale 3 (Hysteria) is elevated more than the score on Scale 4, persons are more likely to act in an overcontrolled manner most of the time but also display brief, intense episodes of aggressive acting out. Such persons are typically immature, egocentric, and characterized by chronic problems that are difficult to change. In contrast, when the score on Scale 4 is elevated relative to Scale 3, such persons are more likely to be characterized by poorly controlled anger and irritability that tend to be of a repetitive and cyclic manner. They may be quiet, even withdrawn, but manifest sudden outbursts. They show poor judgment under stress, and their emotional or violent outbursts may be only marginally related to identifiable external stress or provocation. Of note, individuals with the 34/43 code type typically lack insight into the origins and consequences of their behavior and more commonly blame others for their difficulties. They often do not see their own behavior as problematic. In addition, overall, such persons tend to reflect a combination of attention-seeking and rejection sensitivity of persons. That is, they are needy for recognition and affection from others and frequently demand attention and approval from others; however, at the same time, they remain cynical and suspicious of others sensitivity to rejection. They may manifest a socially conforming appearance but inwardly they are often seen as quite rebellious. This profile is often associated with several personality disorder diagnoses, including antisocial, histrionic, and borderline personality disorders.

A profile found among sexual offenders involves elevations on Scale 4 and Scale 6 (Paranoia). Again, per Graham (2006, 2011), persons with the 46/64 code type are likely to be immature, narcissistic, and self-indulgent. Typically they are passive-dependent individuals who put demands on others for attention and sympathy but, conversely, are resentful of even mild demands made on them by others. They tend to have difficulty getting along with others and are uncomfortable around members of the opposite sex. They are suspicious of the motivations of others; their apparent feeling is that they are getting a "raw deal" from life and act to avoid deeper emotional involvement. Again, individuals with the 46/64 code type also tend to deny their own serious psychological problems; rather they rationalize and transfer blame to others. They can be unrealistic and even grandiose in their self-appraisals. Persons with a 47/74 for profile typically alternate between periods of gross insensitivity to the consequences of their actions and then apparent excessive

concern about the effects of the behavior in others. Consequently episodes of acting out, including sexual acting out, may be followed by more temporary expressions of guilt and self-condemnation. However, the remorse typically does not carry forward over time to inhibit future episodes of acting out. Generally persons with the 47/74 profiles are relatively dependent, insecure persons who require significant reassurance of their self-worth.

Another profile found among sexual offenders involves elevations on Scale 4 and Scale 8 (Schizophrenia). Graham (2006, 2011) pointed out that, generally, individuals with the 48/84 code type do not seem to fit into their environments and are seen by others as either odd, peculiar, or unusual. They are also typically non-conforming and resentful of authority; their behavior tends to be erratic and unpredictable, and they may have marked problems with the impulse control. Generally, they tend to be angry, irritable, and resentful and as a consequence may act out in asocial or antisocial ways; they also are likely to not appear to profit from their mistakes. Persons with the 48/84 code type are often viewed as harboring deep feelings of insecurity in conjunction with exaggerated needs for attention and affection. Such individuals typically harbor deep feelings of insecurity and tend to manipulate others to satisfy their needs. They lack basic social skills and tend to be socially anxious, withdrawn, and/or isolated. They see the world as a threatening place, they are quite distrustful of other people, and they avoid close personal relationships. There is a greater tendency to have questions about their sexual identity, to obsess about sexual matters, and to experience anxiety about sexual adequacy. Per Graham (2006), they may "indulge in excessive fantasy and/or antisocial sexual acts in an attempt other cope with these feelings of inadequacy" (p. 106). This code type has been noted to be more common among rapists (Graham, 2006).

A particularly common profile found among sexual offenders involves relative elevations on Scale 4 and Scale 9 (Mania). Generally, persons with the 49/94 code type are likely to be particularly narcissistic, selfish, and self-indulgent; the higher the scale elevation(s), the more apparent they are characterized by a marked disregard for social standards. Such persons tend be quite impulsive and are particularly unable to delay gratification of their impulses. Typically, they show poor judgment, often acting without considering the consequences of their acts. They also fail to learn from their own experiences. In addition, they are likely to be unwilling to accept responsibility for their own behavior. Thus, they tend to rationalize their own shortcomings and failures and blame their problems on others. They usually manifest a low frustration tolerance for stress, particularly frustration of their "wants," and manifest considerable or regular irritability or harbor intense feelings of anger and hostility. Such persons may also be energetic and tend to seek out emotional stimulation and excitement. They tend to be uninhibited and extroverted in social situations but have superficial relationships, keeping others at a distance. A diagnosis of antisocial personality disorder is often associated with a 4/9/94 code type.

Another common presentation on the MMPI-2 by sex offenders involves a primary elevation on Scale 3 (Hysteria). All of the 60 items in the original version of Scale 3 were retained in the MMPI-2. Elevations on the Hysteria scale can identify two types of persons (e.g., Graham, 2006, 2011). First, persons who respond to stress with some involuntary psychogenic loss or disorder of function may produce higher scores; such persons do not typically commit sexual offenses. However another group of individuals with elevated score on Scale 3 are persons characterized by a general denial of psychological or emotional problems or of discomfort in social situations. A particularly salient feature of the day-to-day functioning of persons who score highly on the Hysteria scale tends to be a marked lack of insight concerning the possible causes of their difficulties and little insight concerning their own motivation and feelings. High scorers on Scale 3 are typically described as immature psychologically, at times even childish or infantile. Such persons are often quite self-centered, narcissistic, and egocentric; they expect a great deal of attention and affection from others. They may use more indirect and devious means to get the attention and affection they appear to crave. However, when others do not respond appropriately, such individuals will experience anger and resentment but deny such negative affect or not express those feelings openly or directly.

MMPI-RC

As noted, recently, items on the MMPI-2 were studied for the development of restructured clinical (RC) scales (Tellegen et al., 2003). These scales were found to have improved validity. The number of items on the RC antisocial scale is 22 compared to the 50 on Scale 4 of the MMPI-2; only 9 items overlap between the two (i.e., 33 %), and there are 13 items on the RC scale that are not on Scale 4. The correlation between the Psychopathic Deviate scales and the RC antisocial scale ranges from .55 to .64. (e.g., Greene, 2011, p. 348). Per the manual, high scores on the antisocial scale are associated with individuals who are likely to engage in various antisocial behaviors, tend to behave aggressively toward others, and are viewed as being antagonistic, angry, and argumentative. They may engage in antisocial acts such as lying or cheating. High scorers find it difficult to conform to societal norms and expectations and may, as a result, experience legal difficulties. They are at increased risk for engaging in substance abuse and sexual acting out. They are likely to have conflictual family relationships and histories of poor achievement (p. 56).

Greene (2011) reviewed studies of the RC 4 scale and found that there were statistically significant correlations with criminal history, juvenile delinquency, antisocial behavior, and impulsivity. Of note, correlations with elevated scores on RC 4 scale and Disconstraint (DSIC) scale and with a lack of Social Responsibility (Re scale) were particular high (i.e., .64–.78 and –.72, respectively). However, as noted previously, given the greater transparency or face validity of the RC 4 items, there can be an increased likelihood of dissimulation on the part of an offender.

MCMI-III

Regarding antisocial traits and predispositions, several MCMI-III scales have significance. Scale 6A (Antisocial) shows elevations when offenders have reported behavioral problems in school, having been in trouble with the law, and doing what they want without worrying about what others might think of them. Further, punishment never stops them from doing something they want to do. They are good at making up excuses when they get into trouble. They are generally responsible and impulsive. Of note, for the MCMI-III antisocial scale, there is good evidence of reliability and convergent validity with Scale 4 of the MMPI-2 as well as the results of structured and semi-structured diagnostic interviews (Craig, 2006). Scale 5 (Narcissistic) shows elevations when persons endorse themselves as special or superior individuals who deserved special attention from other people. They do not blame others who take advantage of others who "allow" that to take place. They indicate awareness that persons who know them (e.g., their families) perceive them as selfish and only think of themselves. Finally, Scale 6B (Sadistic/Aggressive) evidences elevations when individuals indicate that they get personal pleasure and satisfaction in ways that humiliate others. They report that they are critical of others who annoy them and are rough or mean to others to "keep them in line." Such persons indicate that they often say cruel things about others just to bring them unhappiness and report that they think it is important to control others. On Scale 4 (Histrionic), elevations result when persons indicate that they see themselves as particularly sociable, outgoing, and looking to make friends. They recognize that they are constantly looking for signs of acceptance and approval from others.

PAI

On the PAI, an obvious scale of potential interest is the Antisocial Features scale (ANT) "designed to assess personality and behavioral features relevant to the construct of antisocial personality and psychopathy" (Morey, 1991, p. 18). The description associated with a significantly elevated score on the ANT scales is as follows: "Individuals have a history of difficulties with persons in positions of authority and have trouble following social conventions. They have a callous attitude toward and lack empathy for other people. They feel little responsibility for the welfare of others and have little loyalty to their acquaintances. They have a willingness to take risk and a desire for novelty. Their behavior is potentially dangerous to themselves and others around them" (Weiner & Greene, 2008). Per the PAI manual, persons with significantly elevated scales are viewed as impulsive, hostile, having a history of antisocial acts, exploitative in relationship, unreliable, and irresponsible. Persons with markedly elevated scores are viewed as likely characterized by prominent features of antisocial personality disorder. Morey (2007) has reported that the ANT scale demonstrated its largest correlations with MMPI scales measuring antisocial personality as well as with measures of psychopathy.

Three subscales were developed to measure distinct facets of antisocial features: Antisocial Behaviors, Egocentricity, and Stimulus-Seeking. Antisocial Behaviors addresses a history of conduct problems, antisocial acts, and criminality. Egocentricity (ANT-E) measures self-centered, exploitative, callous, and remorseless behavior; elevations indicate little responsibility or loyalty toward others or concern about roles as spouse, parent, or employee. Effectively, "ordinary" narcissism is the target of this subscale. Stimulus-Seeking (ANT-S) is directed at a tendency to seek thrills and excitement and low boredom tolerance as manifested by reckless and potentially dangerous behavior. The PAI also includes an Aggression scale (AGG) that "provides an assessment of attitudinal and behavioral features relevant to aggression, anger, and hostility." Subscales tape aggressive attitudes (easily angered, difficult controlling anger, perceived hostility) and both verbal and physical aggression. Salekin, Rogers, and Sewell (1997) found that PAI had poor to mode predictive validity. Walters, Diamond, Magaletta, Geyer, and Duncan (2007) reported that the PAI ANT scale is best viewed as a dimensional or severity measure, identifying the degree of self-reported antisociality and not distinguishing categorical classification of persons as antisocial or not.

As noted, a significant issue with the PAI is that the items are face valid and transparent. Consequently, it is not uncommon to find persons with highly antisocial histories per records, and interview data endorse average or low levels of traits on one or more of these scales, presumably in an attempt to provide a positive impression. Regardless of the validity scale scores, low levels of self-reported antisociality on the PAI cannot negate the reality of repeated and/or severe historical manifestations of antisocial behavior and attitudes. Consequently, it does not seem surprising that in a sample of 1,400 higher-risk sexual offenders, the self-reported antisocial and aggression scales were not predictive

of sexual offense recidivism as measured by arrests during a follow-up period (e.g., Boccaccini, Murrie, Hawes, Johnson, & Simpler, 2010).

The MSI II

Antisocial personality disorder and/or its traits can be diagnosed using the MSI II Antisocial Personality Disorder scale because the scale was developed based on the DSM-III criteria. The Antisocial Behavior (AB) scale of 50 items represents a sum of two 25-item scales: a Conduct Disorder Index and a Sociopathy Index (including Exploitive and Aggressive Behaviors, Stealing Behavior, Financial Irresponsibility, Arrests, and Detentions). Stinson and Becker (2008) compared the MSI II Antisocial Behavior (AB) scale with the PCL-R (Factor 2) and the MCMI Antisocial scale. They demonstrated that the MSI II AB scale correlated significantly with both the MCMI Antisocial scale and Factor 2 of the PCL-R. They also found that the MSI II AB achieved the highest correlation (.92) of the three when measured against known external criteria for antisocial behavior.

The MIDSA

The MIDSA provides scales regarding Juvenile Antisocial (Juvenile Drugs/Alcohol, Juvenile Delinquency, Juvenile Assault), Adult Antisocial (Alcohol and Drug Abuse, Conduct Disorder, Fighting and Assaultive Behavior), Psychopathy and Hypermasculinity (Lack of Perspective Taking, Lack of Empathy, Conning and Superficial Charm, Impulsivity, Negative Masculinity, and Hostility Toward Women), and Pervasive Anger scales (Constantly Angry, Physical Fighting, Cruelty to Animals, and Fantasies of Hurting People). Thus, there are a number of MIDSA scales and subscales that relate to antisocial and/or psychopathic traits or conditions. Most importantly, the MIDSA includes six scales that assess various components of psychopathy and negative masculinity, which the authors argue are correlated domains related to increased probability of sexually coercive behavior against women and age-appropriate females. Two scales relate to *Emotional Detachment*; *Lack of Empathy* involves reporting a lack of feelings or concern for the misfortunes of others, while a *Lack of Perspective Taking* involves reporting difficulty seeing another's perspective and considering both sides of an issue. Another scale *Conning and Superficial Charm* involves admitting to conning others, taking advantage of others, manipulating others by lying, and charming others into doing what one wants. An *Impulsivity* scale allows respondents to report acting on impulse, losing control, and moodiness. Finally, *Negative Masculinity/Toughness* provides the opportunity for persons to endorse attitudes of toughness and "masculine honor defending," while *Hostility Toward Women* regards reporting negative attitudes toward women and endorsement of cognitive distortions about rape.

PCL-R

As noted, the PCL-R is viewed by many researchers and professionals as representing the "gold standard" measure of a propensity for future criminal and violent behavior. Beyond simply the largely behavioral criteria of ASPD, this measure of psychopathic traits also includes measures of various maladaptive personality traits such as need for stimulation, conning/manipulative, lack of remorse/guilt, callous/lack of empathy, shallow affect, and heightened sense of self-worth. The PCL-R has an "asymmetric relationship" with ASPD; "the majority of offenders with high PCL-R scores meet the diagnostic criteria for APD [ASPD], whereas the reverse is not true" (Book et al., 2006, p. 161). Thus, higher scores on the PCL-R identify a subgroup within the criminal population (for which there is substantial evidence relative to risk for various forms of future criminal and violent behavior, including sexual offending). In addition, the PCL-R, as a dimensional measure, provides a range of scores for individuals, while a DSM-IV/DSM-5 diagnosis is a categorical determination (e.g., a person has demonstrated three or more specified behaviors along with evidence of early onset antisocial behaviors). However, when ASPD is scored dimensionally (or prototypically), it is highly and more strongly correlated with ratings on the PCL-R, particularly Factor 2 (Hare, 2003a, 2003b). In short, a higher PCL-R rating indicates the presence of greater antisociality and likely a particular form of antisociality. Both the Structured Risk Assessment: Forensic Version (SRA: FV; Thornton & Knight, 2014) and Violence Risk Appraisal Guide-Revised (Rice, Harris, & Lang, 2013) utilize one or more facets of the PCL-R as proxies for antisocial aspects of a person's history.

Relational Style, Social Functioning, and Socioaffective Issues

A consistent element of theories of sexual offending is that a significant subgroup of sexual offenders are compromised in their ability to develop and maintain healthy interpersonal relationships that provide support, validation, and opportunities for intimacy. Sometimes this appears to be a function of disinterest or inability in interacting with age-appropriate peers, both emotionally and sexually, and sexual offenders who are characterized by emotional distance or even detachment in their social relationships. A more extreme form of

this aspect of personality relates to persons who are callous, who lack the capacity for empathy with others, and whose social behavior is not affected by feelings of guilt or distress at harming others. In other instances, individuals appear to manifest significant anxiety about interacting with age-appropriate sexual partners and, as a result, have great difficulty initiating or maintaining appropriate intimate peer relationships, socially and/or sexually. Finally, another group of sexual offenders appear to have interest but lack the skills to maintain stable relationships due to issues in regulating their negative affect and relationship expectations, leading to frequent interpersonal conflict and relationship terminations or breakups.

MMPI-2

On the MMPI-2, Scale 0 (Social Introversion) was designed to assess an individual's tendency to withdraw from or approach social interactions. All but one of the 70 items in the original scale are maintained in the updated MMPI-2 version of the scale. As with Scales 3 and 4, persons with elevated scores on Social Introversion are of particular note relative to propensity and risk for sexual offending. High scorers tend to be persons who are very insecure and uncomfortable in social situations. They tend to be shy, reserved, timid, and retiring such persons may feel more comfortable either when alone or with a smaller group of known individuals, and they do not participate in many social activities. In particular, they may display particular discomfort around members of the opposite sex. High scorers tend to lack self-confidence, may be hard to get to know, and can be described by others as cold and distant. Thus, the common descriptors for persons who score high on scale 0 are socially introverted; very insecure and uncomfortable in social situations; tend to be shy, reserved, and committed retiring; feel more comfortable alone or with a few close friends; do not participate in many social activities; may be quite over control to not likely display feelings openly or could be described as others is cold and distant; are likely to be troubled by their lack of involvement with other people; and issue particular discomfort around members of the opposite sex.

MCMI-III

Results on the MCMI-III can provide significant information about the nature of an individual's self-reported social functioning. Persons elevated on the borderline scale tend to manifest emotional instability that is characteristically manifest in the interpersonal relationships, with intense ups and downs in those relationships. Elevations on the Schizoid scale identify persons who tend to be socially detached, prefer solitary activities, seem aloof, apathetic, and appear distant from others with difficulties in forming and maintaining relationships. Thus, schizoid traits identify persons who are unable to or uninterested in emotionally connecting with other persons. Persons elevated on the Schizotypal scale appear even more extreme in this direction: individuals seem "spacey," self-absorbed, eccentric, cognitively confused, as well as being socially indifferent. A more common presentation is persons who are elevated on the Avoidant scale; such individuals tend to be particularly socially anxious due to perceived expectations of rejection by others and fearful. Persons elevated on the dependent scales tended to be individuals that are passive, submissive, and feel inadequate; they generally lack autonomy and initiative. Individuals who show elevations on the passive-aggressive (negativistic) scales are likely to be persons who are disgruntled, argumentative, petulant, and negativistic; they keep others on edge.

PAI

Several scales on the PAI speak to aspects of problematic social relations, in particular, elevations on subscales of the borderline scales (BOR), particularly those for subscales measuring affective instability and negative relationships. In the former, the descriptors for elevated scores are "Individuals are highly responsive emotionally, manifesting rapid and extreme mood swings. Their affective instability involves a propensity to become rapidly anxious, angry, depressed, or irritable." On the latter subscale, "Individuals repeatedly become involved in relationships that are very intense and chaotic. When their expectations are not met in relationship, they feel betrayed and exploited." In addition, the PAI's Non-Support scale "provides a measure of perceived lack of social support, tapping both the availability and quality of the respondent's social relationships." The PAI Dom (Dominance) scale measures the extent to which a person is controlling, submissive, or autonomous in interpersonal relationships"; thus, both high (controlling) and low (submissive) scores are of potential interest in evaluating sexual offenders. Finally, the PAI Warmth scale "provides a measure of the extent to which a person is empathic, engaging or rejecting, and mistrustful in interpersonal relationships." Low scores are indicative of someone who has little interest or investment in social interactions or is distant in such relationships.

MIDSA

On the MIDSA, there are several scales that assess the presence of intimacy, attitudes about masculinity, sexual adequacy, and anxiety related to females and issues with

historical caretakers. On the MIDSA, Relationships with Important Caregivers was measured via two scales. *Acceptance-Neglect* is a scale of items that describe ways in which the caregiver expressed love and acceptance to the person. Conversely, Emotional Abuse consists of 11 items, most of which describe the frequency that the caregiver engaged in verbal abuse. The capacity or existence of intimacy is assessed via two scales. One, *Friendship Intimacy* involves reporting whether relationships with important friends included behavioral and emotional support (if the individual has reported that they had such friends). The other scale, *Romantic Intimacy* with females, involves reporting that their relationship was emotionally and behaviorally supportive if the individual had reported a relationship that had lasted more than three months and in which he felt close to the girl or woman. On the MIDSA, there are several scales related to Masculine and Sexual Inadequacy scales. The *Masculine Adequacy* scale consists of items relating to being manly and good in fights and in sex. The *Anxiety with Women* scale consists of items relating to feeling anxious, nervous, inadequate, and guilty around women and sex. *Sexual Performance Anxiety* scale consists of items that measure a man's anxiety about their penis and their sexual performance. Finally, the *Erectile Dysfunction* scale consists of items regarding difficulties with erection and ejaculation.

Distorted Cognitions and Attitudes Related to Sexual Offending

Historically, several lines of thinking have identified the possibility that sexual offending may be related to a variety of "distorted" or "dysfunctional" beliefs or attitudes. These have been referred to as "cognitive distortions" or "offense-supportive attitudes." Both Ellis (1957) and Beck (1970) postulated that distorted thinking was a central factor in the development and maintenance of depression. Later, Abel et al. (1988) also applied the term "cognitive distortions" to refer to seemingly unusual beliefs regarding atypical or deviant sexual behavior, initially among child molesters (e.g., justifications, perceptions, and judgments used to rationalize sexual offending behavior). Subsequently, the range and conceptualization of such distorted attitudes and beliefs among sexual offenders have expanded substantially. In 2011, Schlank wrote: "Cognitive distortions often used by sexual offenders include learned assumptions, self-statements, and attitudes that facilitate the offender's minimization, justification and denial of his sexual offenses" (pp. 20–21). She noted that such conditions allowed sexual offenders to continue their sexual offending without experiencing feelings of guilt, anxiety, and shame. The study of cognitive distortions more generally in psychology has led to the conceptualization of schemas as a structured or organized patterns of thinking involving preconceived ideas about oneself and situations that strongly influence the processing and interpretation of information derived from experience. "Schema" is viewed as rooted in both an individual's culture and their own specific experiences. Prominent among schema is the notion of a "self-schema," related to a belief system about oneself and "event schemas" involving belief system about general and specific situations. By virtue of their structure, schemas are seen as both influencing a person's attention and of being resistant to contradictory information; to the degree that schemas are incorrect or maladaptive, they lead to misperceptions and misinterpretations of experience. Ward (2000) suggested that offense-supportive statements by sexual offenders were the products of schemas or as Ward termed them "implicit theories." Gannon (2009) has suggested the importance of the "external" world's role in supporting sexual offender's misperceptions and maladaptive beliefs and attitudes.

During this same period, investigators like Hanson and Thornton (e.g., Hanson et al., 2007; Knight & Thornton, 2007) have identified offense-supportive attitudes as beliefs that justify or excuse sexual offending in general. It was noted that such attitudes showed a small but statistically significant relationship with sex offense recidivism in the most recent meta-analysis (e.g., Hanson & Morton-Bourgon, 2004). More recently, Helmus, Hanson, Babchishin, and Mann (2013) studied 46 samples involving approximately 14,000 persons and found a "small, but reasonably consistent relationship with sexual recidivism," more so for child molesters than for rapists. They concluded that attitudes supportive of sexual offending are PMRF for sexual reoffending. However, as Mann et al. (2010) and Thornton and Knight (2014) have suggested, while this dimension appears to be a propensity, there are clear problems with identifying and measuring such attitudes, particularly in adversarial settings, including supervised release (e.g., Hanson et al., 2007). Offense-supportive attitudes are typically measured with self-report measures; limitations of such methodology are their susceptibility to impression management due to their obvious transparency and the inclusion of items expressing "post hoc" justifications as opposed to actual attitude statements. Consequently, offenders in a forensic, adversarial, or mandated context may not endorse the presence of such attitudes because of implications for their potential disposition. Unfortunately, there is little evidence "that evaluators are able to distinguish between feigned and sincere remorse, particularly in adversarial settings" (Mann et al., 2010, p. 200). Consequently, if such attitudes are endorsed, they most likely represent "true positive" reports on the part of examinee; however, if the individual does not endorse such attitudes, it cannot be concluded that particular maladaptive attitudes are not present.

Self-report obtained by the MMPI-2, MMPI-2RF, MCMI-III, and PAI can provide potentially useful information regarding various attitudes and beliefs that may be related to sexual offending; consequently, these tests of general personality predispositions can be extremely relevant to this domain, even though these tests were not specifically developed to provide "sexual offense"-specific information.

MSI/MSI II/MIDSA

Both the MSI II and the MIDSA provide a means of measuring such cognitions and attitudes.

The MSI II Justifications scale is a measure of the degree and manner in which sexual offenders explain their sexual offending to others. On the MIDSA, the *Child Molester Cognitive Distortions* scale consists of items that endorse attitudes conducive to or supporting sexual behavior with children, including the items that focus on the theme that children are sexual beings and sex with them is like sex with adults and other items that downplay the possibility of any harm to the child. Further, the MIDSA contains a number of scales that speak to distorted attitudes generally and/or related to antisociality and, more specifically, deviant sexuality (e.g., Hostility Toward Women, Negative Masculinity, Molester Cognitive Distortions).

The Accountability scales of the original MSI provide several measures of attitudes that may support sexual offending. The Cognitive Distortions and Immaturity scale measures the extent to which an offender adopts a victim stance in relationship to his present offense and measures levels of accountability accepted for offending behaviors. The Justifications scale taps various potential justifications sexual offenders may use to explain their offenses.

The MSI II also provides a number of scales that serve to provide measures of criminogenic attitudes generally and most specifically regarding past criminal sexual behavior. The Denial (Dn) scale assesses an offender's use of excuses for having engaged in sexual contact with someone who has accused him of sexual impropriety, such as being mixed up, under the influence of alcohol, etc. The Justifications scale identifies a client's lack of ability to take responsibility for his sexual behavior by placing blame onto others and on circumstances beyond his control, such as that his sexual offense occurred because he had too much alcohol or drugs.

Sets of measures used in the MSI II are designed to assess cognitions and attitudes associated with sexual deviance. Based on an empirical scaling procedure, if an offender obtains a score like the group with the known attribute (e.g., child molesters or rapists), it is more likely that the offender will evidence distorted cognitions (thinking errors) and sexual attitudes similar to the criterion sample. Two criterion-oriented scales are reported by the MSI II. The *Molester Comparison scale* is an empirically scaled measure using demographically comparable, but distinctly different samples involving admitting adult male sexual offenders who manipulate, rather than force their victims (criterion group sample) and normal adult males (control group sample). The *Rapist Comparison scale* is also an empirically based measure using demographically comparable but distinctly different samples of admitting adult male sexual offenders who primarily used force during a sexual assault. An offender's score is compared to both the criterion-related and normal group samples, and the results report the degree to which he scored as similar to the criterion group(s). Thus, the interpretation of the self-report of the particular offender is identified by the degree to which the results suggest a level of commonality in thinking and behavior between the client and the reference group of adult male sexual offenders (e.g., not similar, somewhat, moderately, or highly similar).

Other Measures

In addition, the Abel–Becker Cognition scale (ABCS; Abel et al., 1989) was developed to measure distorted attitudes regarding sexual behavior between an adult and child. The ABCS is a questionnaire that asks an individual to indicate his relative agreement on a 5-point scale (from strongly agree to strongly disagree, including neutral) with beliefs about the appropriateness of adult sexual contact with youth. The ABCS includes what might be considered to be rationalizations, justifications, and cognitive distortions used by child molesters to justify their child molestation behavior. The ABCS is a very transparent instrument, with responses denying the appropriateness of sexual contact between adults and youth strongly associated with social desirability. Consequently, any positive response to the items on the ABCS is significant because of the high face validity.

Similarly, the Burt Rape Myths scale was designed to assess cognitions related to rape victims (Burt, 1980). However, beyond the transparency of these scales, Schlank (2011) pointed out other methodological weaknesses (e.g., the Likert scale response option of each scale allowed for a person to assume a "neutral" position on items). Bumby (1996a, 1996b) developed two scales for MOLEST and RAPE on a small "in treatment" sample, which were viewed as less transparent and more free from "social desirability"; they also utilized a Likert scale that eliminated a possible neutral response. Per Schlank 91 % of high-risk sexual offenders endorsed a higher percentage of cognitive distortions on the Bumby scales relative to the Abel–Becker and Burt scales, suggesting that the Bumby scales might be more useful (relative to other such scales) in identifying such need areas and for treatment purposes. However, Arkowitz and Vess (2003), with a similar group of offenders, found that

rapists and child molesters in their sample endorsed markedly fewer cognitive distortions than the sexual offenders in Bumby's original study (Bumby, 1996a, 1996b). They suggested that current self-report measures such as the MOLEST and RAPE scales are too susceptible to a socially desirable response set to provide useful data with high-risk sexual offenders (e.g., those who were involuntarily committed for treatment). Pervan and Hunter (2007) also found issues with the MOLEST and RAPE scales, particularly the latter. They also noted that offenders reporting "higher" self-esteem selected more pro-social or socially desirable attributes than those who endorsed lower self-esteem.

Pemberton and Wakeling (2009) investigated a particular domain of distorted attitudes among sexual offenders, namely, sexual entitlement. In their review of extant research and in their own study, they found evidence for four forms of sexual entitlement: (1) "I can offend because women/children are my possession/property"; (2) "I can offend because it's my right as a husband/partner/ father"; (3) "I can offend because it is my birthright as a man"; and (4) "I can offend because only I matter." In addition, their analyses identified two additional common forms of sexual entitlement: (5) "I can offend because the victim owes me" and (6) "I can offend because I have the power." They noted that the third and fourth form of sexual entitlement were more common among rapists, while the other four were found among both rapists and extra- and intrafamilial child molesters.

Self-Management

Self-regulation has been said to refer to a person's ability to formulate and enact goal-directed behavior without immediate external control or to take responsibility and control one's own thoughts, feelings, and actions. A number of personality issues have been viewed as related to self-regulation, including (1) relative impulsivity and/or recklessness, (2) rapid and intense anger, (3) noncompliance with general social mores or more specifically social regulations that apply to a particular individual (e.g., noncompliance with supervision, the demands of schools, or other social programs), (4) dysfunctional or maladaptive coping, and (5) substance abuse.

Aspects of impulsivity are measured by several of the MDPT. As noted earlier, persons who score relatively high on Scale 4 of the MMPI-2 (e.g., the Psychopathic Deviate scale) are typically very impulsive persons who strive for immediate gratification of impulses, do not plan their behavior very well, act without considering the consequences of their actions, tend to be very impatient, and have a limited frustration tolerance. Their behavior may involve poor judgment and considerable risk-taking, they tend not to profit from experiences, and they find themselves in similar difficulties on repeated occasions. Similar attributes are associated with elevations the RC 4 (antisocial scale) of the MMPI-RF. Further, on the MMPI-2, an elevated score on the PSY-5 scale DISC (for Disconstraint) is associated with high risk-taking and impulsive behavior. Such individuals appear to "be less bound by moral restraints than other people and show callous disregard for others."

On the MCMI-III, elevations on any of the three scales [and more specifically, the Grossman Facet scale (GFS) scores within each of those scales] are associated with heightened impulsivity including the antisocial (GFS: Expressively Impulsive and Acting-Out Mechanism), sadistic (GFS: Temperamentally Hostile, Eruptive Organization), and borderline scale (GFS: Temperamentally Labile).

As indicated, issues with alcohol and drugs are often considered to fall under the risk domain of self-regulation. In addition, studies of both Scale 4 of the MMPI-2 and RC 4 of the MMPI-RF show a particularly strong relationship between elevated scores on RC 4 and both alcohol and drug abuse history (Greene, 20011). In addition, elevated scores on the MacAndrews Alcoholism Scale-Revised (also associated with extraversion and thrill-seeking), the Addiction Potential scale and the Addiction Admission scale (AAS) can all indicate substance abuse and related issues. The MCMI-III includes straightforward scales for persons to endorse drug or alcohol problems. The PAI also includes scales that provide measures of alcohol problems (ALC) and drug problems (DRG). Both provide an index based on the offender's self-report of behaviors, and consequences relate to the use, abuse, and dependence of alcohol and drugs, respectively. Higher scores are associated with abuse and dependence, respectively. Morey and Hopwood (2006) have reported that in true clinical samples, these scales are able to differentiate patients with problems with substance abuse from those without such problems. However, the authors note: "Because the items for ALC and DRG inquire directly about substance use, the scales are susceptible to denial" (p. 102). Unfortunately, most available measures of alcohol or drug abuse are quite transparent; further, they may not capture the propensity to use alcohol or drugs in persons who have been in institutional settings for extended periods of time or who deny or are defensive about their inclination to consume alcohol or drugs.

Relative to self-management, the MIDSA includes four *Pervasive Anger* scales that assess "constant" anger (instances of anger and failure to control one's temper including grouchiness, frequent anger, and temper tantrums), fighting (instances of physically assaultive behavior against both males and females as an adult), aggression toward animals, and nonsexual aggressive fantasies (having fantasies of hurting other people or seeing them hurt).

Diagnoses or Mental Disorders

Several studies have demonstrated that a considerable number of sexual offenders are characterized by elevated rates of psychiatric disorders and other psychopathological conditions (e.g., Kafka & Hennen, 2002; Marsh et al., 2010; Raymond et al., 1999). Långström, Sjöstedt, and Grann (2004) examined psychiatric disorders among a nationwide, representative cohort of sexual offenders. They found that alcohol use disorder was the most frequent diagnosis, followed by drug use disorder, personality disorder, and psychosis; each of these conditions was associated with increased risk for sexual offense recidivism. They noted that their diagnoses were based on only those sexual offenders who had been admitted to psychiatric hospitals as inpatients likely leading to a significant underestimation of the true prevalence of psychiatric disorders in general. More recently, Marshall (2007) has reviewed the extant literature on primary and comorbid mental health conditions among sexual offenders. Among the reports in the literature, the following rates of such conditions were identified, depending on sample and setting: mood disorders (5–95 %), anxiety disorders (3–39 %), ADHD (36 %), substance-related disorders (8–60 %), antisocial personality disorder (35–40 %), and any personality disorder (33–52 %). In addition, Marshall noted the "general inadequacy of DSM to fully cover all those people who seek and need clinical treatment… It often forces clinicians to use the 'not-otherwise-specified' (NOS) category for various types of problems. As it turns, the NSO category is the most common diagnosis appearing in general clinical practice…" (p. 20).

Clearly, each of the MDPT has the potential to offer considerable, reliable, and valid information that can be utilized in ascertaining diagnoses for sexual offenders. As would be expected, each of the broadband test manuals indicates that a diagnosis should never be made directly or exclusively from the finding of any psychological test. That is, the results of psychological testing should be considered as one source of information that supports, does not support, or is equivocal/silent about the degree to which a diagnosis may characterize a sexual offender at the current time and context; again, the most compelling conclusions about current diagnoses are those which rely on and integrate as many sources of information as possible. It is also of particular note that Rogers (2003) has emphasized that a common error among MHPs is the misinterpretation of the so-called Within Normal Limits (WNL) results on tests like the MMPI-2 when they erroneously conclude that the lack of clinical elevations reflects an absence of psychopathology. Rather, as Rogers emphasizes: "The 'WNL' is often found in chronic populations and cannot be interpreted as a 'healthy' profile. The 'WNL' profile is the most common patient profile, occurring in approximately 30 % of referrals" (p. 318, emphasis in original).

Regarding a past history of childhood psychiatric disorders, on the MIDSA, symptoms associated with attention-deficit/hyperactive disorder (ADHD) and oppositional defiant disorder (ODD) during childhood are measured via several scales: *Attention Deficit* (being careless, distractible, and disorganized before the age of 12 years), *Inhibition Difficulties* (indicating that they found it difficult to inhibit verbal and motoric behaviors as children), and *Oppositional Behavior* (reporting that they tended to be hateful, angry, and argumentative and that they often refused to obey rules when they were children).

The determination of the presence of personality disorders can often be supported by the findings of the results of computerized interpretations of the MDPT as well from the analysis and descriptions of the various interpretive books for the MDPT. For sexual offenders, the Pearson and PAR interpretations of the MMPI-2 and the MCMI-III as well as the PAR interpretation of the PAI are often, but not always, sources of identified personality disorders as likely or to rule out diagnoses. The interpretations of the MCMI-III, based on its scoring method, can potentially identify the degree to which maladaptive personality features and traits, as well as "full" personality disorders, characterize an individual (within a larger contextual perspective). More so than the Pearson interpretations, the PAR interpretations of the MMPI-2 and the MCM-III provide more clear statements of the likely presence of personality disorders.

In addition, there are also several additional self-report questionnaires that can also be sources of information about the degree to which a sexual offender views himself as characterized by maladaptive personality traits. The Personality Diagnostic Questionnaire (PDQ-4+; Hyler, 1994, 2008) consists of 99 true–false items, each of which corresponds to the specific personality traits enumerated by DSM-IV. Similarly, the Structured Clinical Interview for DSM-IV-Axis II Questionnaire (SCID-II-Q; Spitzer et al. 1990a, 1990b) is composed of one item per diagnostic criterion. However, the SCID-II-Q, the questions regarding antisocial personality disorder, only includes the items on conduct disorder based on the apparent assumption that individuals are less likely to acknowledge adult antisocial behavior. Consequently, the PDQ-4+ by virtue of including items regarding adult antisocial personality traits may be a better choice for evaluations of sexual offenders. Since the PDQ-4+ is a paper questionnaire (e.g., not a computerized answer sheet), one can also provide permission and encourage an offender to write comments about their responses to questions about particular diagnostic criteria. Guy, Poythress, Douglas, Skeem, and Edens (2008) have shown that the responses on the PDQ-4 by over 1,300 criminal and substance abuse offenders were strongly related to scores (e.g., simple dimensional symptom count) on the PAI ANT scale and interview responses to the SCID-II Antisocial Personality Disorder scale. However, those offenders formally identified as being characterized as

antisocial personality disorder were different among the three measures. This is, in part the result of method variance, the diagnostic concordance of interview, and self-report measures of antisocial behavior were more limited suggesting that while self-report screens may identify a pool of persons with likely ASPD, structured interviews provide more rigor in making such diagnoses.

However, as should be apparent, the specific statements endorsed by an offender via a self-report instrument represent a form of self-representation. Consequently, if the actuarial interpretive comments from the MMPI-2, MCMI-III, or PAI indicate the presence of criteria of antisocial or other personality disorders, that can provide particularly important information about the offender since those endorsements are the product of the offender's own self-report. Again, there appear to be relatively few false positives when offenders endorse items that indicate particular personality disorder diagnoses.

Alternately, evaluators will certainly encounter cases where the offender's criminal and personal history (as evidenced in the available archival records) and/or responses to diagnostic interviews clearly indicate the presence of specific relevant personality disorders, but the results of the standardized personality tests do not indicate the presence of one or more specific personality disorders. In those cases, it can be informative to take the time to examine the set of items that compose the relevant test scales and compare the offender's responses to those items and determine if he has responded to those items in a manner congruent with the existing archival or interview data. In those cases, the evaluator can identify that the records and/or interview responses indicate the presence and severity of the personality disorder of concern and note that the offender's self-report per one or more tests does not indicate such a disorder, suggesting that the maladaptive traits may be ego-syntonic (such that the offender is not aware of or minimizes such traits) or that the offender is denying specific traits or behaviors that are identified in the existing records and/or interview responses.

The structured diagnostic interviews described earlier can also be utilized to acquire information that can provide basic information regarding the existence of potentially relevant traits of personality disorders and in combination the definition of and determination of personality disorders themselves. Thus, the SCID-II, the PDI-IV, the SIDP, etc., provide useful information collected from the offender and interpreted by the evaluator that can provide the foundation for identifying specific maladaptive personality traits and typically multiple personality disorders that may characterize an offender.

Similarly, and perhaps more clearly, the results of the offender's responses to the MSI II scales can provide a basis toward concluding that the offender has the characteristics of a pedophilic, coercive/rape, or exhibitionistic paraphilia. As the developers have noted, the MSI II contains 11, 12, and 4 items placed in the past tense, respectively, in the subscales regarding deviant sexual fantasies related to child molesting, rape, and exhibitionism. In addition, the MSI II contains 12, 8, and 4 items placed in the past tense, respectively, in the subscales regarding urges as measured by pre-assault behaviors (e.g., grooming or "cruising" as methods to find or "obtain" a victim related to child molesting, rape, and exhibitionism). Finally, the MSI II contains two assault subscales for each paraphilia which are summed to reflect behavior related to a specific paraphilia: (1) for child molesting there are 10 and 6 items in the Sexual Assault and Aggravated Assault subscales; (2) for rape there are 12, 4, and 5 items in the Sexual Assault, Rape Sadism, and Violent Assault subscales; and for exhibitionism, there are 8 and 4 items in the Sexual Assault and Advanced Assault subscales. Scores or endorsements in each of these subscales are identified in the report and then summed to provide a Sexual Deviance scale for child molesting, rape, and exhibitionism, which then provides an account of his self-reported behaviors and also helps diagnose recurrent paraphilia behaviors (which then can also be compared to his known record of potentially paraphilic behaviors). Then, that summed Sexual Deviance score is recorded onto the MSI II Profile form, which contains standard T-scale norms. The offender's Sexual Deviance scores are then compared to MSI II scores for the nationally standardized samples including different types of sexual offenders, persons who deny committing an offense, end-of-treatment subjects, and normal (nonsexual offender) males. Taken together, the results from the MSI II Sexual Deviance subscales may provide information that suggests or directs confirmation of one or more paraphilic disorder.

Of note, it seems likely that, in the near future, the field will move to a more dimensional (versus categorical approach) to considering sexual offenders. This seems likely to occur both as a result of the increasing evidence for "crossover" paraphilic behavior among a large subset of sexual offenders and part of the larger movement in the mental health field to shift to a dimensional approach to conceptualizing mental disorders (already reflected in the dual methods of DSM-5 for classifying personality disorders). As Marshall and Kennedy (2003) wrote a decade ago: "…a description of the acts of sexual offenders, along various dimensions would be more useful than an attempt to categorize these offenders…Such dimensional ratings should provide a better guide to assessors, treatment providers, researchers, theoreticians and the courts." (p.15)

Information regarding antisocial personality disorder and/or its traits can be also be provided by the MSI II Antisocial Personality Disorder scale because the scale was developed based on the DSM-III criteria. The Antisocial Behavior (AB) scale of 50 items represents a sum of two 25-item scales: a Conduct Disorder Index and a Sociopathy Index (including

exploitive and aggressive behaviors, stealing behavior, financial irresponsibility, arrests and detentions).

While the available meta-analyses have not identified alcohol or drug abuse dependence as a consistent risk factor for sexual offense recidivism, those conditions are commonly found among sexual offenders. In addition, anecdotally, sexual offenders frequently report that such substance use has been related to their sexual offending. Substance abuse has been identified by some as a criminogenic need related to self-regulation and/or as predisposing factor for sexual offending. In addition, it appears to be a key situational component to nonsexual predisposing conditions to sexual offending (e.g., Abbey, 2011; Hoberman, 2014). All of the broadband PAP tests provide one or more specific scales that tap substance abuse. The MacAndrew's revised scale on the MMPI-2, when elevated, suggests the possibility of a drug or alcohol abuse problem, as does an elevation of the Addiction Potential scale (APS). In addition, it should be noted that the Pd scale, particularly when a high clinical scale, is the MMPI-2 profile configuration most common among alcohol- and drug-abusing populations. The MCMI-III provides both an Alcohol Dependence and Drug Dependence scale, while the PAI contains both Alcohol Problems (ALC) and a Drug Problems (DRG) scales. Each of these scales on the MCMI-III and PAI provides direct measures of self-reported alcohol and drug abuse; however, the items are very transparent and thus subject to impression management.

Treatment Amenability, Planning, and Outcome

The major MDPT provide varied information regarding several areas related to the process and direction of psychosocial treatment. Butcher (1990) wrote that psychological testing can provide information about an individual's motivation, attitudes, defensive style, personality traits, and symptoms, much of which a person may be unaware of or reluctant to admit to directly (particularly in an adversarial context). Thus, psychological testing can provide a normative framework from which treatment motivation and "problems" can be viewed.

SPA can provide important information about an offender's general amenability to treatment. As Butcher, Graham, Kamphuis, and Rouse (2006) noted:

> Unfortunately, the assumption that patients are ready to engage in the treatment process is not always well founded. The MMP-2 validity indicators provide a direct test of patient's readiness for treatment. By directly assessing response attitudes, the therapist can evaluate the patient's level of cooperativeness and encourage or reinforce the willingness toe engage in the task of self-disclosure…patients who produce defensive, uncooperative test patterns, as reflected in the test validity scores, may likewise be relatively inaccessible to the therapist during sessions. (p. 4)

Weiner and Greene (2008) offer similar comments on the application of validity scales generally to amenability to treatment stating:

> Individuals who provide extremely self-favorable descriptions of psychopathology see their problems as less troubling to themselves, and, hence, are less motivated to change. Their problems also may be more chronic, and consequently, more difficult to treat, if they remain in treatment. None of these potential causes of an extremely self-favorable description of psychopathology is a good prognostic sign for any type of psychological intervention. (p. 149)

On the MMPI-2, for example, the Pearson interpretation of the offender's self-report may indicate: "The treatment prognosis is poor. Although he may enter treatment through court referral or at the insistence of a family member, he is not motivated to change, tends to feel that others are to blame for his difficulties, and is likely to terminate therapy when the pressure eases." Similarly, on the PAR interpretation for the MMPI-2, a common comment encountered for sexual offenders is "His prognosis is guarded unless treatment begins early in his life."

The MCMI-III does not always provide specific statements about the amenability of an individual for psychosocial treatment but suggests aspects of treatment that may be more useful given an individual's test responses; by its nature, the test appears to assume that persons taking the test are interested in and/or motivated to participate in treatment. Consequently, it offers perspectives on the types of treatment, therapeutic approaches, and potential treatment issues that a particular set of responses by an individual tend to be associated with.

On the PAI, there is a specific Treatment Rejection (RXR) scale that provides a measure of attributes and attitudes associated with an interest (or disinterest) in personal changes of a psychological or emotional nature. Items tap the relative willingness to participate actively in treatment, acknowledgment of personal problems, and the disposition to accept responsibility for problems in one's life. Elevated scores on RXR indicate little motivation for treatment, whereas low scores indicate that the offender is representing major difficulties in his functioning and perceives a need for help.

Geer et al. (2001) found that the MSI II (in conjunction with the MMPI-2 and the Abel–Becker Sexual Interest Card Sort) was able to identify which sexual offenders were likely to complete a sexual offender treatment program in prison.

Some evidence exists that those individuals who are identified and characterized as antisocial or moderately to highly psychopathic by their scores on the PCL-R may respond poorly to treatment (e.g., Garrido, Esteban, & Molero, 1995) or cannot be treated (Harris & Rice, 2006). Thornton and Blud (2007) noted five domains related to interpersonal effects of psychopathic traits which might interfere with effective treatment: dishonesty about past history and functioning, having "bogus" intentions, disrupting group process,

experiencing treatment as just another opportunity to con or dominate, and, finally, seeing no reason for persona change. In addition, they note that more psychopathic individuals often lack the capacity for empathy, avoid responsibility of their past criminal behavior, and lack an ability to bond meaningfully with therapists. Further they noted that the treatment setting and expectations might be experienced as boring and lead to noncompliance with homework and attendance. Finally, they note that not uncommonly more psychopathic individuals have difficulty complying with rules. Thornton and Blud conclude that "all four facets of psychopathy have a potential to disrupt effective participation in treatment, though the ways in which they affect therapy vary" (p. 511).

Regarding treatment planning, Davis and Archer (2010) pointed out that that objective multiscale personality inventories such as the MMPI-2, MCMI-III, and PAI continue to have utility in individual treatment planning with sexual offender because of these instruments' ability to identify a psychopathological characteristic that may be relevant to treatment. Grady et al. (2011) noted that surveys had identified significant common core treatment targets in adult sexual offender treatment in North America, and these treatment targets are focused on presumed risk factors believed to be related to risk factors for sexual reoffending. Such treatment targets included offense responsibility, victim awareness and empathy, intimacy and/or relationship skills, social skills training, problem-solving, arousal control, emotional regulation, self-monitoring, and offense-supportive attitudes. As noted previously, Grady et al. have provided a review of available specific scales or available instruments that could be utilized to measure such sexual offender treatment targets. However, they concluded "…the psychometric properties of these instruments and their applicability to sexual offenders vary tremendously…there are few valid and reliable instruments available to researchers and clinicians to accurately measure se offender's deficit areas…more research is need to develop specific instruments that can be used with sex offenders to better understand the areas of specific deficits…" (p. 237).

As has been suggested, the results of SPA can be utilized to identify PMRF that can be selected as treatment targets. However, we have also noted that an evaluator must apply special considerations in the "clinical/forensic" context given the strong possibility or even likelihood that individuals are likely to present attenuated presentations of such PMRF. Thus, offenders may begin sexual offender treatment with self-reported lower levels of identified PRF than may actually characterize them.

Regarding treatment outcome, SPA can also have unique and potentially powerful utility in providing a standardized means of measuring whether sexual offenders appear to change as a result of participating in treatment. When Thornton (2002) compared first-time offenders to repeat offenders, he found that repeat offenders who had molested children tended to score more highly in the area of distorted attitudes; they also had lower scores in the areas of socioaffective functioning and self-management than the first-time offenders group. However, again given the "clinical forensic" context of sexual offender treatment, it may be that offenders are simply altering their verbal or written responses to test items as opposed to having changed their cognitions or behaviors. As Grady et al. (2011) have also noted that most measures are relatively transparent and susceptible to response bias, they also note that research has demonstrated that sexual offenders do in fact "fake good" relevant to reported treatment change or gains. Barnett, Wakeling, Mandeville-Norden, and Rakestrow (2012) suggested that treatment participation may create a "demand characteristic" relative to the participants' belief that they are expected to have changed; we would similarly suggest that a similar pressure that may operate is secondary gain where participants believe that they "need" to show that they have changed—or at least report change—to secure some desired outcome (i.e., "successful" treatment completion to secure a reduced period of incarceration or detention). Consequently, it is perhaps no surprise that a number of studies have consistently found that *pretreatment measurements* of psychosocial constructs, including personality traits and aspects of sexual deviance, have been more predictive of sexual offense recidivism. Rice, Quinsey, and Harris (1991) found that despite the appearance of change in measured deviant sexual interests between pre- and posttreatment, pretreatment measures were much more strongly associated with sexual offense recidivism relative to posttreatment assessment. Similarly, albeit with a much larger sample, Barnett et al. (2012), in their study of 3,400 sexual offenders, found that posttreatment scores on various psychometric measures "were less discriminative and predictive of reconviction than pretreatment scores…one explanation is that pretreatment scores are a *purer* measure of dysfunction than post treatment scores" (p. 23). They stated: "…the poor performance of these measures posttreatment suggest that treatment providers should rely less on these scores as a way of assessing risk after treatment. Indeed, for programme evaluators, these findings suggest less emphasis should be placed on post treatments scores on psychometric measure of dynamo risk factors as a way of establishing the efficacy of treatment programmes" (pp. 23–24). In a more recent review of the literature, Wakeling and Barnett (2014) reviewed the relationship between psychometric test scores and reconviction in sexual offenders participating in sex offender treatment in the UK. They concluded:

> We believe that these results suggest that it may be unwise to rely on large batteries of psychometric tests to determine change in treatment and that further research is required before we can be sure of the relationship of psychometric tests to

> recidivism outcome…it is very unfortunate that we are not yet in a position to make reliable estimates of the extent to which such programs have benefited individual participants. The use of psychometric tests may not be so promising as we once thought. Additionally, *the evidence so far suggests that to use change on psychometric test scores for program evaluation (i.e. as a proxy measure of reconviction outcome) is not warranted*." (p. 143; emphasis added)

Consequently, it has been relatively unusual for posttreatment or change scores to be associated with outcomes following participation in sexual offender treatment and, relatedly, relatively little evidence that sex offender treatment outcome can be meaningfully measured or demonstrated by the use of within-program psychological tests and questionnaires.

Risk Assessment

Measuring recidivism is a complex endeavor. First, base rates increase substantially with longer periods of follow-up, certainly for sexual offenders. Second, more serious offenders are often arrested and/or incarcerated for various offenses and "removed" from the "opportunity" to be followed or studied; consequently, only studies utilizing survival analysis should be considered, since they only follow persons who remain in the community with the possibility of committing additional offenses. Without survival analyses, recidivism rates most likely apply to only low- or moderate-risk offenders since high-risk offenders are more likely to be in secure settings, often for extended or repeated periods of time. Finally, the implications of the criterion variable must be carefully understood. As Douglas, Vincent, and Edens (2006) pointed out: "Sole reliance on official records will invariably underestimate actual criminal behavior" (p. 545) and lower base rates of actual recidivism. Thus, Douglas and Ogloff (2003) found that when criminal records were supplemented by other archival sources, the base rate changed from approximately 10 % to 40 %. Similarly, Monahan et al. (2001) found that the inclusion of information from official records, other collateral sources, and self-report increased recidivism rates by a factor of six!

As noted, the PCL-R has historically been regarded as the gold standard for various types of recidivism. The association between dimensional (e.g., continuous scores from 0 to 40) scores on the PCL-R and criminal and violent outcomes is, for the most part, linear; this means that a higher score on the PCL-R is associated with a higher likelihood of future negative outcomes (including criminal or violent behavior (Hart & Hare, 1997)). Via meta-analysis of the PCL-R and its relationship to recidivism was studied across multiple individual studies (Hemphill, Hare, & Wong, 1998; Hemphill, Templeman, Wong, & Hare, 1998; Hemphill, 2007). Results demonstrated that the PCL-R was consistently among the best predictors of recidivism, whether utilized as a continuous or categorical measure. In fact, surprisingly, survival analyses for "medium" and "high" PCL-R groups were not clearly differentiated from one another; both of these groups showed similar recidivism rates and patterns. Thus, a somewhat elevated PCL-R score (i.e., a moderate score) was also associated with a significantly greater likelihood of recidivism than a low score. [Of note, the mean PCL-R score for any prisoner in a state correctional facility is approximately 22, while that for the general population of males is 6 (Hare, 1991).] In addition, as Douglas et al. (2006) demonstrated: "The PCLR was more strongly predictive or added incrementally…to other predictors such as demographics, criminal history variables and personality disorder. …What these studies suggest is that the predictive contribution of psychopathy remains quite robust in the face of competing factors" (p. 542).

In their two meta-analyses, Hanson and Bussière (1998) and Hanson and Morton-Bourgon (2004) identified a number of clusters of variables and specific psychosocial characteristics that demonstrated a particular association with sexual offense recidivism. Both reviews found that the two primary predictors of sexual offense recidivism for both adult and adolescent sexual offenders were deviant sexual interests and antisocial orientation. Hanson and Morton-Bourgon (2004) found that "Sexual recidivism was significantly predicted by almost all indicators of antisocial orientation (antisocial personality, antisocial traits and history of rule violation). Specifically, sexual recidivism was predicted by the *Hare Psychopathy Checklist… the MMPI Psychopathic deviate scale [Scale 4]*…and by other measures of antisocial personality (e.g., psychiatric diagnoses, responses to questionnaires…" (emphasis added, p. 9). They also found that the general category of "any personality disorder" was also significantly related to sexual offense recidivism. In a study of rapists and child molesters, Quinsey et al. (1995) found that within 6 years of release from prison, more than 80 % of psychopaths (versus 20 % of non-psychopaths) had violently recidivated and that many of their offenses were sexual in nature; it should be noted that psychopathy was defined by a score of 25 or greater on the PCL-R. Rice and Harris (1997) found that violent recidivism rates for 5 years after release were 85 % for persons classified as psychopaths by record review (i.e., cutoff score of 25 or more) based upon survival analysis; this rate was approximately 50 % above that of non-psychopaths.

On the PAI, Morey and Hopwood (2006) noted that elevations on the PAI Aggression, Antisocial, Borderline, and Manic scales elevate the risk of behavioral acting out and recidivism, particularly higher scores on ANT and ANT-E. Morey (1996) developed a Violence Potential Index (VPI; available via the computerized interpretation of the PAI from Psychological Assessment Resources, this index samples 20

indicators of violence potential based on PAI scale elevations or configurations). Per Morey and Hopwood (2006) studies have shown the BP as demonstrating an anticipated pattern of correlations. However, as noted, Boccaccini et al. (2010) examined the ability of scores from the PAI to predict post-release rearrests over a 5-year follow-up in a sample of over 1,400 sexual offenders. ANT, AGG, DOM, and the VPI were predictive of violent and nonviolent recidivism, and AFF scores demonstrated incremental validity over both age at release and total number of prerelease arrests for both types of recidivism. However, none of the scales predicted sexual offense recidivism. The authors concluded that "the small size of the predictive effect suggest that PAI scores may be of only limited practical value for improving risk assessments… it does not appear that PAI scores are predictive of arrest for offenses that are clearly sexual in nature" (p.146).

As noted, the combination of deviant sexual interests and psychopathy has been demonstrated to greatly increase the amount and rate of sexual offense recidivism. Rice and Harris (1997) found that the combination of higher PCL-R scores (e.g., 25 and above) and deviant sexual arousal resulted in substantially faster and higher rates of sexual reoffending; sexual recidivism per survival analysis was approximately 60 % for this group. More recently, this research group again confirmed this finding [Harris et al. (2003)]. Other investigators (e.g., Doren, 2002; Hildebrand, de Ruiter, & de Vogel, 2004; Serin, Mailloux, & Malcolm, 2001) demonstrated that this "dynamic duo" of both elevated antisocial characteristics for offenders with deviant sexual interests was associated with higher rates of sexual offending. Most recently, in a meta-analysis, Hawes et al. (2013) confirmed that across studies the combination of different measures of the presence of sexual deviance and higher PCL-R scores were strong predictors of future sexual offense recidivism.

Even more broadly, Thornton and Beech (2002) examined the interaction between "psychological deviance" and Static-99 scores to sexual offense recidivism. They found that simply the number of dysfunctional domains (e.g., the number areas of psychosocial and psychosexual deviance, similar to the domains of criminogenic needs discussed previously) that characterized sexual offenders obtained moderate predictive accuracy in predicting sexual offense recidivism in two samples (AUCs ranging from .83 to .85). The number of dysfunctional psychological domains also showed significant independent contribution to prediction over and above the Static-99 risk category, indicating incremental validity.

Using the original MSI, Craig et al. (2007) found that sexual offenders who committed subsequent offenses produced higher scores on several scales: social desirability, cognitive distortions/immaturity, attitudes toward treatment, and rape interests. They also found good predictive accuracy for several scales of the MSI, including Sexual Obsessions (AUC=.85), Child Molest (AUC=.74), Rape (AUC=.74), and Paraphilia (SUC=.74). In contrast, self-report on the "Normal" factor was a poor predictor of sexual offense recidivism. Further, after a factor analysis, Craig et al. found that a "Sexual Deviance" factor made a statistically significant contribution *independent* of the Static-99 at both 2- and 5-year follow-up.

Craig et al. (2007) studied the effectiveness of psychological markers of risk, in effect by selecting test scale scores to approximate PMRF. Mean scores on deviancy domain scales were compared between recidivists and non-recidivists. Craig et al. found that recidivists obtained significantly higher scores on the MSI: Sexual Obsession and MSI: Cognitive Distortions and Immaturity scales than did non-recidivists. There was a trend for recidivists to obtain higher scores on measures of hostility, depression, and the Psychopathic Deviate scale of the MMPI. Further when measures of psychosocial deviance were statistically combined to create a "psychological deviance index" (PDI), Craig et al. too found that the number of dysfunctional psychosocial domains had a linear relationship to sexual offense recidivism. When PDI was grouped into low, moderate, and high domains (defined as deviance in three or more domains), the results showed that the degree of PDI and the rates of sexual offense reconviction were linear at 3 %, 18 %, and 40 % respectively. A logistic regression analysis indicated that the PDI made a statistically significant contribution to production in addiction of sexual offense recidivism reconviction that was independent of the Static-99 at 5-year follow-up.

Wakeling, Freemantle, Beech, and Elliott (2011) reported findings that tentatively suggested that some psychometric scores, particularly those gathered pretreatment and relating to socioaffective functioning, were associated with subsequent sexual and/or violent reconviction in sexual offenders. They concluded that such measures of PRF might be able to add to the predictive power of static risk assessment. However, more recently, Wakeling and Barnett (2014) reviewed the relationship between psychometric test scores and reconviction in sexual offenders participating in sex offender treatment in the UK. They concluded:

> We believe that these results suggest that it may be unwise to rely on large batteries of psychometric tests to determine change in treatment and that further research is required before we can be sure of the relationship of psychometric tests to recidivism outcome…it is very unfortunate that we are not yet in a position to make reliable estimates of the extent to which such programs have benefited individual participants. The use of psychometric tests may not be so promising as we once thought. Additionally, the evidence so far suggests that to use change on psychometric test scores for program evaluation (i.e. as a proxy measure of reconviction outcome) is not warranted." (p. 22)

Wakeling and Barnett suggested that rather than using specific tests to measure particular risk factors for the purpose of treatment outcome, efforts should be made to develop measures to reliably quantify "domains of risk."

However, while pre- and post-scores on certain specific psychological tests or scales may not be useful in measuring treatment outcome, they may still be useful in risk appraisal. Craig and Beech (2009) in their review of psychometric assessment of sexual offenders concluded that the use of psychometric measures to approximate dynamic deviancy domains in predicting sexual reconviction challenges existing risk assessment procedures by demonstrating that psychological trait factors provide unique information not captured by actuarial methods. Trait or psychological dispositional factors assessed at prerelease and also help to identify individuals exhibiting characteristics of psychological deviance may require greater supervision. It has been demonstrated that psychometrically assessed information can have a significant contribution to the assessment of recidivism independent of actuarial systems. There appears to be a relationship between psychological and actuarial risk markers. It may be that actuarial scales are best understood as being composed of historical markers for the past expression of the psychological risk factors (p. 103).

Summary

The comprehensive evaluation of sexual offenders represents the cornerstone of almost all disposition and treatment planning—all management-related matters—for sexual offenders. Given that almost all such evaluations occur related to or within some existing or potential legal context, it is our contention, as that of Hoberman and Jackson (2015), that most evaluations of sexual offenders are effectively forensic ones. Consequently, *Structured Psychological Assessment*, constituting standardized, typically norm-referenced methods of collecting and organizing self-report or professional ratings, is essential as a central component of all evaluations of persons facing allegations of or convicted of committing a sexual offense. Perhaps even more than in most clinical and forensic evaluations for psycholegal settings or purposes, *Structured Psychological Assessment* has particularly unique and significant value in any assessment of sexual offenders. To a large degree, this has to do with the limitations of unstructured self-report by sexual offenders and issues with unstructured judgments by varied MHP. The combination of self-report by a sexual offender (in the context of standardized, actuarial test administration/interpretation and validity (self-presentation) assessment) and structured professional judgment provides a critical and highly useful adjunct to the available records regarding a sexual offender and their particular version of their history and current psychosocial status. SPA is particularly effective when results are considered in the context of available comprehensive records and other collateral sources of information regarding the individual under consideration. The use of SPA is virtually ubiquitous for all significant clinical and forensic evaluations generally and, in effect, represents the standard of practice relating to formal comprehensive psychosocial evaluations.

Currently, a variety of broadband, multidimensional measures of personality and psychosexual characteristics as well as structured professional interviews and rating measures are available to provide useful, critical information about impression management and psychologically meaningful psychosocial characteristics of sexual offenders across key domains of so-called criminogenic needs, including general personality characteristics, social functioning, self-management, psychiatric status and history (e.g., the existence of mental disorders), treatment amenability and/or planning, and risk assessment. Such norm-referenced, standardized methods of collecting and appraising information also provide a particularly useful evidence-based means of addressing psycholegal issues. The use of SPA greatly enriches the ability for evaluators to obtain current information from sexual offenders themselves in a uniform, reliable manner and then to organize and compare that information to normative data and even past administration of the same or similar tests. Such information by virtue of combining the individual self-report in relation to normative data and structured professional judgment provides a unique substantive platform for understanding a particular sexual offender and offering unique and valuable information for decision-making about such offenders. Further, as seems likely, if the field of sexual offender research moves toward a dimensional model for the consideration of predisposing conditions for sexual offending from both a theoretical and an applied [e.g., risk assessment (e.g., Doren, 2010; treatment planning) approach, then SPA will likely serve as a primary means of best identifying and quantifying those dimensions.

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Psychophysiological Assessment of Sexual Offenders: A Practitioner's Perspective

Wesley B. Maram

Psychophysiological assessment measures have been used in the assessment and management of sexual offenders for over half a century. Despite the large body of research as well as their extensive use in treatment programs (both residential and community-based) and the supervision for sexual offenders, critics continue to raise various issues about the nature of the findings and their application in clinical, forensic, and broader management settings for offenders. However, among those who use physiological assessment there is a recognized family of procedures with common aims that offer general guidance to effectively collect and interpret the results that provides a reasonable justification for the continued use of such measures (O'Donohue & Letourneau, 1992). Thus, the Association for the Treatment of Sexual Aggressive Abusers (ATSA, 2001, 2013) included several psychophysiological assessment measures in their Practice Standards. ATSA notes that it is recognized that psychophysiological assessment methods such as phallometry, viewing time, and polygraphy may have particular usefulness to (a) obtain objective behavioral data about an individual that may not be readily established through other assessment means, (b) explore the reliability of individual self-report, and (c) explore potential changes, progress, and/or compliance relative to treatment and other case management goals and objectives.

This chapter represents an effort to gather and organize the available literature on the procedural steps of administrating the Penile Plethysmograph along with other psychophysiological measures. However, this author departs from some practitioners regarding how to interpret findings in both clinical settings (in which the goal is to identify appropriate treatment targets for therapy) and forensic settings (when the purpose is to elicit information regarding the presences or absence of sexual deviance). It is posited that in clinical practice it is of greater importance to identify the potential presence of sexual deviance among known child molesters than it is to adhere to rigid interpretative guidelines. Having just one positive indicator or evidence of significant arousal to a sexually deviant stimulus provides valuable, clinically important information that should not be ignored even when the individual shows greater arousal to nondeviant stimuli. Important clinical information can be obtained about an individual who was aroused by a single image or deviant story about sex with a child, sexual violence, or nonsexual violence. This chapter includes discussions about and suggestions on how to apply viewing time measures and polygraph examinations as well as Penile Plethysmograph results in clinical and evaluating settings to increase and accelerate client disclosure of sexual deviance. Issues and concerns related to admissibility of this information in the courtroom are also discussed.

It is a formidable but critical process to attempt to determine what factors motivate a person to sexually molest a child, or rape a child, adolescent, or adult and then develop an effective intervention strategy to prevent future sexual abuse from occurring. The effort is complicated by the fact that there is a lack of uniform consensus on how to define the diagnostic criteria for sexual offending against children or nonconsenting individuals. Some even question the wisdom of classifying people with a Pedophilia, a Paraphilic Disorder-Not Otherwise Specified (NOS) (e.g., Coercive Paraphilic Disorder), or Sexual Sadism as mental conditions at all because historically sexual behavior with children and nonconsenting persons has been common (Green, 2002; Quinsey, 2010). Even if we settle on the diagnostic definition provided by the Diagnostic and Statistical Manual, Fourth Edition, Text Revision (DSM-IV-TR, 2000) which reads, "The paraphilic focus of Pedophilia involves sexual activity with a prepubescent child generally age 13 years or younger (p. 571)," different evaluators too often do not come to the same diagnostic conclusion (e.g., Levenson, 2004; O'Donohue, Regev, & Hagstrom, 2000; Wollert, 2007). The DSM-5 does not provide any additional clarity since the diagnostic criteria of Pedophilia remains the same. The only revision made was to change the name of the disorder from Pedophilia to Pedophilic Disorder. Also, efforts to establish

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a new diagnosis of Paraphilia Coercive Sexual Disorder (to replace and improve upon the Paraphilia NOS nonconsenting partner diagnosis), referring to males who are sexually aroused by the coercive elements of rape, were debated and subsequently not included as specific disorder in the DSM-5 (DSM-5 Development, 2013; Knight, 2009). However, paraphilic disorders relating to sexual arousal, urges, and/or behavior to nonconsenting persons can still be categorized under DSM-5 as a Paraphilic Disorder-Not Otherwise Specified (NOS) (e.g., Coercive Paraphilic Disorder) or under the expanded definition of Sexual Sadism.

Problems with diagnostic reliability are likely to continue. Reliability is weakened when the evaluator who frequently only has at hand criminal records and the individual's self-report (where the former is too often a superficial behavioral description completely lacking details about internal motivation, and the latter is overly influenced by the desire for self-preservation). There is a common expectation that the accused individual will not be forthright about dimensions of their sexual deviance. Relying on the offender's self-report alone is problematic. This point was recognized by the DSM-V Paraphilia Workgroup (2013). They wrote, "…the fact that a substantial proportion—perhaps a majority—of patients referred for assessment for paraphilias is referred after committing a criminal sexual offense. Such patients are not reliable historians, and they are typically not candid about their sexual urges and fantasies." (pg. 1)

Official records list detected criminal events and may also include behavioral descriptions of criminal incidents. Information regarding the individual's fantasies and urges is generally discovered through clinical interview. Because of the negative societal repercussions associated with child molestation or sexual violence, there is a natural reluctance by the sexual offender to engage honestly in public self-examination of deviant fantasies and urges toward children to evaluators who are going to include this information in reports to the courts and other elements of a the legal system that will make decisions about their freedom.

A variety of strategies have been developed and employed to elicit the psychological factors of an individual related to his sexual offending, including using positive interview techniques that support the individual and avoid "shaming" the person for what they have done. In addition, standardized sex history questionnaires can extract information that might not otherwise be directly disclosed in a face-to-face interview. For example, questionnaires such as the Psychosexual History Questionnaire© (Nichols & Molinder, 1999) pose questions about the person's sexual experiences, fantasies, and urges in the context of gathering background information about the individual in a manner that has the potential to be objective, clinical, and less threatening than having to respond to a clinician who is asking specific questions to the person about their deviant sexual behaviors, fantasies, and urges. Even with the aid of structured questionnaires and skillful interviewing, an evaluator can rarely have confidence that the sex offender has made a full disclosure. Issues associated with subjective offender self-report and clinical judgment in making reliable and valid diagnosis suggest that objective measures might offer potential utility as another source of information (Bradford, Kingston, Ahmed, & Fedoroff, 2010). Sexual arousal testing can help by offering one means of identifying the possible presence of deviant sexual interests. Underscoring the importance of this information, meta-analysis studies (Hanson & Bussière, 1998; Hanson & Morton-Bourgon, 2005; Mann, Hanson, & Thornton, 2010) demonstrated that deviant sexual interest in children is among the strongest predictors of sexual recidivism.

PPG, VRT, and Polygraph

Psychophysiological procedures have been developed that offer the advantage of providing a standardized and often more objective measure to help differentiate the situational offender from the persistent offender with preferential deviant sexual interests. These psychophysiological measures to be discussed in this chapter include the Polygraph in conjunction with Viewing Time, also referred to as Visual Reaction Time (VRT) assessments, and the Penile Plethysmograph (PPG), often referred to as phallometric assessment.

The Polygraph Sexual History Exam attempts to gain an individual's full disclosure of the extent and variety of their criminal, deviant, and nondeviant sexual behaviors using skillful interviewing in combination with measures of involuntary physiological reactions to stress, by monitoring patterns of blood pressure, heart rate, respiration, and galvanic skin response. VRT assessment [such as the *Abel Assessment for Sexual Interest*™ (AASI)] combines measures of self-reported sexual arousal with standard measures of how long the individual looks at slide images of persons of different age and gender categories (e.g., viewing time) along with a self-report sexual history questionnaire (Abel, Huffman, Warberg, & Holland, 1998). The PPG measures sexual arousal by changes in penile engorgement or tumescence (e.g., relative blood flow into the penis) while the individual is viewing clothed or nude images of children, adolescents, and adults; listening to audio recorded sexual stories involving children and sexual and nonsexual violence; or viewing and listening to these stimulus presentations. When these psychophysiological tools are used in tandem with other measures related to potential deviant sexual interests, the evaluator/clinician often obtains a more clear and comprehensive overview of the individual's sexual interests,

arousals, and behavioral history (Maram & Koetting, 2004). The availability of this information from these particular procedures can be used to create an opportunity for the individual to become more willing to disclose their inner motivation for deviant behavior.

Drawbacks and Advantages

As with any measurement approach, each of these psychophysiological measures has relative limitations as well as relative advantages. For example, those critical of the polygraph point to studies that suggest the polygraph lacks scientific validity (e.g., U.S. Congress Office of Technology Assessment, 1983). In contrast, polygraph supporters point to the polygraph's empirically demonstrated utility in post-conviction assessment of sex offenders (English, Jones, Pasini-Hill, Patrick, & Cooley-Towell, 2000; Grubin & Madson, 2006; Kokish, Levenson, & Blasingame, 2005; Raskin, 1988; Raskin, Barland, & Podlesny, 1976). The AASI has been criticized as being inaccurate in distinguishing child molesters from non-molesters (e.g., Fischer & Smith, 1999). Others have reported that the AASI results provide good discrimination between child molesters and non-child molesters (Card & Dibble, 1995; Letourneau, 2002).

Critics have also raised questions about the methodology and value of the PPG. These range from its lack of standardization and potential ethical concerns to questions as to whether penile engorgement is a reliable indicator of sexual arousal (Konopasky & Konopasky, 2000; Schouten & Simon, 1992). Alternately, a number of authorities advocate that the most well-established method for assessing positive evidence of sexual interest or arousal remains the Penile Plethysmograph (O'Donohue & Letourneau, 1992; Rosen & Keith, 1978; Zuckerman, 1971). Penile Plethysmograph responses to slide images and audio stimuli have been reported to provide relatively accurate information to classify child molesters and men who commit sexually coercive acts, such as rape, into more refined, delimited diagnostic groups and/or differentiate them from normals or other sex offender and non-sex offender groups (Barbaree & Marshall, 1984; Fedora et al., 1992; Lalumière, Quinsey, Harris, Rice, & Trautrimas, 2003; Quinsey, Steinman, Bergersen, & Holmes, 1975; Wormith, 1986).

Given the varied points of view and, to some extent, court rulings regarding the potential utility of the PPG, AASI, and polygraph, some forensic evaluators and clinical practitioners may be unclear about the value of such physiological assessment methods. The aim of this chapter is help lower the "noise level" and guide the evaluator in understanding, administering, interpreting, and then applying the PPG, AASI, and the polygraph in the forensic and clinical settings for optimal utility relative to exploring potentially useful additional sources of information about a particular individual related to sexual offending.

Before launching into a discussion on first how to use the PPG in applied settings, we need to be better grounded in its history, empirical support, and ethical concerns.

The Development of Penile Plethysmography

Sexual offenders are not the only category of individuals that might be motivated to deny their sexual interests or preference. In response to the Czechoslovakian government's concern about recruits attempting to evade military service by falsely claiming to be homosexual, Kurt Freund was commissioned to develop a procedure to differentiate sexual preference. In 1957, he employed a device, the volumetric method, to measure blood flow into the penis. He called this method the Penile Plethysmograph (commonly abbreviated as PPG). From this beginning, Freund's research evolved to focus on detection and diagnosis of sex offenders, particularly pedophiles (Wilson & Mathon, 2006).

The popularity of the PPG should be understandable, considering the unreliability of an offender's self-report and the fact that through such an evaluation, there is confidence that a meaningful erectile response to a sexual stimulus presentation of an adult or child is a psychogenic arousal and not simply a random erection (Bradford et al., 2010; DSM-5 Proposed Revision, 2010; Heilbrun, 2003; Janssen, Everaerd, van Lunsen, & Oerlemans, 1994). An offender's reluctance to be fully disclosing about both his current level of deviant arousal and his history of sexual offending is not difficult to understand, considering his fear of societal disapproval and the painful consequences that might follow an accurate accounting of past deeds and current deviant sexual interests. It is common for therapists working with recidivist, i.e., repeat sexual abusers of children and adults, even those with multiple detected victims spanning years, to hear from the sexual perpetrator denial or minimization of their offense history and/or denial of past or current deviant arousal. Abel, Mittelman, and Becker (1985) found that among 411 outpatient volunteers, the subjects initially provided very low reports of their past incidents of sexual crimes. However, when confronted with PPG results demonstrating erectile responses to sexually deviant stimuli, a large majority of those same sexual abusers in their study subsequently admitted that they had committed many more sexual offenses than they had previously disclosed. In a similar manner, Abel et al. (1988) discovered that among 561 nonincarcerated paraphiliacs, when provided assurance of confidentiality (e.g., a Federal Certificate of Confidentitality), most disclosed having engaged in as many as ten different types of sexually deviant behaviors that were previously unknown. This was

evidence of "crossover," with a significant number of sexual offenders reporting multiple types of atypical sexual behaviors as opposed to just one type, such as "rape" or "child molesting." Similar reports of previously non-disclosed victims and a history of varied sexual offending (e.g., crossover offending) have been reported by other researchers relying on polygraph examinations of sex offenders (English et al., 2000; Grubin, Madsen, Parsons, Susnowski, & Warberg, 2004).

Early Beginnings to Present

Contemporary Penile Plethysmography has generally changed from early Volumetric Plethysmograph measurement in which the blood flow into the penis is measured by the air displacement from a glass or rigid cylinder that is placed over the penis with an inflatable cuff. The cylinder is generally held in place with a leather harness that the technician places on the individual. This cumbersome process was first simplified by Bancroft, Jones, and Pullan in 1966 and later by Barlow, Becker, Leitenberg, and Argus in 1970 (Coric et al., 2005) to the method commonly used today, a circumference gauge. The gauge typically used today is a simple, thin mercury-filled elastic strain gauge that is placed on the midshaft or base of the penis. The gauge stretches as the penis circumstance expands with penile engorgement.

From its early beginning in the 1950s, the measurement of erectile responding became a central component and standard in the evaluation and treatment in the field (Marshall, 2006a, 2006b; McGrath, Cumming, & Burchard, 2003). The Penile Plethysmography equipment one is most likely to find in labs today consists of a computer with plethysmography software that includes sexual stimuli presentations and an attached wire leading from a circumferential mercury strain gauge (an elastic mercury band designed to measure electrical impedance to detect blood volume changes) that is calibrated on a calibrating rod prior to testing. The subject places the wire around the midshaft or base of the penis, and audio, video, or audio/video equipment is used for the examinee to listen to and view the stimuli. Some labs continue to use Volumetric Plethysmography, most notably the Centre for Addiction and Mental Health, which was described earlier. Volumetric Plethysmography requires placement of a cylinder over the penis and measures air displacement caused by erectile engorgement during stimulus presentations. Volumetric measurement is reported to be more accurate than mercury strain gauge circumference measurement for erectile response that is less than 10 % (2.5 mm) of full erection. However, both volumetric and strain gauge results were highly correlated for 10 % (2.5 mm) and greater of penile circumference increase (Barbaree, Blanchard, & Kuban, 1999).

Pros and Cons of Penile Plethysmography (PPG)

Proponents of Plethysmography hold that if it has been established that "Pedophilia" is a term that describes a sexual interest in largely prepubescent children, then the PPG is the most effective method for assessing such a sexual interest. Further, it is claimed that the PPG is useful in tracking erectile changes and it is the most well-established available method for assessing sexual interests (O'Donohue & Letourneau, 1992; Rosen & Keith, 1978; Zuckerman, 1971). PPG responses to slide images have been reported to be reasonably accurate in classifying child molesters into diagnostic groups and/or differentiating child molesters from normals or other sex offender and non-sex offender groups. Using the combined method of presenting erotic slides of nude children and adults and audio stimuli together with a self-report card sort (written scenarios of 13 categories of attractiveness to various description of sexual interest) (Laws, 1996) measures to differentiate boy-object and girl-object child molesters provides classification accuracy of 91.7 %, which is greater than any single measure (Barbaree & Marshall, 1984; Baxter, Marshall, Barbaree, Davidson, & Malcolm, 1984; Fedora et al., 1992; Freund, Watson, Dickey, & Rienzo, 1991; Laws, Gulayets, & Frenzel, 1995; Laws, Hanson, Osborn, & Greenbaum, 2000; Quinsey et al., 1975; Quinsey & Carrigan, 1978; Quinsey, Chaplin, & Carrigan, 1979; Wormith, 1986). This finding supports the notion that "more is better" in that using the PPG along with other measures of sexual interest is likely to give you the most comprehensive and accurate picture of the individual's sexual interests.

The primary focus of this chapter is on the assessment of child molesters and rapists in evaluation and treatment settings. Most sex offenders, including rapists are eventually released into the community. Some suggest that the results of PPG studies for rapists are a bit muddier than those for child molesters. A number of researchers have argued that PPG reliability with rapists is too low for its valid application in assessment (Eccles, Marshall, & Barbaree, 1994; Fernandez & Marshall, 2003). Barbaree, Baxter, and Marshall (1989) reported test–retest reliability of the rape index was extremely low ($r = 0.44$). However, Lalumière et al. (2003) revisited and updated quantitative reviews of studies that examined phallometric responses of rapists and other men. They discussed many laboratories assessing rapists have reported that approximately 60 % of rapists (perhaps a modest but still significant detection level) show rape indices that are larger than the rape indices of about 90 % of non-rapists. This 60/90 benchmark is a cut-point that can produce a score that determines interest for rape. In other words, good group discrimination between rapists and non-rapists is suggested

by these results. Lalumière et al. (2003) suggested that future research would be valuable in distinguishing among three potentially different sexual arousal patterns of profiles as these apply to rapists' phallometric responses: biastophilia (sexual arousal involving nonconsenting, struggling, resisting, but not necessarily to injury or cause physical suffering of the victim); sexual sadism (sexual arousal to pain, suffering, and injury); and the general antisocial or indifferent rapist (indifference to the interests, feelings and desires of others).

In a study of 586 male sex offenders convicted of contact sexual offenses assessed between 1982 and 1992 whose recidivism was studied over a 20-year follow-up, Kingston, Seto, Firestone, and Bradford (2010) investigated the predictive validity of sexual sadism, as indicated by psychiatric diagnosis, level of violence during the most recent sexual offense, the intrusiveness of the sexual activity, and phallometrically assessed sexual arousal to depictions of sexual or nonsexual violence. They found that the three behavioral operationalized indications (level of violence, sexual intrusiveness, and phallometrically assessed sexual arousal to sexual and nonsexual violence) were better predictors of sexual recidivism among sex offenders than the psychiatric diagnosis of Sexual Sadism. Of special interest here are the phallometric results of the study.

Kingston et al. calculated the *Pedophilia Assault Index* by dividing the highest response to an assault stimulus involving a child victim (nonphysical coercions of child, physical coercion of child, sadistic sex with child, or nonsexual assault of child) by the highest response to a child stimulus with no overt form of coercion. Similarly, they calculated the *Rape Index* by dividing the highest response to the rape stimulus by the highest response to the adult-consenting stimulus. The *Adult Assault Index* was calculated by dividing the highest response to a nonsexual assault stimulus against an adult by the highest response to a consenting adult. They then created a new index of sexual arousal of sexual and nonsexual violence, irrespective of victim age, that was simply the highest score from any of the three indices (Pedophilia Assault, Rape, and Adult Assault indexes). They found that phallometrically assessed sexual arousal to violence added to the prediction of violence (including sexual) recidivism after actuarially estimated risk to reoffense was controlled. This study's findings suggest that behaviorally operationalized measures, including the results of phallometric assessment, are preferred over psychiatric diagnosis because the phallometrically assessed deviant arousal to violence, including sexual violence, was associated with recidivism; whereas, in contrast, psychiatric diagnosis of sexual sadism was not associated with recidivism. This is yet another argument in support of the use of the PPG for assessment of sexual deviance for violent sexual offenders.

From the perspective of the evaluator and treatment provider, the available research provides sufficient support that the results of a PPG examination of an individual can produce findings that could be useful when discussing with the client that responds strongly to sexual and nonsexual violence. Some writers have suggested that since PPG testing with rapists may not be as discriminating as that for pedophilia, it may be less useful for clinical or forensic purposes. However, in addition to the available research that does support the utility of PPG evaluations with persons accused of or convicted of sexual assaults of adolescents and adults, it has also been long established that a significant proportion of sex offenders tend not to be specialists and some rapists also have sexual interest in children (Abel, Becker, Mittleman, et al., 1988; Marshall, 2006a, 2006b). Therefore, the PPG can still useful to rule out the possible presence of pedophilic interests in persons who assault adult females and is, therefore, also recommended to be used in settings assessing the sexually violent rapist as well as the child molester.

Several studies have assessed PPG sensitivity and specificity for diagnosing pedophilia (Camilleri & Quinsey, 2008). Sensitivity is defined as the probability that the test says a person has the "disease" or condition such as Pedophilia when in fact they do have the disease or condition. Specificity is defined as the probability that the test says a person does not have the "disease" (Pedophilia) when in fact they are "disease free" (Sensitivity and Specificity, 2013). "Sensitivity" is calculated by dividing the number of men identified as pedophiles by PPG assessment out of the total number of true pedophiles in the sample. For child molesters with multiple child victims, sensitivity was reported to range from 61 % to 88.6 %. Offenders with male victims had higher sensitivity scores. "Specificity" is calculated by dividing the number of men identified as gynephiles (men who prefer adult women) by PPG assessment out of the total number of true gynephiles in the sample. The specificity range was 80–96.9 %. For samples among adolescent sex offenders, sensitivity was lower but still acceptable at 42 % (Camilleri & Quinsey, 2008). In summary, the findings reflect moderate to robust sensitivity and robust or strong specificity, meaning we can have greater confidence in PPG findings that indicate the presence of pedophilia rather than in the absence.

Although the PPG has been around for over 40 years and there is a large body of research supporting its use as the best-validated tool for assessing pedophilia, a single standardized way of administering the test and published norms are lacking (Camilleri & Quinsey, 2008). Marshall (2006a, 2006b), an early proponent of the PPG, has more recently raised questions about the clinical usefulness of the PPG. He wrote:

> "… clinicians who rely on phallometrics must offer compelling arguments for doing so. The evidence of the reliability and validity of phallometrics presently available in the literature certainly offers little support for its use … some may find justification in the present review for abandoning the use of phallometric assessments altogether (p. 21)."

Similarly, at one point, Laws (2003) opined the PPG should be viewed as more an art than a science because of a perceived lack of universally agreed-upon standards and procedures. He reported on a national effort in the United Kingdom to develop standardization guidelines in 2007 (Thornton & Laws, 2009). There were also earlier attempts in North America to standardize the age and gender assessment of PPG administration for child molesters in 1987. However, of the five sites in the United States and three in Canada, only one Canadian site completed the study. Laws expressed disappointment about lack of plans to standardize the PPG and noted that the PPG is intrusive, invasive of privacy, and time-consuming. He expressed frustration that it had taken too long for the emergence of standardized procedures and explicit protocols (Laws, 2009). However, more recently, Laws (2009) has taken a less negative view on the utility of the PPG. He has retracted some of his earlier criticism because of improvements in the field. He has also acknowledged that PPG works well if implemented in a relatively consistent fashion. Laws acknowledged that many clinicians and researchers believe the PPG is a valid measure of deviant sexual interest, reporting that PPG measures correctly classified 82 % of the offenders by sex of victim and 74 % by both victim gender and use of force. Further, he reported encouragement based upon the implementation of a multisite study in the United Kingdom and the detailed procedure manuals that have been developed as a result. He concluded these results may, at least partially, solve many of the problems that have existed previously.

Similarly, O'Donohue and Letourneau (1992) have opined that although there does not appear to be a single standardized penile plethysmography assessment protocol, recognized procedures do exist and have shared aims. The British Psychological Society has, in fact, published Penile Plethysmography Guidance for Psychologists (British Psychological Society, 2008). The Association for the Treatment of Sexual Aggressors (ATSA, 2001, 2013) has long supported the use of PPG by experienced professionals using one of the more standardized procedures. Marshall and Fernandez (2003a, 2003b) have also supported the PPG's value. The authors stated that the psychometric data for assessments from tools such as card sorts (self-rating of 13 categories of attractiveness to various descriptive paraphilic sexual interests) (Laws, 2009), self-report measures, viewing time, and clinical interview results are less satisfactory than phallometry and that these alternative measures cannot yet be considered as a viable replacement for PPG testing. They opined phallometry would continue to have a role in effective clinical assessment of sexual offenders, but cautioned the role should be restricted to (1) determining which offenders need treatment, (2) targeting its application at modifying deviant interests, (3) estimating whether or not treatment intervention has reduced deviant tendencies, and (4) estimating the likelihood that an individual will reoffend. They indicated PPG evidence of deviant arousal for any sexual offender is an indication of problems that need to be addressed in all the decisions made about the offender, including treatment choices.

Justification for using a considered or qualified approach in interpreting PPG findings can be found in studies measuring PPG sensitivity (44–86 %) and specificity (approximately 95 %). The test sensitivity (accuracy of correctly categorizing individuals with sexual deviance) and specificity (accuracy of correctly categorizing nondeviant individuals as not being sexually deviant) findings tell us PPG test results are most informative when some signs of sexual deviance are revealed However, when no sexual deviance is revealed with PPG testing, it *cannot* be concluded that the person is not aroused by children because PPG false-negative rate can range from 14 % to 56 % (Freund & Blanchard, 1989; Freund & Watson, 1991; Hall, Hirschman, & Oliver, 1995). Consequently, PPG results indicating "nondeviance" do not confirm the absence of pedophilia or absence of arousal to coercive or violent sexual stimuli. In contrast, we can be fairly confident an individual was correctly classified as sexual deviant if their PPG results indicate the positive evidence of sexual deviance.

Further, relative to the value of the PPG assessment for sexual offenders, the Hanson and Bussière's (1998) meta-analysis of 61 scientific reports on the prediction of sexual reoffending involved approximately 40,000 sexual offenders. They found that PPG measure of deviant sexual arousal to male children was the single most distinguishing marker for sexual recidivism. In a second meta-analysis of 91 studies of 31,000 sexual offenders, Hanson and Morton-Bourgon (2005) found further justification for PPG results related to child stimuli in relation to sexual offense recidivism. They reported that phallometric measures of any deviant sexual interest and sexual interest in children were significantly related to sexual recidivism. Most recently, in an updated meta-analysis, Mann et al. (2010) found that measured sexual interest in violence was itself a significant risk factor for sexual recidivism.

PPG and the Polygraph

Laws (2009) described a personal communications with Thornton (5 April 2007), who has integrated the PPG and the Polygraph procedures for assessment and treatment. In Thornton's procedure, the client is instructed during PPG testing to allow himself to become sexually aroused with no attempt to control his response. The second phase is called the "enhanced non-suppression PPG." The procedural instructions are the same, except the client is asked a series of questions about the sexual stimulus 30 s after it has terminated.

The purpose is to encourage the client to process more deeply. Later, after the PPG, the client undergoes a polygraph examination focusing upon his compliance with PPG pretest instructions; he is asked more generally whether he deliberately tried to distort the results.

Clearly, while issues regarding PPG use have been raised and considered, it remains a primary method for the assessment of sexually deviant interests. The popularity of the PPG is irrefutable given its widespread use throughout North America. In a survey of North American treatment programs, out of 330 community-based programs for adult male sex offenders in the United States (U.S.) and 19 in Canada, 27.9 % of the U.S. programs and 36.8 % of the Canadian programs measure sexual interest reported using the PPG. Residential programs' use of the PPG is even higher. Of 85 U.S. residential programs participating in the 2009 North American Survey, 36.5 % were using PPG assessments, and of 8 Canadian programs, 87.5 % were using it (McGrath, Cumming, Burchard, Zeoli, & Ellerby, 2009). Hecker, King, and Scoular (2009), in their investigation of alternative approaches to the measurement of sexual interest, referred to the PPG as the "gold standard" for measuring sexual interest because of the extensive research literature of phallometric testing and the strengths and limitations of plethysmography are well know.

Some of the drawbacks to PPG that exist are simply logistical ones, For instance, equipment, laboratory space, and time required in setting up a lab and prepping for a test are expensive. Also, staff training can be both expensive and time-consuming. This likely means that the smaller program providing sex offender treatment is at a disadvantage without cooperative arrangements to refer clients to other facilities for PPG assessment.

Ethical Concerns with PPG Use

Few topics in North American culture draw as much attention and controversy as the subject of sex. Therefore, it should not be surprising PPG examination of sex offenders causes many to worry about ethics regarding its use with adolescent and adult offenders. The ethical challenges related to the fact that PPG stimuli are designed to evoke deviant sexual arousal and that the testing is intrusive. Examples of related concerns mentioned in the PPG literature should be considered (Association for the Treatment of Sexual Abusers, 2001; British Psychological Society, 2008; Marshall, 1996):

- Explicitly deviant stimuli can be seen as providing tacit approval for the material.
- Exposing impressionable juveniles and adults to explicit deviant stimuli material might shape future sexual interest patterns.
- Stimuli are inherently degrading to women and children.
- Exposure to explicit sexually deviant stimuli can produce anxiety, nervousness, depression, and other emotional upset.
- Lab procedures that require the subject to self-stimulate to achieve maximum arousal can increase subject embarrassment and humiliation, and may be contrary to religious beliefs.

These concerns have dampened research enthusiasm as well as "caused" the reluctance of human research ethics committees or Institutional Review Boards (IRB) to permit PPG studies has made it even more difficult to address the empirical limitations identified by some writers (Marshall, 1996; McAnulty & Adams, 1991; Murphy & Barbaree, 1994).

Here are some of the "Do not's" associated with PPG testing recommended by Marshall (1996) and British Psychological Society (2008):

1. Do not use PPG testing results as the sole criterion for determining deviant sexual interests.
2. Do not use PPG testing alone for estimating risk for engaging in future sexually abusive behavior.
3. Do not use PPG testing results exclusively regarding recommendations to release clients to the community.
4. Do not use PPG testing to determine that clients have completed a treatment program.
5. Do not use PPG test results to draw conclusions about whether an individual has or has not committed a specific sexual crime.
6. Do not test an individual with sexually transmittable diseases until their symptoms are in remission.
7. Do not interpret PPG results in absence of other relevant information to determine risk and treatment needs.

Yet some of these recommended prohibitions have been refuted. Regarding risk assessment, the available data (e.g., Hanson & Bussière, 1998, 2004; Marshall & Fernandez, 2000; Mann et al., 2010) from three meta-analysis studies clearly demonstrated that PPG results regarding deviant sexual arousal are significantly associated with future sexually abusive behavior.

Caution is recommended when using PPG results with clients who are developmentally disabled or have acute major mental illness based upon the paucity of normative data for these populations and the invasiveness of the techniques (National Clearinghouse on Family Violence, 1998). Also, the developmentally disabled population may, for example, have difficulty accurately perceiving the stimuli because of limited ability to discriminate the age and gender in each of the presentations in the assessment, and they might have problems associated with understanding the self-report

procedure (Haaven & Schlank, 2001). Also, it is clear that PPG results must be interpreted and applied in conjunction with other relevant information to determine the risk and treatment needs of a particular sexual offender.

How *Should* the PPG be Used

Lalumière and Harris (1998) offer a list of best practices for optimal discrimination using phallometric testing. They recommend the testing involves:

- Use of images that best discriminate age and gender preference.
- Use of graphic and violent audio narratives that best discriminate preference for coercive sex.
- Use of more than one stimulus per category (2–5 stimuli recommended by Lalumière & Quinsey, 1994).
- Collection of data tracing after the stimulus presentation has ended (recommended at least 30 s).
- Computation of a "deviance differential" index of relative preference between deviant (child or coercive sex) and nondeviant (adult or consenting sex).
- Using *Z*-score transformation to address individual differences in responding (high vs. low responders) to improve discriminate validity, or percent of full erection (PFE). Both methods are believed to provide good validity values.
- When auditory stimuli are used, the employment of anti-countermeasure procedures are recommended for use (such as semantic tracking tasks) to detect faking and encourage subject compliance.

The British Penile Plethysmography Guidance for Psychologists' (British Psychological Society, 2008) instructions on good practice indicate the clinical purpose of the PPG is to provide physiological evidence of patterns in sexual arousal, facilitate participant acknowledgement of their sexual arousal/interests and their engagement in treatment, develop formulation of problematic or offense-related sexual behavior, assist treatment and risk management planning, assist in measurement of changes in sexual arousal/interest, and again emphasize that PPG should not be used to establish guilt or innocence regarding offense behavior. It further indicates responsibility for correct administration, interpretation, and supervision of the PPG assessment should rest with a supervising psychologist who has substantial up-to-date knowledge of the relevant literature, practice, legal and ethical issues surrounding PPG assessment, and substantial experience working with men who have committed sexual offenses.

Establishing and Administering a PPG Lab

It is best to standardize PPG laboratory facility and operating procedures with other PPG labs to obtain greater confidence that assessments are done correctly. Jensen and Laws (1994) provided helpful videotape instruction on the "How-To" of phallometry where the viewer is walked through the physical layout of the lab facility. This author has also inspected a number of labs in California, Washington State, and Toronto. The common theme found in each of these labs is that the physical facility maximizes privacy and minimizes distraction. Typically, the subject is placed in a separate room from the lab technician with a window that permits the technician to both observe and communicate with the subject. Some labs are including audio/video equipment. It can be prudent to video record the administration of the PPG session to discourage false claims that the subject was embarrassed by being required to be exposed to the examiner. Also, the recorded session can be viewed afterward to look for so-called countermeasures (T. Buttle, personal communications, February 8, 2010). The need for countermeasure detection is underscored by the discovery that some males are able to bias or invalidate results by suppressing their arousal, and in some cases they are able to increase their arousal (Abel, Blanchard, & Barlow, 1981; Adams, Motsinger, McAnulty, & Moore, 1992; McAnulty & Adams, 1991). A well-trained technician pays close attention to potential cues suggesting deception such as furtive hand and arm movement, breathing rhythm changes, and unusual erectile tracing patterns displayed on the computer monitor.

The subject's room should have a comfortable, washable chair. Covering the chair with disposable paper medical drape sheets ensures good hygiene and conveys a message that the testing is conducted in a professional environment. The visual stimuli used today are usually displayed using a full-size television or computer monitor that is sufficiently large to dominate the subject's visual field. The room lighting should be dim and the subject should not be distracted by other objects or noises. When using audio presentations alone, you may use small computer speakers, or an audio headset that can be cleaned after each testing. Additional equipment connected to the computer includes the following:

- Mercury strain gauge, which the subject places on his penis in private outside of the view of the technician
- Visual and semantic tracking device such as a keypad, which is used to track the subject's attentiveness, provide self-report of erectile response, and encourage compliance with testing procedures

- Pressure sensor seat pad to detect artifact movement
- Respiration measuring device to monitor breathing pattern

The subject can cover his lap with a medical drape or put on a medical gown to avoid exposure when placing the gauge on the penis and during test administration.

The technician's room is designed to monitor and communicate with the subject during testing. Although a great deal of technological advancement has occurred since Kurt Freund developed the PPG device in 1957, fundamentally little has changed in the actual measurement of penile tumescence. Blood flow is still measured by change in the size of the penis. Most labs use an elastic circumference mercury strain gauge such as D. M. Davis, Inc., HgPC, which is durable and reusable when washed and soaked in a 10 % mixture of chlorine and water. The gauge is connected to a computer, which records electrical impedance that occurs as the penis expands, stretching the strain gauge placed around the circumference of the penis. Typically, software programs specifically designed for PPG testing transmit video, audio/video, or audio stimuli to the monitor and speakers.

The goal is to administer stimuli that will elicit erectile responses sufficient to discriminate between deviant and nondeviant interests. Problems can occur with stimuli such as the Auditory Stimuli for Penile Plethysmography (1993) that include vague audio stimulus descriptions such as, "You are with a young girl…the age you like the most." The subject may visualize that the "young girl" in his mind is a 6-year-old child and become sexually aroused, but then report he imaged the "young girl" to mean an 18- or 19-year-old female. To avoid this type of deception or confusion when using such audio stimuli that doesn't clearly state the age of the sexual partner, the technician or the stimuli materials should give clear and specific instructions stating what the age category will be on each stimulus prior to beginning the assessment, and reinforcing the instructions periodically throughout the testing session.

A variety of types of stimuli have been produced over the years (film, videotapes, slides, audio recordings), but not all stimulus sets generate discriminating responses from the subject. For example, Abel and Blanchard found that videos generated the greatest levels of arousal, but that the strong arousal obscured differential responding, that is, the video overstimulated the subjects causing undifferentiated arousal to deviant and nondeviant stimuli (Marshall, 2006a, 2006b). Conversely, other stimuli sets may not be sufficiently arousing to generate meaningful erectile responses. Further, the duration of stimulus time matters. In a study of 31 child sex offenders aged 21–44, Avery-Clark and Laws (1984) reported that there was a significant difference in the arousal levels achieved between 2 and 4 min of stimulus presentations, suggesting the need for stimuli presentation longer than 2 min; a recommended stimulus time is 3 min. Another important consideration is at what point should the sexually significant event identifying the deviant or nondeviant theme occurs during the sexual vignette in the audio stimulus (Marshall, 2006a, 2006b). If the audiotaped stimulus provides over a 2-min description of sexually arousing behavior and then only toward the end reveals that the sexual partner is a prepubescent child, it is difficult to discern to what the subject is responding. Marshall's finding suggests the introduction of the sexually deviant stimuli aspect of the vignette should occur early on in the stimulus presentation to remove doubt about what is arousing the subject.

Laws and Court Decisions Impacting PPG Use

The stimuli used in PPG testing of sex offenders have not been without controversy. The government of Canada allows the use of what might be termed pornography for scientific or clinical purposes (Howe, 1995), whereas this is not the case in the United States. Concern over distribution of child pornography and legal sanctions against transporting child pornography across state lines, even for evaluation or research purposes, have made it difficult to standardize PPG procedures across evaluation sites (Howe, 1995). In the United States, federal statutes and state laws exist prohibiting the use of nude images of children for the purpose of sexual arousal (e.g., Federal Law, 18 U.S.C. § 1466A (2008) § 1466A. Obscene Visual Representation of the Sexual Abuse of Children; California Penal Code 311.3 & 311.11, Obscene Matter of a Minor). Legal prohibition of images of children construed to be sexually abusive or obscene have encouraged the development of clothed slide images of children and audio stimuli depiction of deviant sexual behavior described above for use in PPG testing. However, research shows that audio stimuli is reasonably accurate when compared to the nude stimuli (Barbaree & Marshall, 1984; Fedora et al., 1992; Lalumière et al., 2003; Quinsey et al., 1975; Wormith, 1986), suggesting valid PPG testing has not been significantly diminished by governmental restrictions.

PPG Stimuli

There are a number of sources for standardized stimuli that can accurately classify deviant and nondeviant subjects and which have demonstrated reliability and validity. Some stimuli are encrypted and are only commercially available through the software manufacturers, so it may be necessary to purchase the hardware equipment and software products from commercial distributors such as Limestone Technology, Inc. and Behavioral Technology, Inc. in order to obtain the stimulus set. The apparent reason for this is to encourage

potential users to purchase their product. This competitive spirit may make good business sense, but it is unfortunate for professionals in the field who seek improved standardization because it limits ready accessibility, thereby discouraging published reports on the same standardized stimuli.

One recently standardized audio/video stimulus, Real Children Voices (RCV) (T. Buttle, personal communications, August 8, 2010), is more creative than many of the older stimuli versions found and may prove to better capture an individual's unique arousal profile. The RCV aural portion of the stimuli includes the voices of the sexual partners. In other words, the subject hears both the adult male talking about the sexual behavior and the voice of the child sexual partner responding as the sexual scene is enacted.

American Psychological Association Ethical Principles 9.03 (2010) requires informed consent be obtained for PPG testing. The subject must agree to volunteer for the testing. Otherwise his resistance is likely to sabotage the testing. It is important to recognize that few individuals find much enjoyment sitting in a chair in a monitored room for over an hour with a gauge on their penis and being directed to pay attention to a variety of deviant and nondeviant sexual stimuli. Preparation of the individual for PPG testing starts with helping the individual client reduce his anxiety by explaining the testing protocol and familiarizing him with the lab before he begins testing. An examinee needs to be trained on how to correctly put the gauge on and how to use the keypad or other devices that encourage his cooperation. He must sign his informed consent to the test and be reassured that the facility and gauge are clean and his privacy is respected.

The test instructions should be standardized. The easiest way to do this is by reading a prepared script describing the protocol, or as with the RCV, the protocol may be described on the subject's monitor to get him ready for the stimulus presentation (T. Buttle, personal communications February 8, 2010). This automatic protocol assures greater standardization. The instructions walk the subject through the testing, starting with how to put the gauge on. The RCV stimulus set begins with the subject in the chair reading instructions on the monitor that inform him about what to expect in each stimulus presentation, then inform him how to respond to the visual and audio attention cues, and how to rate his level of sexual arousal on the keypad. Then the examination begins.

The subject should be instructed before the examination date not to masturbate to ejaculation 48 h before the examination because the sexual refractory period can last from a few minutes to days, depending on age, frequency of sexual activity, and other factors (Crooks & Baur, 2008). To ensure subjects' compliance subsequent to PPG testing, he can be administered a polygraph test and asked if he engaged in dissimulation behaviors to bias the PPG results. Just prior to testing, it should be suggested that he take a restroom break. Also, he should be discouraged from consuming liquids such as coffee or soda beforehand because he will be sitting in a chair for over an hour with no restroom opportunity.

Administration of the PPG

Once the subject is in his seat and the testing has begun, the technician observes both the subject and the computer screen tracings displayed on the monitor. The technician monitors the subject's compliance with the testing protocol and may need to remind the subject how to correctly follow the anti-countermeasure cues. For example, with the RCV stimuli the subject is required to press the OK button on the response pad when the picture shows a different person from the one shown in the previous photo.

The technician watches for a subject attempting to "beat the test" by moving, tensing his muscles, not paying attention, holding his breath, or breathing rapidly. Keen alertness to countermeasures is necessary because research has shown that the phallometric test is easy to fake (Laws, 2003; Wilson, 1998). Indications of faking may also include a wavy arousal pattern viewed on the technician's computer monitor. This pattern suggests the subject is attempting to control his arousal. Similarly, a flat tracing pattern during the presentation followed by arousal after the presentation and continuing beyond 30 s also suggests the subject may be suppressing his arousal. It has also been reported that high responses to neutral stimuli may be another sign of faking (Freund, Watson, & Rienzo, 1988).

Interpreting the Data

Many labs use cutoff scores for low response levels. This author is aware of labs that use cutoff scores ranging between 10 % and 20 % of full erectile response. A full erectile response has been determined by various means, such as requiring the subject to masturbate to full erection and then stop before ejaculation, displaying highly erotic stimuli during a pretest examination designed to measure full erectile responses, and estimating average erectile circumference.

The masturbatory procedure is viewed as problematic. Many subjects are uncomfortable being monitored while masturbating and when full arousal is achieved it might influence tumescent response to subsequent stimuli. Others object to the masturbation procedure because of religious reasons. Viewing highly erotic stimuli before testing might also exaggerate sexual responsiveness during the test administration.

An estimated range of full erection, a preferred procedure in this author's opinion, was reported to vary from between 25 mm to 30 mm, until the results of Howe's (2003) study of

circumference scores were obtained from 724 respondents at nine North American correctional facilities. He reported that flaccidity to full erection for male sexual offenders has a mean of 32.6 mm and a standard deviation of 8.8 mm, and the scores are normally distributed. Ninety-five percent of circumferential change scores can be expected to fall at or below 47 mm. He contended that using anything less than 47 mm as an estimate of full erection is unacceptable by conventional scientific standards. Following this recommendation, 10 % erectile response converts to about 4.5 mm, 15 % 7 mm, and 20 % would be about 9 mm. For clinical purposes with circumference measurement, we use 10 % percentile response as the minimum response level. If the subject does not achieve 10 % erectile response to any of the stimuli, then he is classified as a nonresponder, meaning his responses were too low to interpret the PPG results. Fifteen percent and 20 % erectile responding is often used as the cut score indicating some minimal degree of sexual arousal.

However, Lalumière and Harris (1998) indicated that cutoff scores might not be needed. They reported that they were unable to find any minimum response level that increased validity. They noted that there is no discriminant validity data of which they were aware of that supported declaring low responder data as useless, except when responses to the neutral stimuli are higher. They also argued that there is a mathematical advantage to using standard scores because one can obtain information from low responders that is just as good as from high responders. One might question the advisability of interpreting data on low responders knowing the circumferential strain gauge is inaccurate below 2.5 mm, and low levels of responding might not be due to sexual arousal (Barbaree et al., 1999).

This author recommends use of both standard score and percentage of full erection (PFE) when interpreting data in the clinical setting. The clinician will oftentimes discover that the PPG results reflect the same rank order of age and gender preference using either the *Z* score (standard deviation from the mean) or PFE. This means that the individual's sexual arousal profile looks about the same regardless of whether the raw score is converted into *Z* scores or percentage of full erection. If the individual has higher sexual arousal to children than to adults, both measures are likely to reflect this same arousal pattern.

After each presentation has ended, the circumference tracing should continue to be collected for at least 30 s (Barbaree et al., 1999). I have observed with older subjects their sexual responsiveness is generally more gradual and takes longer than 30 s before reaching peak arousal. Therefore, you may want to continue to observe the tracing another 30 s. The next presentation should not begin again until the subject has returned to baseline. Unfortunately, some subjects may never return to their original flaccid baseline during the testing session. For example, in some cases a subject may have a stable baseline reading of 95 mm after placing the gauge on his penis, and then after 30 min his baseline drops 10–85 mm. Others might become aroused during a presentation and not return to the original baseline during the rest of the session. Variation of baseline of 3 mm appears to be acceptable (W. Burke, personal communication, July 10, 2009) and will not affect either the *Z* score or PFE because data collection begins at the start of each presentation. In cases where there are dramatic baseline shifts, one has less confidence in the accuracy of the data.

In a clinical practice, the PPG results may be of limited value unless the findings are shared with the subject; sharing results may provide the impetus for a particular subject to move past denial and minimization and help focus and motivate the individual to address his deviant sexual interests as treatment needs. During the testing the subject has been asked to estimate the percentage of his highest erectile response after each presentation. Therefore, it makes sense to provide him with the findings of the PPG in PFE as well. It is not uncommon for the subject to report during the testing that he was not aroused by any of the stimuli. Therefore, it may also be helpful to show him his arousal-tracing pattern of PFE on the computer monitor to assist in effectively communicating the PPG findings. This is an important juncture of communication between clinician and client. The client may have started the PPG session admitting to his offense behavior, but denying any ongoing deviant fantasies or urges. Presented with the results of a PPG, this may change; that is, an examinee presented with evidence of demonstrated sexual arousal to deviant stimuli might subsequently acknowledge recent or current experience of deviant sexual fantasies or urges (Schwartz & Cellini, 1999). This writer has heard candid admissions of sexual deviance on countless occasions after PPG testing results are shared with the subject.

Lalumière and Harris (1998) recommended using deviant index scores to determine the presence of deviant sexual interest (e.g., highest average deviant score to children minus highest average nondeviant score to adults). Their reasoning is that computing a numerical deviant index score enhances validity. They also indicated that if one obtains a single clinically significant score suggesting arousal to children, for example, but the deviant index does not support the conclusion of sexually deviant interest, one does not give weight to the deviant score because the subject's average sexual preference is not deviant. This author argues that in testing individuals with a history of inappropriate sexual contact with children, even a single clinically significant "hit" (e.g., response) to a child or sexual violence is clinical information that should not be ignored. Such information provides an important starting point for a dialogue with a client who may be denying or minimizing his interest in children. The clinician needs to bring this finding to an examinee's attention and ask him if he was aware of his arousal; under what other

circumstances this arousal has occurred; how often it has occurred; frequency of recent deviant sexual thoughts; and frequency of fantasies about children during masturbation. Faced with evidence of his sexual arousal to one deviant stimulus even when he had greater responsiveness to adults, the client may become more inclined to identify transient or persistent sexual interests in children. This is especially true when the findings from a PPG examination are combined with those of VRT (Maram & Koetting, 2004), and then further clarified when followed by a polygraph examination. The value of the polygraph in revealing previously unknown sexually deviant behaviors was demonstrated in a study of 109 individuals under the jurisdiction of the Colorado Department Corrections (Ahlmeyer, Heil, McKee, & English, 2000). The researchers reported the mean number of victims revealed by Presentence Investigative Reports and Sexual History Disclosure form nearly doubled from a mean of 61 to 109 victims after the first polygraph.

Court Challenges and Research Regarding the Penile Plethysmography

In U. S. v. Powers, 59 F.3d (1995), the Federal court determined the penile plethysmograph test did not meet the scientific validity prong of Daubert. Laws (2003) summarized the legal literature surrounding the admissibility of PPG evidence in court as follows: (1) the technique has been tested; (2) it has been peer reviewed and published; (3) the procedure has a known or potential rate of error; (4) there is standardization for operation and the PPG is generally accepted in the scientific community. Laws then opined PPG should not be accepted in Daubert. He indicated that to some extent items 1 and 2 have been met. The PPG has been tested thousands of times, and with highly unvariable results. Also, it has been peered reviewed and published hundreds of times. However, the absolute error rate is unknown (item 3), and adequate standards do not exist for administration of the procedure, failing to meet the criteria of item 4. In Powers it was argued that the district court erred in excluding the testimony that the penile plethysmograph test did not indicate pedophilic characteristics. The district court excluded this evidence because, in its opinion, the test did not satisfy the "scientific validity" prong of Daubert. The U.S. Court of Appeals 4th Circuit affirmed the lower Court's ruling, excluding the PPG results. However, the court also noted the plethysmograph test is "useful for treatment for sex offenders" and permitted the district court to impose this condition on an individual as part of their supervised release from custody. This particular decision prohibited the use of PPG results in the guilt phase of Federal criminal proceedings, but allowed it to be used in treatment.

In Berthiaume v. Caron, 142 F.3d 12, 1st Cir (1998), the PPG was described as "an accepted tool" and "a standard practice" in the field of sex offender treatment. Barker and Howell (1992), at the time, reported that there was much research to support the claim that the penile plethysmograph is a reliable and valid method of assessing erectile response in male sex offenders. They concluded that while the PPG is the best objective measure of male sexual arousal and could be useful in assessing and treating sex offenders, caution still must be exercised because of its limitations. These limitations included a lack of standardization, a high incidence of both false negatives and false positives, and the use of the PPG unsupported by other data as a predictive test. Barker and Howell (1992) suggested that the PPG is most effective in predictive situations when it is used in conjunction with multiple data sources.

In State of North Carolina v. Spencer, 459 S.E. 2d 812, 815, N.C. Ct. App (1995), the court reviewed the literature and case law and concluded that penile plethysmography was scientifically unreliable. They concluded that despite the sophistication of the current equipment technology, question remains whether the information emitted is a valid and reliable mean of assessing sexual preference.

In a more recent review, it was reported that a substantial amount of research data has been gathered and reviewed, and significant steps have been taken toward standardization. According to Launay (1999), "[T] he the validity of the technique for research and clinical assessment has been is now established."

Other than in the guilt-determination phase of court proceedings, phallometry is now widely considered appropriate for treatment and supervision of convicted sex offenders. The courts are now permitting plethysmographic testing for monitoring compliance of sex offenders with the conditions of their community placement as part of crime-related treatment for sexual deviancy (Sachsenmaier & Peters, 2002).

The scientific validity and reliability of the procedure has also earned acceptance in many jurisdictions during the presentencing stage of criminal proceedings, as well as for the parolee or probationer who is under community supervision. The standard of evidence required need only be sufficient indicia of reliability to support "probable accuracy," a standard analogous to preponderance of the evidence; this is a standard less stringent than the Daubert standard (U.S. v. Silverman, 976 F.2d, 1992; U.S. v. Herrera, 928 F.2d 769, 772, 6th Cir, 1991; U.S. v. Lee, 1998). As a result, the Courts are now more routinely upholding the use of PPG testing in administrative law cases and with probationers for evaluation and treatment (Berthiaume v. Caron, 142 F.3d 12, 1st Cir, 1998).

The debate over PPG use is not limited to the United States. In Canada, the Canadian Supreme Court (R. v. J.-L. J., 2000) ruled against admitting penile plethysmography into

evidence in a case in which a psychiatrist (who was a Canadian pioneer in the field) attempted to testify about the results of the penile plethysmography (previously recognized by the Courts as a therapeutic tool), as a forensic tool in criminal procedures. Similar to the United States, the court opined that although PPG test level of reliability in a court of law was not necessarily sufficiently reliable to identify or exclude an accused individual as a potential perpetrator of an offense (a criminal application), they identified it as quite useful in therapy because it yields information about a recommended course of treatment.

In summary, court rulings thus far have not provided a bright line regarding the admissibility of the PPG in court proceedings. Generally speaking, the PPG is not allowed in the guilt phase of criminal proceeding (an exception to this will be discussed later from People v. Stoll, 1989). The PPG, however, may be allowed in the sentencing phase of court proceeding, is often introduced during Sexually Violent Predator cases and in other civil proceedings, and is permissible for use in sex offender treatment.

Summary on Penile Plethysmograph

The PPG has been in use for sex offender assessment and treatment for over 50 years. Although there are a large number of published articles on the subject, there continues to be controversies regarding its validity and reliability. In particular, concerns have also been expressed as to the lack of common standards and procedures and the variability of PPG administration, results, and interpretation. Consequently, some have suggested and continue to believe that using the PPG is more of an art than science (Laws, 2003, 2009). Others strongly support its role in clinical assessment (ATSA, 2001, 2013; Marshall & Fernandez, 2003) and point out that although the procedure may show varied standardization, there are recognized functions for its use that share common aims and features and utility (O'Donohue & Letourneau, 1992), such as treatment planning and hypothesized motivation of the underlying offense.

The recommended procedures described here include using a lab that ensures privacy and discretion; using discriminating stimuli that have been standardized and validated; carefully screening the PPG session for faking; using video recording as well as other devices that require the subjects' consistent visual and auditory attention; and using measures to check breathing and muscle movement to reduce threats to reliability and validity. In a clinical practice, it is important that data be shared with the client in a manner that is readily understood. Therefore, during the posttest interview, it is recommended that data interpretation be shared in "percentage of full erection" to encourage a client to report his inner deviant experiences and actual behaviors with greater openness and accuracy. The presence of any significant deviant arousal, even when there is greater average arousal to adults, is important clinical information and should be included in the dialogue with the client.

At present, the PPG continues to be the most sensitive and reliable available physiological measure of sexual arousal (Howe, 2003). However, until there is a convergence of standardization, the PPG will continue to be colored by controversy, and its admissibility in court for certain functions will remain uncertain. Effective sex offender assessment requires leadership and communication to establish professional consensus, to yield agreed upon standards of practice in which improved validity and reliability studies can follow. In the interim, although the clinician must rely upon less than ideal guidance when administering and interpreting PPG data, in this author's opinion, there are sufficient arguments supporting its value to justify its continued use in clinical practice.

Viewing Time Measures

Several other measures have been used in an attempt to reliably measure sexual arousal and interest. These include facial electromyography, measures of penile temperature, volume, circumference, and motion (Krueger, Bardford, & Glancy, 1998). It is postulated that sexual arousal is not a unitary construct and identifies three stages of sexual attraction in males: (1) aesthetic response, a hedonic feeling response to the sexual stimuli in which the individual may keep the object of interest in view; (2) an approach response where the individual moves toward the sexual object of attraction with a desire for body contact; and (3) the genital response characterized by greater penile engorgement. The third stage is the purview of the PPG, which was the subject of the previous discussion in this chapter. An increasingly popular method for assessing sexual interest involves Visual Reaction Time (VRT) measures, which rely on increased visual response to potential objects of attraction (or the first component of Sing's model, the aesthetic or hedonic response).

Abel, Jordan, Hand, Holland, and Phipps (2001) reported visual reaction time measurement was originally based on the work of Rosenzweig (1942). Rosenzweig, in a study with 20 schizophrenics using the photoscope, was the first to report that VRT was a good objective device for identifying sexual interest. Subsequently, Wright and Adams (1994) (in a study of 80 subjects using a VRT test) found that sexual arousal interfered with cognitive processing. Specifically, they found that individuals showed a longer reaction time to slides depicting preferred sexual partners than to nonpreferred sexual partners or neutral scenes.

Abel et al. (2001) addressed the difficulty and the importance of determining what motivates a person to sexually molest a child when developing an effective intervention

strategy to prevent future molestations from occurring. Support for the use of VRT as a measure to differentiate child molesters from non-child molesters and to identify individuals who are concealing their interest in children has been repeatedly reported in the literature (Abel et al., 1998, 2004; Harris, Rice, Quinsey, & Chaplin, 1996). Although Harris et al. (1996) reported that VRT was less intrusive than the PPG and significantly discriminated between child molesters and normals, they also noted the PPG was still better at discriminating these categories than VRT measures. Maram (2005; Maram & Koetting, 2004) found that use of VRT and the PPG incrementally increased discriminant validity, especially with child molesters of male youth. This finding supports the combined use of these instruments in the clinical setting.

Perhaps the best-known and most frequently used VRT measure is the *Abel Assessment for sexual interest*™ (AASI). The AASI has hundreds of licensed sites throughout North America authorized to administer the AASI testing instrument. The AASI was developed to function as a viable alternative to the PPG (Abel Screening, Inc. 2004). The licensed site setup cost to run AASI testing is significantly less than what is required for a PPG lab. The test comes with a training manual, Abel and his associates conduct training workshops several times a year and there is an online examination for qualified users. In addition, Abel and others at Abel Screening are available for consultation. In comparison to the PPG setup cost for the hardware, software, office space, laboratory equipment, and training, the AASI is a particularly economic alternative. In addition, it is not nearly as intrusive as the PPG (no one has to take their clothes off or attach devices to their genitals) and it does not cause the anxiety and distress often experienced by individuals taking the PPG. Using AASI as an inexpensive replacement to the PPG can be appealing to many sex offender evaluators and treatment programs and may explain the popularity and wide use of this instrument. However, as previously indicated, using the AASI and the PPG together has the advantage of increasing the individual's candor and willingness to cooperate with treatment.

Both the AASI and PPG have advantages and disadvantages based on the specific methods used. Although PPG and VRT measure different phenomenon, they both should be at least conceptually related to sexual interest and sexual attraction.

Research and development of the AASI demonstrated the test has criterion validity based on its ability to discriminate between non-child molesters and admitting child molesters. Abel has also demonstrated that the AASI was resistant to falsification based upon a statistical regression model designed to discriminate between "lier-deniers" child molesters and non-child molesters (Abel et al., 2001).

About the AASI

The AASI is a two-part examination. The first part is the VRT procedure relative to images of individuals of varied ages and races as well as a detailed questionnaire examining sexual interest, arousal, and behaviors. Both VRT data and self-report data are used together to assess respondents' sexual interest(s) and to calculate probability values that reflect the likelihood that a respondent has pedophilic sexual interests (Abel et al., 2001) The VRT is an ipsative measure, meaning the individual's standard scores are not normed to others, but compared only to the individual's personal scores to the visual stimuli administered as part of the procedure. In other words, the person's sexual interest to images of children, adolescents, and adults is normed only for the individual and is not compared to others.

Questions About AASI Reliability and Admissibility in Court

Like other assessment instruments, the AASI-2 has its detractors and its admissibility in court has been challenged. Smith and Fischer (1999) reported in their study that the Abel Assessment for Interest in Paraphilias used with juvenile sexual offenders in residential and day treatment failed to demonstrate adequate reliability and validity. They concluded there was no evidence that the test produced reliable scores for adolescents that could screen deviants from normal individuals or could diagnose specific pathology in deviant subjects. Abel et al. (2004) responded to Smith and Fischer's article with a counterargument to their criticism, citing numerous flaws in their study, the most central of which was the authors' failure to determine whether members of their control group were really "non-child molesters" or lacked sexual interest in children. The importance of this determination was underscored in a 2001 study (Zolondek, Abel, Northey, & Jordan, 2001) that reported information gathered from 485 males younger than 18 who were being evaluated as possible juvenile sex offenders. More than 60 % reported involvement in child molestation. Of the boys who reported never being accused of child molestation, 41.5 % reported they had molested a younger child.

Abel (personal communication, February 5, 2008) indicated that the AASI should not be used in making a diagnosis, nor does he claim it to serve that purpose. He pointed out that not all sexual abusers of children have a sustained sexual interest in children. He describes unpublished data showing VRT sensitivity as .44 and specificity of .81 when using a very high cutoff score to limit false positives. His study was based on 7,773 admitted sexual abusers of minors (children

or adolescents) and 365 non-sex offender community volunteers. He notes, "the sensitivity would be even higher if one only considered individuals who sexually abused children instead of combining the sexual abusers of children and sexual abusers of adolescents."

Letourneau's (2002) study demonstrated the utility of the AASI with adult male offenders. She investigated the reliability and validity of VRT and PPG in a sample of 57 sex offenders incarcerated at a high-security military prison. She reported the results indicated adequate internal consistency for both measures. The convergent validity and assessment of clinical usefulness indicated that both measures accurately identified sexual offenders against boys. The VRT, but not the PPG, also significantly identified offenders against adolescent girls. However, neither measure reached statistical significance in identifying offenders against adult women or against young girls.

The AASI has been used in various criminal court proceedings and on numerous occasions has been ruled as admissible evidence. For example, in U.S. v. Stoterau, 07-50124 524 F.3d 988, 9th Cir (2008), the district court ruled that Mr. Stoterau could be subjected to the AASI as a condition of his supervised release. Similarly, the Ninth Circuit, Central District of California, ruled that the district court may require AASI as a condition of supervised release (2006). The U.S. District Court of Louisiana ruled the AASI met the Federal Daubert standard (G. Abel, personal communications, February 5, 2008).

However, the AASI has not been uniformly accepted by all the courts. In Ready v. Commonwealth of Massachusetts, 2002, the AASI was found not to meet the Daubert standard for scientific validity because the original research study that developed the "rule of thirds" used to score the VRT (The "rule of thirds" refers to the cutoff score used to determine if sexual interest to an age and gender category was detected by the test) was never published (G. Abel, personal communications, February 5, 2008).

The AASI, as well as the PPG and polygraph examination, results are admitted into evidence generally without challenge when both sides stipulate to its use in an evaluation of sexual interest and arousal. Additionally, the California Superior Court has ruled that an expert may rely on standardized psychological tests in formulating an expert opinion (People v. Stoll, 1989). This allows the expert to offer an opinion about an individual's character relying upon their assessment of the individual using standardized testing such as the AASI, PPG, and polygraph without the Frye standard applying, which prohibits admissibility of evidence in the court of new or novel scientific techniques that are not generally recognized as sufficiently established by the scientific community (Frye v. United States, D.C. Cir, 1923, 293 Fed. 1013). In other words, in Stoll, the scientific technique(s) which formed the basis for the expert's testimony are not required to be tested as generally accepted by the scientific community. This opens the door for ethical issues since Stoll allows the defendant to present expert opinions of good character to show non-commission of a crime. However, an expert may not ethically report the findings of the AASI, PPG, and polygraph as evidence that the individual did not commit a sexual offense.

VRT in the Clinical Setting

Using the AASI in the clinical setting is fairly straightforward. Testing should be conducted in a location that minimizes distraction. Testing begins after the individual receives standardized instructions and successfully completes a practice test of 15 slide images. Following the practice session, the client is administered 160 slide images of the AASI on a computer screen. The slides consist mainly of clothed male and female models (there are no nude images) of different ages, ranging from age two to adulthood. The client is instructed to imagine being sexual with each image and then after becoming familiar with each slide, they are to indicate their perception of how aroused or disgusted he or she would become by the idea of being sexually involved with the slide image depicted. The individual indicates their degree of "disgust" or "arousal" by pressing numbers ranging from 1 to 7, which ranks the image from a "1" of very low interest and highly disgusted to a "7" which indicates the image is highly sexually arousing. Approximately, a client requires30 min to complete the VRT.

The second part of the AASI test is a comprehensive questionnaire concerning sexual interest, arousal, and behaviors, as well as questions about history of sexual abuse, cognitive distortion questions about statements which individuals who molest children often endorse, and social desirability questions to assess the individual's willingness to be truthful. There are different versions of the questionnaire for men, women, adolescent boys and girls, and special needs populations. Typically, the questionnaire requires about 45–60 min to complete. However, some individuals agonize over their responses to questions and take much longer. For clients with reading, cognitive problems with special needs, evaluators may need to anticipate at least 2 h and/or multiple testing sessions to complete the questionnaire.

Disingenuous responding or faking is an obvious concern of any type of psychological testing. As discussed previously, PPG is vulnerable to faking. Lanyon and Thomas (2008) reported that no research on AASI could be found that utilized non-admitters or deliberate faking. They concluded that the ability of VRT procedures to detect deceptive responders is unknown. Gray and Plaud (2005), in an investigation of test sensitivity of PPG and AASI with 63 participants (17 subjects were excluded because of low

responding on PPG testing) in an outpatient treatment program. Reported that both the AASI and PPG measures were able classify pedophiles to a high degree. The plethysmograph was able to classify 65 % of the participants correctly, while the AASI was able to correctly classify 79 % of those participating in this study. Gray and Plaud (2005) also observed what they referred to as a reflective responder, i.e., individuals who attempt to employ dissimulation on the AASI. They devised a formula to be used with the Abel Assessment graphs to detect for reflexive responders and report significant improvement in sensitivity.

THE AASI provides interpretation and training to its authorized users on the administration and interpretation of an individual's test results. The data from a particular test administration is electronically transmitted back and forth between Abel Screening, Inc. and the evaluation site. The raw data is computer-scored and returned as a sexual interest graph, which displays eight bars of the appropriate ethnicity, gender, and age category for the Caucasian and African-American client. Each bar has a *Z* score associated with each of the two age and gender categories of children, plus two gender categories of adolescents and adults, totaling eight individual age and gender categories. There are also other potential paraphilic interests measured, the most significant of which are the measures of sexual interest in male and female adult object sadomasochism. Bars at or below the vertical cutoff score (using the rule of thirds as the cutoff determinate) showed on the graph reflect suspected high sexual interest in that category. For instance, a client may have bars at or above the cutoff of adult females, adolescent females, and male children 2–4 years old. This profile suggests the individual appears to have sexual interest in adult and adolescent females, with suspected interest in prepubescent children. The mathematical formula used to calculate the *Z* score is proprietary information and not available for public dissemination. There has been criticism of AASI about secrecy surrounding the specific mathematical formula embedded in the test interpretation. Abel (Personal communications, February 5, 2008) defended this position saying the release of such information would compromise the test's utility for future test-takers. He maintains the accuracy and validity of the AASI, like the majority of psychological tests, is partially dependent on the test-taker not knowing how the test works. Also, to disseminate such information compromises the aspect of a naïve normative group. Further, as Abel noted, the Standards for Educational and Psychological Testing (specifically Standards 11.7 and 11.8) address such protection of copyrighted material. He pointed out with the advent of the Internet it is even more critical to safeguard the information that would compromise the usefulness of the test. In addition, Dr. Abel fully acknowledges his commercial interest in the proprietary nature of the software, which is within his rights protected under law.

Discussing the Result with the Client

After the individual completes the AASI testing, the clinician may discuss the test results with the client. More often than not, when describing the findings to a client with sexual interest detected to prepubescent children, the client reacts defensively and denies this attraction, sometimes claiming that they may have accidentally pressed the wrong number, or somehow used the computer incorrectly. It is helpful at this point to then discuss the results of the PPG, which generally reveals an arousal pattern to children similar to the AASI. Frequently, the resistive client begins to disclose more about their sexual appetite, but usually not everything. It is after the completion of the AASI-2, PPG, and then the polygraph examination that the client is likely to be most revealing about past sexual behaviors and current interests.

The Polygraph: Its History

Knowing what is truth and what is a lie has likely been a subject of conversation among people since language first evolved. Daniel Defoe in 1730 was not the first to suggest that "taking the pulse" was a practical and more humane method of identifying a criminal in his essay entitled "an Effectual Scheme for the Immediate Preventing of Street Robberies and Suppressing all Other Disorders of the Night." Defoe wrote:

> Guilt carries fear always about with it; there is a tremor in the blood of a thief, that, if attended to, would effectually discover him; and if charged as a suspicious fellow, on that suspicion only I would always feel his pulse, and I would recommend it to practice. The innocent man which knows himself clear and has no surprise upon him; when they cry "stop thief" he does not start; or strive to get out of the way, much less does he tremble and shake, change countenance or look pale, and less still does he run for it and endeavor to escape. (Matte, 1996)

In the 1900s, C. Lombroso, M. D. (an Italian criminologist) applied blood pressure-pulse test to actual criminal suspects on several occasions while assisting the police in identification of criminals. By the turn of the twentieth century, Verdin of Paris, a manufacturer of physiological apparatus, was producing ink-recording polygraphs with pneumatic tambours. Later, S. Veraguth (1907) began using word-association tests with the galvanometer. His observations of the galvanic phenomena and emotions noted that emotional complexes, unveiled in word-association experiments, made an ascending galvanometer curve, in contrast with the rest curve of non-crucial stimuli (as reported in Matte, 1996).

Larson, a University of California medical student, employed by the Berkeley California Police Department, invented the modern portable lie detector in 1921 (Matte, 1996).

Since then the polygraph has been used in many thousands of police interrogations and investigations and now is an essential part of many sex offender treatment programs. However, as with other psychophysiological measures, it is controversial among researchers and is not always judicially acceptable (Bellis, 2013).

Polygraph Research

Modern-day research conducted on psychophysiological veracity (PV), which is the polygraph examination, involves three types of validation studies: the analogue study, the field study, and the hybrid study. The analogue study employs a mock crime paradigm, whereas a field study involves testing of real-life suspects of criminal offenses. The hybrid study attempts to avoid weaknesses of both analogue and field studies by combing the best features of each. Most of the research conducted consists of analogue studies, which is problematic because the psychodynamics are quite different in mock paradigms (analogue) studies than in real-life cases. The analogue studies are appealing to researchers because absolute truth is known and it is easier to study because the investigator has complete control over the experiment. However, the analogue studies fail to duplicate three major emotions normally responsible for autonomic arousal in real-life suspects: fear of detection by the guilty examinee, fear of error by the innocent examinee, and anger by the innocent examinee. In spite of the shortcomings of analogue studies, many studies have shown remarkable results attesting to the validity of the PV examinations (Matte, 1996). In a field test of real-life criminal guilty knowledge tests (an investigation of 40 innocent and 40 guilty subjects), Elaad, Ginton, and Jungman (1992) reported that over 97 % of the innocent and nearly 76 % of the guilty subjects were correctly classified. Incredibly, some investigators have reported correctly identification of 100 % of innocent as truthful with no inconclusive findings and no errors (Mangan, Armitage, & Adams, 2008).

However, as a scientific tool, some researchers continue to find polygraphy of questionable validity (Iacono, 2008). Iacono considered the Mangan et al.'s methods flawed because the confessions in that study were obtained by the polygraph examiner who interrogated the examinee after deciding the test was failed. Iacono wrote, "Although largely ignored by the polygraph profession, this flaw inherent on confession-based field studies of polygraph validity has been known to confound these studies for over two decades. Hence, contrary to Mangan et al. (2008), their study design does not provide for an adequate estimate of polygraph test accuracy." (p. 25)

The American Polygraph Association website (http://www.polygraph.org), not surprisingly, reports studies more supportive of polygraph testing. They report researchers having conducted 12 studies of the validity of field examinations, following 2,174 field examinations, which reported an average accuracy of 98 %. Further, researchers conducted 11 studies involving the reliability of independent analyses of 1,609 sets of charts from field examinations confirmed by independent evidence, providing an average accuracy of 92 %. Researchers also conducted 41 studies involving the accuracy of 1,787 laboratory simulations of polygraph examinations, producing an average accuracy of 80 %. It was also reported that in 16 studies involving the reliability of independent analyses of 810 sets of charts from laboratory simulations, there was an average accuracy of 81 %. In summary, these studies indicate between 80 % and 98 % accuracy, giving strong support for the continued use of polygraph testing.

Polygraph: How It Works

The polygraph examination is really just a measurement tool of a person's autonomic nervous system. In the psychophysiological veracity (PV) examinations, the ear of the subject is the receptor that receives the potentially threatening question or stimulus from the polygraph examiner. The stimulus is transmitted from the ear to the reticular activating system (RAS). The RAS, part of the brain that regulates sleep–wake transitions, can influence the state of arousal depending on the nature of the stimulus. When a question is perceived as threatening, impulses trigger a sympathetic system response, which when activated prepares the body for "fight or flight" with secretion of hormones (epinephrine and norepinephrine). This causes constriction of the arterioles leading to the stomach, significantly reducing the amount of blood normally routed to the stomach, producing the nauseated feeling sometimes referred to as "butterflies." Norepinephrine affects the skin capillaries in the same manner, producing pallor in the face seen when one experiences severe fright, as well as coldness or clamminess of the hands and fingers due to the reduction in the volume of the blood in those extremities. The heart begins to pump blood harder and faster, increasing blood pressure, and pulse rate. Salivary glands in the mouth secretion change causing "dry mouth." There is a tensing of the involuntary muscles, in addition to constriction of the cardiovascular system, causing a tightening of the involuntary muscles in the stomach inhibiting diaphragm-intercostal muscular complex, causing less than average air intake at a time when the brain needs more than an average amount of oxygen because of increased mental activity. Consequently, stimulation of the respiratory muscles by the brain will also cause some breathing changes. Sweat glands are stimulated releasing perspiration, the iris of the eyes dilate, and contraction of the anal and urinary sphincters occurs, along with relaxation of the bladder (Matte, 1996).

When the test subject is presented with a threatening question, the previously described physiological reactions can occur. The polygraph instrumentation attached to their body records a variety of these changes.

There are numerous commercial companies supplying polygraph equipment (Lafayette Instrument, Axciton System, Stoelting, and Limestone Technologies). For about five or six thousand dollars, one can purchase a polygraph computerized system. The polygraph system uses four basic components to record the examinee's physiology. There are the thoracic and abdominal breathing devices consisting of two hollow corrugated tubes attached to a unit by a rubber hose and fastened around the subject's upper body with a beaded chain or Velcro® trap. This breathing or pneumo unit is low pressured and measures the inhalation/exhalation causing the tubes to expand and contract reflecting changes in the subject's breathing pattern (Matte, 1996).

The galvanic skin response component senses small changes in the skin resistance to electricity caused by the sweat glands activity in the bodies' fight or flight protective response to threat or danger. Galvanic skin conductance is measured by electrodes placed on the fingertips of the examinee's nondominant hand (Matte, 1996).

The fourth component is a cardio-sphygmograph, which measures blood pressure, rate, and strength of the pulse beat. The cardio-sphygmograph is a medical blood pressure cuff containing a rubber bladder that is wrapped around the upper arm against the brachial artery (Matte, 1996).

Before one can become a polygraph examiner, basic polygraph training is required. Accredited APA training generally consists of 12 weeks full-time residential training including theory and hands-on lessons with simulated cases, followed by several weeks of practical training with actual examinees. The topics covered include scientific foundations of polygraph, physiology, psychology, testing protocols, instrumentation, and interviewing and interrogation techniques. Regarding polygraph examination of sex offenders, APA By-Laws require a polygraph examination to be administered by a well-trained and competent polygraph examiner who has completed an additional 40 h of specialized instruction and certification training approved by APA on Post Conviction Sex Offender Testing (PCSOT). In addition, to maintain certification, 30 h of continuing education training is required every 2 years. Examiners conducting PCSOT are required to spend at least 15 h specific to the issues dealing with testing, treatment, or supervision of sex offenders.

The PCSOT examiner uses three screening tests: Maintenance Exam, Sex Offense Monitoring Exam, Sexual History Exam I—Victims, Sexual History Exam II—Compulsivity. The PCSOT diagnostic exams included: Instant Offense Exam—event-specific; Instant Offense Investigative Exam—multi-facet; Prior Allegation Exam—event-specific; and Prior Allegation Investigative Exam.

In practice, the types of polygraph examinations conducted in the PCSOT field are as follows (T. Tipton, personal communications July 23, 2007):

- Sex History examination: Covers several different activities and sexual behaviors, excluding the offense for which the examinee is on probation. Areas covered include past sexual habits, other victims, sexual deviance, sex abuse, physical abuse, alcohol/drug use, etc., during the examinee's lifetime.
- Disclosure examination: Specifically refers to the offense(s) for which the examinee is on probation. The test should be conducted if there is a significant discrepancy between the offender's version of the offense and the reported version of the offense. Used to assist in evaluating denial of offense.
- Maintenance/Monitoring examination: Refers to the period of time since examinee last took a polygraph examination, generally a 3–6 month period. Issues covered include compliance to probation/therapy rules, alcohol/drug use, contact with victim or minors, exposing or peeping, use of pornography, etc.
- Monitoring examination: Involves the commission of sexual offenses or other probation/therapy restrictions to a narrower line of questions. Focus on whether or not the offender had committed a sexual reoffense during the period of supervision.
- Specific issue/Incident examination: An exam concerning one issue or incident, identical to the disclosure in that it concerns one event, possibly travel out of state.

Although PCSOT coursework includes familiarity with the psychological issues relevant to sex offenders and some interviewing techniques (American International Institute of Polygraph, 2009), the polygraph examiner must acquire the knowledge and understanding of how a sex offender might think and feel about their sexual behavior and interests. The pretest and posttest interviewing skill required of a good examiner is an art that can be acquired with experience.

Working with the Polygraph Examiner

The polygraph examiner is an important member of the collaborative effort of a sex offender management strategy and must work closely with the community supervision officer and the sex offender treatment provider. Generally, the PCSOT are conducted in the polygraph examiners' office. However, this can create a time and information gap. Too often after information is revealed for the first time in a PCSOT and by the time the report reaches the clinician, the client has created a story to minimize the importance of the new information. Practically, what works best is when the supervision officer and clinician are both nearby during

the examination. This allows the examiner direct access to the officer and clinician and client to clarify issues and concerns that may arise during the pretest interview. Then, subsequent to the posttest interview, the officer and clinician appear in the examining room and hear directly from the client what he has disclosed to the polygraph examiner. The client still may attempt later to distort or somehow minimize any new revelations in his therapy group about his sexual behaviors and interests. However, the clinician is now better able to assist the client to remain on track.

Appling the PPG, AASI, and Polygraph in the Clinical Setting

Thus far, the history, science, and the application of the PPG, AASI, and Polygraph examination have been considered for the sex offender client in evaluative and clinical settings. Integrating these physiological tools is not a new suggestion, nor is it complicated. It was reported earlier that combining measures of sexual interest and arousal incrementally increases the validity of classifying individuals with sexual deviance. Thornton has also suggested combining the PPG and the polygraph to increase PPG sensitivity (Laws, 2009). Information obtained from polygraph examination can have obvious value to the individual's treatment as well as contributing to community safety. This information is enhanced by the obtaining data from the AASI and PPG. The combined results of these three procedures can be used to help the client better identify (and become more motivated to face) their problems associated with sexual deviance. It is suggested that the evaluator and clinician work closely with the client with deviant sexual interests, sharing findings reflective of sexual deviance on the AASI, which is likely to be denied, and then following that with information about deviant sexual arousal from the PPG. The next step requires the evaluator and clinician to communicate with the polygraph examiner about the individuals' testing results and have the polygraph investigation probe further about the individual's behavior. This layering and integration of information from AASI to PPG and polygraph can be expected to increase the client's treatment motivation. When an individual is candid about their internal experiences and past and recent behaviors, he can be encouraged and guided in treatment toward focusing on and overcoming psychological or criminogenic needs that contribute to the potential for sexual recidivism. Thus, the use and integration of psychophysiological assessment practices, over time, can provide an individual information and assistance in the development of a more balanced, nondeviant lifestyle, with the development of motivation, understanding, and skills to minimize the chances of sexual reoffending.

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Forensic Evaluations of Sexual Offenders: Principles and Practices for Almost All Sexual Offender Appraisals

Harry M. Hoberman and Rebecca L. Jackson

Introduction

The formal evaluation of identified or alleged sexual offenders is an activity of great significance. Evaluations of individuals, by definition, involve compiling a range of relevant information about a person (the assessment process), organizing and analyzing the existing set of "data," "facts," "hypotheses," and prior appraisal(s) of that person, and, most commonly, offering one or more contemporary appraisals or opinions about the individuals as they bear on specific psycholegal questions about the individual. As with any psychological or, more broadly, mental health appraisal, an evaluation requires an iterative process of assessment and consideration nomothetic or group-based information and idiographic or case-specific information to determine what opinions might be offered. The cumulative material collected, integrated, and interpreted from various multiple assessments and the resulting findings or conclusions of sexual offender evaluations can and do play a critical role in the disposition of such offenders. Despite a long history of concern about the established public health significance of sexual offending and dispositions for sexual offenders, it remains surprising how little has been written about the methods and process of the comprehensive evaluation of such individuals. Of the limited professional publications regarding the assessment of sexual offenders, most articles are directed at seemingly "pure" clinicians (e.g., potential treatment providers) for the purpose of evaluating a sexual offender for treatment amenability and planning. Those few articles about the "clinical" evaluation of sexual offenders are themselves relatively limited, in both length and substance. Compared to this circumscribed literature on the so-called "clinical" assessment of sexual offenders, even less has been published regarding the so-called *forensic* evaluation of sexual offenders (perhaps with recent exceptions in the domain of risk assessment). Generally, as Nicholson (1999) wrote regarding forensic psychology: "Across disciplines the application of scientific knowledge and principles and professional experience to legal issues is referred to as forensics. Forensic psychological assessment, then, refers to the application of the principles and procedures of psychological assessment to address questions raised in legal contexts; it can be conceived as an interdisciplinary specialty within psychology that requires specialized training experience and scholarship" (p. 121). From a United Kingdom perspective, Mullen (2000) wrote: "Forensic mental health defined more broadly is an area of specialization that, in the criminal sphere, involves the assessment and treatment of those who are both mentally disordered and whose behaviour has led, or could lead, to offending." (p. 307). He indicated that, in particular, applied mental health work relative to risk assessment and risk management clearly—and increasingly—fell into the realm of forensic mental health. More recently, following Heilbrun (2001), Heilbrun, Grisso, and Goldstein (2009) have discussed and attempted to define what is referred to as Forensic Mental Health Assessment (FMHA) as those assessments of various mental states, psychological phenomena, and behavioral predispositions relevant for or related to legal questions about human behavior. They identify FMHA as "a domain of assessments of individuals' intended to assist legal decision makers in decisions about the application of laws requiring considerations of individuals' mental conditions, abilities and behaviors." (p. 15)

Virtually all evaluations of sexual offenders are, in fact, forensic evaluations. Just as Forensic Psychotherapy is typically defined as that which pertains to "justice-involved clients," forensic evaluations can and should be considered as any evaluation or appraisal of an alleged or convicted sexual

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offense that is "justice-involved" or in anticipation of "justice involvement" (e.g., Mitchell et al., 2013). In contrast, historically, forensic evaluations of sexual offenders have been viewed as a mere subset of sexual offender evaluations. However, at the present time, almost all appraisals of sexual offenders are initiated or implemented to address a definite or potential disposition in the criminal justice system (e.g., pre-plea evaluations and presentencing evaluations, determinations of possible enhanced sentencing), court-ordered or expected perspectives on treatment amenability and progress as a factor in disposition, release from detention, or, in certain jurisdictions, identification as a so-called "sexually violent predator" (SVP) or some similar designation. Consequently, the reality is that many or, in fact, almost all evaluations or appraisals of sexual offenders are either directly or indirectly of a forensic nature.

As Meloy (1989) and Nicholson (1999) have indicated, the term "forensic" is derived from the Latin "forensis" meaning of the forum, understood as in the public or legal forum. Thus, a forensic evaluation would be any evaluation that is (1) ordered by a legal entity; (2) related to a legal proceeding (e.g., likely or possible adjudication), and/or (3) has implications for the community or "public." Broadly, "Forensic Mental Health" (FMH) is defined or conceptualized as the application of scientific, technical, or specialized professional knowledge and procedures of the mental health field for the purposes of matters involving the courts, or the larger legal and political system. The key emphasis is on the services provided (e.g., the context) and not a professional's typical area of practice. Thus, any evaluation that takes place within the context of a judicial order or a broader judicial context (e.g., contemplated legal considerations or actions) is by definition a forensic evaluation. Any evaluations which are initiated by anticipated or active legal proceedings are forensic and are inherently "for the court" and, by extension, "for the public" forum.[1] In North America, this would typically include most initial treatment amenability assessments or intakes, treatment progress reports, treatment summaries, and release reviews, activities traditionally viewed as "clinical" and falling outside the realm of forensic mental health. Perhaps the *only* type of evaluation of a sexual offender not to be considered forensic would involve those assessments of sexual offenders who voluntarily seek treatment for sexual offending issues relative to a self-defined concern (e.g., distress) and prior to any actual or anticipated legal involvement. Thus, when considering the referral for or implications of evaluations of sexual offenders, it seems clear that virtually all such appraisals take place either as a result of or in anticipation of a legal context. Consequently, evaluations of sexual offenders, even those traditionally considered of a more pure "clinical" nature, are most accurately forensic in nature and should be governed by the same principles and procedures as those more "traditionally" viewed as of a forensic nature; that is, for sexual offenders, what have typically been considered as "clinical" evaluations should necessarily be regarded as forensic evaluations unless appropriately justified as completely independent of the criminal justice or larger judicial processes.

The purpose of this chapter is to describe relevant principles, methods, and other considerations in conducting adequate and informed forensic evaluations of sexual offenders (e.g., *most* evaluations of sexual offenders) and to discuss a set of domains and procedures (interviews, tests, questionnaires, and rating scales) for collecting relevant, reliable, and admissible information for assessing and appraising the various psycho-legal questions that the judicial system might pose regarding sexual offenders. While some of this material might seem minor or irrelevant to persons who conduct what were previously viewed as clinical evaluations (but which are more accurately conceptualized as forensic evaluations), the experience of an adversarial hearing can quickly expose the pitfalls of undertaking an evaluation with legal implications when one is naïve to the host of legal, ethical, scientific, professional, and other substantive issues that surround forensic evaluations.

By definition, forensic mental health evaluations have two components. First, they are evaluations "for the court" or "for the public" to supply professional review practices and opinion-generation for legal decision-making, often about issues that have an important bearing on public safety. Second, to that end, they are evaluations that apply the principles and procedures of psychological, psychiatric, and other mental health professional disciplines to address specific sets of questions or issues raised regarding sexual offenders in legal contexts. Legal contexts are, by definition, adversarial ones; that is they involve two opposing interests or claims and the outcome is disputed. For specific types of cases, the judicial system often relies on the specialized knowledge or experience to inform its decision-making; forensic evaluations and expertise relate to the generation, judgments, and/or communication of information that relates to a legal issue. This "information" (typically provided in the form of an opinion and the basis for that opinion) is provided to judicial entities, often referred to as a trier of fact and/or law (TFL). A trier of fact (TF) can be a judge or a jury; the trier of law (TL) in a legal issue is always a judge (or panel of judges). The purpose of any forensic evaluation is to bring information in the form of a clear, well-substantiated opinion to a legal setting that provides useful information to the TF/TL so that they, in turn, can make a more informed decision about the individual for whom they must make some determination. Forensic mental

[1]It is of note that in the United Kingdom, the practice of forensic mental health practice is defined as almost exclusively as that occurring in or in anticipation of involvement with the penal and secure hospital settings.

health professionals (FMHPs) are any mental health professionals (MHPs), independent or agency-based, who practice mental health care that is either anticipated for a court or legal proceeding (e.g., a potential or scheduled hearing, such relegated to dispositions or conditional release) or related to an existing court mandate (e.g., court-ordered evolutions or treatment). FMHP must be able to translate psychological—or more broadly mental health—information including the state of knowledge in the fields relevant to a case and/or the results of a particular mental health evaluation, into a legal framework that has particular concerns with the admissibility of information and occurs within an adversarial system. In addition, forensic mental health practitioners recognize the great significance of maintaining a neutral role relative to the persons that they evaluate or offer opinions about; they are advocates for their scientific and professional findings and not for a particular individual/client.

Forensic evaluations of alleged and adjudicated sexual offenders generally pertain to the disposition of a particular sexual offender or, in select cases, a specific legal conclusion and, as such, typically play a very significant role in a range of matters concerning such persons. Persons occupying central roles in the criminal or civil commitment proceedings of sexual offenders may lack the necessary background to understand or appreciate both issues related to sexual offending and the methods and results of a forensic psychological evaluation. In most cases, one cannot expect or assume that attorneys for the parties or judges are particularly conversant in the multiple, interacting fields relating to the forensic evaluation of recidivistic sexual offenders. As a result of lacks, gaps, or even mistaken knowledge regarding sexual offenders by the TFL, the role of a conscientious, comprehensive, and rigorous forensic evaluation can typically be of great significance to a particular legal matter. Judicial officers and juries may give considerable weight to the opinions of professionals they believe have credibility or have deemed to be "experts" in a field such as sexual offending. Consequently, an appropriately conducted forensic evaluation offering well-considered conclusions based on structured methodology and informed by a reasoned understanding of the extant scientific literature can have great impact on the disposition of a sexual offender. Conversely, the results of a poorly rendered, incomplete, or erroneous evaluation can result in a negative outcome for one or both parties.

Frequently the nature of an evaluation for a legal or pubic context will result in "live" testimony about a report derived from a forensic evaluation but that is not always the case. There are a number of situations, including "high-stakes" legal matters such as civil commitment, where the report(s) of evaluators may be all that is "admitted" to a judge (e.g., provided to the judge for their consideration) without questioning by attorneys for opposing sides and those reports may be central to the judicial officer's decision. Consequently, on many occasions there is the opportunity for the methods and conclusions of a forensic evaluation to be challenged in court. However, it may often be the case that a legal decision with significant implications for a particular sexual offender may be made based largely on just the report submitted regarding the forensic evaluation and resulting opinion. Such reports of a forensic evaluation may be "admitted" into evidence; in this way, the author of forensic evaluation is typically functioning as an "expert" in the judicial proceeding, whether he or she is formally or informally identified as such by a court.

The matters at issue and the methods required for forensic evaluations of sexual offenders can be quite complex. Forensic evaluations of sexual offenders involve the intersection of multiple areas of substance and process: knowledge of the relevant legal issues to the specific forensic task; the nature of sexual offenders and sexual offending; the methods of conducting evaluations of persons in forensic contexts generally and sexual offenders specifically (e.g., the particular ethics and methods of forensic assessments); both general and special assessment techniques for acquiring relevant multisource information; detailed information about the history of the particular individual being evaluated; the quality and scientific integrity of the available information about sexual offenders, including knowledge about treatment options and outcomes as well as risk assessment; the integration of specific information about a particular offender with the general literature on sexual offending; and the application of the specific results of the evaluation, in the context of general knowledge about sexual offending, to the specific psycho-legal question before the court. Unfortunately, the assignment of forensic evaluators (typically by court administration or agencies) in many jurisdictions is often more a matter of convenience, familiarity, and cost and much less a matter of expertise in forensic evaluations in general or sexual offender evaluations in particular. Thus, evaluators may be (1) clinicians who are general practitioners who have limited knowledge of or experience with sexual offenders, or even more broadly, criminal offenders, or in making informed determinations of risk for violence; (2) clinicians who provide treatment and related assessments for sexual offenders but who lack knowledge or experience in conducting forensic evaluations; (3) forensic evaluators who lack knowledge or experience with sexual offenders or who lack knowledge of the literature on risk assessment for dangerous or violent behavior. A key element relative to conducting forensic evaluation of sexual offenders is competency across a broad range of areas, all of which are very important. Clearly, there are many professionals who should not conduct forensic evaluations of sexual offenders due to lack of knowledge, lack of familiarity with methods of evaluation, and/or inexperience.

Ideally, an appropriate professional for conducting a forensic evaluation of a sexual offender is one who has relevant knowledge of or experience with sexual offenders, is

knowledgeable about the specific issues and methods involved in forensic evaluations, and is educated about risk assessment of dangerous behavior, such as risk assessment for sexual offender recidivism. In general, conducting a formal assessment of sexual offenders would direct that the evaluator be familiar with the current state of all relevant research on sexual offenders (McGrath, 1991). Forensic evaluations of sexual offenders *require* that evaluators possess a substantive and comprehensive knowledge of the existing literature regarding the scientific research conducted on sexual offenders and on sexual and nonsexual predisposing conditions associated with such offending and/or criminogenic needs, elements of theories of sexual offending, and risk assessment, in particular. Over the past 15 years, the professional mental health literature regarding sexual and other violent offenders has expanded dramatically. Moreover, the sophistication, controversies, and complexity of both theory and empirical findings in this area have also increased to a point where it has become a very broad and complex area requiring significant training, knowledge, and experience. An evaluator must be able to compare what is known about a particular sexual offender (idiographic features) to the accumulated data on the characteristics of sexual offenders in general (nomothetic or group information). Since this is an evolving science, it is incumbent upon such evaluators to stay current with all emerging information about sexual offenders. More generally, it is also essential that a person conducting an evaluation of a sexual offender that will or may become part of a legal decision be knowledgeable of the methods and instruments (e.g., record review, structured psychological assessment including tests and interviews) that are relied on to develop an opinion about a particular offender. If a particular case entails an actual court hearing, such evaluators must be able to explain the particulars of those methods and instruments, including their limitations. Consequently, persons conducting forensic evaluations of sexual offenders must be well-trained in the general range of tools of mental health assessment and those that are more specific to the domain of sexual offender characteristics and issues. Finally, persons conducting forensic evaluations of sexual offenders should have an appreciation of (1) the meaning of a "forensic" role; (2) the key legal standards that allow the results of an evaluation to be brought to the court; and (3) the specific legal issue(s) that a report and/or testimony are intended to address.

Qualifications for Forensic Evaluations

Since 1962, psychologists have been afforded the opportunity to be recognized as "experts" in U.S. courtrooms if deemed qualified to provide admissible testimony (e.g., Jenkins v. U.S., 1962; of particular note, this was a case involving an attempted sexual offense and the key issues were "mental disorders"). MHPs who are requested to provide forensic evaluations explicitly or evaluations that are likely to be used in legal proceedings have several obligations. It is recommended that such MHPs who evaluate sexual offenders (1) have an advanced degree in a recognized mental health discipline and (2) documented up-to-date training and supervised experience evaluating this population (in using the key assessment procedures such as tests and other psychological measures) necessary for the evaluation. MHPs who elect or are designated to perform designated or de facto forensic evaluations must be capable of demonstrating their competence in both the issues and procedures of a forensic evaluation. Competency in the evaluation of sexual offenders and, more specifically, the forensic evaluation of sexual offenders should be listed with state licensing bodies. Most mental health professions have codes of ethics that prohibit the members from practicing outside their area of expertise as well as codes of ethics that are considered binding. More specifically, the Association for the Treatment of Sexual Abusers (ATSA, 2004, 2014) has continued to formulate and promulgate standards of care and ethical guidelines for the assessment of sexual offenders.

Finally, it is important to note that beyond ethical recommendations for professional evaluators, within particular professions more specific aspirational guidelines may apply to such professionals. Thus, psychologists should be familiar with the original Specialty Guidelines for Forensic Psychologists (SPGF: 1991) as well as the revised SGFP (2011). Psychiatrists should be familiar with the Ethics Guidelines for the Practice of Forensic Psychiatry (2005), while social workers are guided by the Code of Ethics of the National Organization of Forensic Social Workers (1987) and related National Association of Social Workers' Code of Ethics (1999a). For professionals of other disciplines who conduct forensic evaluations of sexual offenders, a review of the available guidelines for other disciplines should provide a reasonable orientation to the ethical issues that surround such work. Such professional guidelines differ from standards, such as those in the professional associations' ethics codes, in that they are aspirational rather than mandatory. They are intended to facilitate the continued systematic development of the forensic activities of particular professions and to facilitate a high level of practice by MHPs.

Authorities in the area of forensic mental health are quite clear about the importance of the expertise and qualifications necessary to conduct forensic mental health evaluations. As Heilbrun and Brooks (2010) emphasize relatively untrained or individuals lacking in the necessary set of fundamental skills required for FMHA should not provide such forensic services. They point to evidence that many forensic or "intended as forensic" reports "are deficient in their thoroughness, relevance and accuracy" (p. 236) Heilbrun and

Brooks (2010) noted that "Poor practice is marked by very substantial limitations that grossly impair its relevance, accuracy, helpfulness or overall quality. Such limitations … include extreme brevity, a very short interview, relying on self-report only without testing, records, or third-party information using outdated or entirely irrelevant tests, making substantial errors in scoring or interpretation, or failing to grasp the relevant legal constructs associated with the evaluation … there is good reason to think that poor practice of [FMHA] has the potential to harm the accuracy of legal decision making … across a range of legs decisions …." (p. 242) Heilbrun and Brooks argue that forensic reports and opinions prepared by MHP with specialized forensic training generally reflect significantly better "work product." Further, across a series of studies and reviews, Garb (1989, 1992, 1998) has emphasized the critical role that training plays in enhancing the quality of psychological assessment and their resulting conclusions. Thus, for forensic evaluations of sexual offenders—and particularly for such evaluations for so-called high-stake decisions such as civil commitment—there should be a premium placed on the utilization of well-trained, knowledgeable, and experienced forensic evaluators.

Forensic Evaluations Are *Not* Clinical Evaluations, While Most "Clinical" Evaluations *Are* Forensic Evaluations: Variations of a Forensic "Ethic"

All evaluations of sexual offenders to address particular psycho-legal issues at the request of a court or in anticipation of an eventual court hearing (again including treatment amenability or treatment status (relative progress) in mandated sexual offender treatment) are *forensic* psychological evaluations. Rosner (2003) provided a simplified notion of the four steps in conducting forensic evaluations. Following his analysis, those steps can be described as: First, what are the *specific psycho-legal issues* involved? Second, what are the *legal criteria* that must be addressed to provide information about that issue? Third, what are the *data or information* that are necessary or central to allow the evaluator to understand the individual in the context of related psycho-legal issues? Fourth, what is the reasoning that is used to integrate and apply the data or information to allow for a reasonable or rational psycho-legal opinion? Heilbrun (2003) has offered a similar set of the four major components of a forensic evaluations, generally and as they might apply specifically to such evaluations of sexual offenders. They include (1) preparation, (2) data collection, (3) data interpretation, and (4) communication.

Greenberg and Brodsky (1998) stated that forensic evaluations entail the application of the principles and processes of mental health science and practice in assessment to forensic or legal issues. A forensic MHP's thinking is focused on the primary forensic task of *critically* or *skeptically* examining the people seen within a particular psycho-legal context, and not on treating them or advocating for an individual in any capacity. A forensic evaluation is time-limited and not an ongoing process. Such evaluations in cases involving sexual offenders attempt to answer questions about the nature of an individual's psychosocial characteristics and/or "psychiatric" status (or more broadly mental disorders), significant characteristics of their past, and their current presentation in terms of relative openness (or defensiveness) and as they might relate to disposition and/or future behavior.

Recognizing that a forensic psychological evaluation is *not* a traditional, clinical "for diagnosis and/or purely treatment planning clinical evaluation is critical. Over 15 years ago, in a seminal article, Greenberg and Shuman (1997) wrote about some of the *irreconcilable* differences between the therapeutic and forensic approaches to evaluations, specifically with regard to so-called role conflicts. In a forensic context, the cognitive set of the MHP is one of neutrality, objectivity, and detachment, as opposed to the supportive, accepting, and empathic stance of a clinician. The professional's role is evaluative and the relationship with the subject may even be adversarial, as opposed to the "helping" role that characterizes the therapeutic relationship. The most important competencies are in the area of forensic examination techniques relevant to the specific legal claims and the application of mental health knowledge to the psycho-legal criteria used in legal adjudication. In a forensic context, the work is examiner-structured and much more structured than therapy might be. In therapy, most of the information is received from the person seeking treatment (e.g., self-report), with relatively little scrutiny of that information by the clinician. In a forensic context, however, litigant or party information is always supplemented with and compared to that of collateral sources; subject-supplied information is carefully scrutinized by any evaluator or clinician acting in forensic role or context and not accepted at "face value" as "true." While a clinician is supportive of the individual's claimed subjective experience, attempts to "benefit" the client and to act as an advocate for that patient, the forensic MHP advocates for the critical analysis of results of the overall information available and the implications of their evaluation in the context of the immediate or eventual legal process. Obviously, the principle of advocating for the results and implications of an evaluation (as opposed to a current or potential client) can create difficulties for clinical personnel providing forensic evaluations (such as for treatment amenability or needs) and particularly for those providing forensic treatment. In such roles, the MHP must balance society's need for critical, well-founded judgments about a particular sexual offender (with public safety concerns quite commonly paramount) with concerns about alienating the subject's potential motivation and pursuit of treatment.

Greenberg and Brodsky (1998) broadened this discussion of the incompatibility of clinical and forensic roles and attempted to define a "forensic ethic" that can be applied to any MHP involved in conducting evaluations that are ordered by or are likely to be utilized by the public via the judicial system (e.g., forensic work). This ethic includes the following components for forensic MHP as evaluators: they *remain dispassionate* as to the legal issues they examine; they are *skeptical* rather than accepting of the information presented to them; and they work to avoid forming a therapeutic alliance with the people they examine for forensic purposes. In addition, the individual examined by an MHP serving in a forensic role bears the burden of convincing that professional of the accuracy and the merit of their report of events and themselves. The forensic ethic further includes that forensic MHPs are wary of the vested interests of the parties they examine (e.g., for sexual offenders, commonly a desire for less severe sanctions and/or a less restrictive disposition); maintain a belief system that encompasses fairness, impartiality, and objectivity toward the participants in the legal dispute; are expected to have the ability to tell others, often in a very public forum, about what they have learned from and about the person they have examined; and have the responsibility to respect the rights of all parties involved in a psycho-legal matter, including the examinee and the community. As Greenberg and Brodsky (1998) argued, the question is not whether as experts forensic MHP can make better decisions than judges or juries; the significance of their role pertains to whether the legal system can do a better job with their input rather than without it. As Greenberg and Brodsky wrote, if the legal system can make more informed and therefore more just decisions with their input, then forensic MHP have contributed significantly to the judicial process. As relative experts, forensic MHPs provide factual, scientific, and opinion information to help a judge or jury make the ultimate legal decisions in the matter before the court.

Relative to providing an appropriate "Forensic Mental Health Assessment" (FMHA) Heilbrun (2001, 2003) identified a set of 29 principles for forensic mental health assessment, identified as either established or emerging relative to professionals serving in a forensic role. Among these 29 FMHA principles that seem most relevant to the evaluation of sexual offenders are the following: identify the relevant forensic issues; accept referrals only within one's areas of expertise (or competence); avoid playing the dual role of clinician/advocate and forensic evaluator; use multiple sources of information for each area being assessed; determine whether the individual understands the purpose of a forensic evaluation and the associated limits on confidentiality; use relevance and reliability/validity as guides for seeking information and selecting data sources; obtain relevant historical information; assess relevant clinical characteristics via reliable and valid ways such as structured psychological assessment; assess legally relevant behavior; use third-party information in assessing response style; use testing, as part of structured psychological assessment when indicated, in assessing response style; utilize evidence from both case-specific, idiographic (comparing the individual to his own behavioral history and functioning at other times) and nomothetic (comparing an individual's functioning on relevant dimensions to that of similar populations) sources in assessing *clinical or predisposing conditions and causal connections*; use scientific reasoning in *assessing causal connections between clinical or predisposing conditions* and functional abilities; be careful, impartial, and thorough when presenting the data and reasoning in a report; provide and describe data so that the source of any specific finding or conclusion is clear; and, as necessary, base opinions on psycho-legal issues on the basis of the results of a properly performed comprehensive forensic evaluation.

Heilbrun (2003) identified that for most principles of FMHA, there was some difference in their applicability to sexual offender-specific FHMA. For 16 of the principles, some modification was required, with Heilbrun noting: "These modifications reflected the difference in focus between evaluating the "clinical condition" of offenders generally in the particular aspects of functioning related to sexual offending, which are typically aspects of thinking, personality, arousal, and behavior rather than mental disorder. It is also important to modify the kinds of tools used, considering those validated for sexual offenders, and focusing particularly on the kind of forensic issues raised in such sexual offender-specific FMHA (reoffense risk and potential for risk reduction). However, these modifications are relatively minor, and fit comfortably within the domain of the larger principle" (p. 182). Heilbrun concluded: "This analysis suggests that a set of FMHA principles like this can offer substantial guidance in the forensic evaluation of sexual offenders" (p. 182). He noted that, with relatively few modifications, his proposed principles could provide a framework to guide the process of forensic evaluations with such individuals.

Most recently, Covell and Jennifer Wheeler (2006) revisited the issues of "irreconcilable conflicts" between therapeutic and forensic roles, specifically for sexual offender "specialists." They noted that the issue of dual role conflicts in the field of sex offender management had historically received little or no attention. However, they also pointed out that recently that this has changed. For example, in Washington State, clinicians offering treatment and evaluations services are discouraged from providing forensic evaluation and treatment services to the same client in order to avoid potential bias and questionable conclusions. Similar to the perspective of this chapter, Covell and Wheeler pointed out that if the purpose of an evaluation of a sexual offender is "to provide clinically relevant data to a third party, who must make an important decision about the offender," then such

evaluations necessarily are forensic sexual offender evaluations. Since most therapeutic sexual offender evaluations take place under the aegis of court order, possible litigation, and/or community corrections supervision, while one goal may be to inform treatment planning and delivery, necessarily that same information has implications for other decisions about the sexual offender to third parties. Thus, it appears that there is an increasingly convergent perspective that most evaluations of sexual offenders are, in fact or principle, forensic mental health evaluations.

General Legal Issues Central to Judicial Consideration of Forensic Evaluations and Related Opinions

Courts necessarily impose limitations on the types of information that they will consider from mental health professionals in providing the results of their evaluation and related opinions as a form of "expert witness" testimony. Judicial entities are required to allow only particularly "useful" information to be provided to TFL; this is referred to as the admissibility of evidence in the form of a report (and its elements) and the opinion of a forensic evaluator. Historically, the basis for the admissibility of expert opinion was rooted in the determination that the subject of that opinion was beyond the normal experience of the average trier of fact. An early decision (involving the admissibility of polygraph evidence), *Frye* v. *United States* [293 F. 1013 (D.C. Cir. 1923], defined the principle for evidentiary admissibility that the information provided by the expert "must be sufficiently established to have gained *general acceptance in the particular field* in which it belongs" (emphasis added). This standard for admissibility was known as that of "general acceptance" within the relevant "scientific community." Nicholson (1999) has written that the "general acceptance standard" described in Frye was meant to apply to then novel scientific evidence and targeted not the expert's opinion per se but rather the theories and methods from which the expert's opinion was derived. Similarly, Hoge and Grisso (1992) noted, "Frye does not mention accuracy, validity, or even 'general acceptance' of the opinion or conclusion that the expert reaches on the basis of these theories and methods" (p. 69).

Some 50 years later, Congress passed the Rules for Evidence (RFE 702–705) governing Expert Witnesses Testimony and Opinion in the Federal Rules of Evidence (Article 7, 1974) which were developed to provide guidelines for cases in Federal court. Some states have also used the Rules as models or guidelines for the admissibility of such testimony, so it is useful to review the rules here. Rule 702 on "Testimony by Experts" states:

> If scientific, technical or other specialized knowledge will assist the Trier of Fact to understand the evidence or determine a fact in issue, a witness qualified as an expert by knowledge, skill, experience, training, or education, may testify thereto in the form of an opinion or otherwise.

Rule 703 describes the appropriate Bases of Opinion Testimony by Experts: "The facts or data in the particular case upon which an expert bases an opinion or inference may be those perceived or made known to the expert at or before the hearing. If of a type reasonably relied upon by experts in the particular field in forming opinions or inferences upon the subject, the facts or data need not be admissible in evidence." Relative to the *Frye* test of general acceptance, Rules 702 and 703 have been viewed as broadening the potential scope of expert testimony and thus creating a potential conflict between the Rules and the *Frye* precedent. In *Daubert v. Merrell Dow Pharmaceutical, Inc.* [509 U.S. 113 (1993)], the U.S. Supreme Court ruled in favor of the Federal Rules of Evidence and the doctrine of a broader admissibility of expert opinion. Briefly, Daubert had listed four factors that courts *could* take into account in making the gatekeeping assessment—whether a theory or technique has been tested, whether a technique or theory has been subjected to scientific peer review or published in scientific journals, whether there was a known or potential rate of error involved in the technique or theory (e.g., inter-rater reliability and/or "predictive accuracy" or discrimination), and even some evidence of general acceptance among relevant professional communities. Often, the *Daubert* decision is viewed as articulating a middle ground where new research not yet generally accepted could be permitted, while poor quality science and nonscientific clinical perspectives that had obtained "general acceptance" would be excluded. In effect, the standard established by *Daubert* was one in which the credentials of the expert witness go to the credibility of the witness, not to the admissibility of the testimony. Further, the value of expert opinion was to be determined on the basis of direct and cross-examination by the attorneys for the parties and the presentation of contrary evidence, including other expert opinion. The Trier of Law functions as the "gatekeeper" for the admissibility of expert testimony. Per the decision, the FRE/Daubert criteria were not meant to be applied by the judiciary as "a definitive checklist or tests…" and mandatory; rather, they were to be considerations along with relevancy. *Daubert* is viewed as representing a trend toward a more demanding level of scrutiny by courts, one in which scientific evidence of research supports the forensic expert's evaluation methods, procedures, and resulting opinions and the larger body of knowledge and practice in a particular area. At the same time, Daubert provides for the admissibility of more novel information that may not have reached the level of "general" acceptance but nonetheless is well founded in its development. According to *Daubert*, the trial court must determine whether the proposed expert testimony regarding "scientific knowledge" has a reliable foundation

(appropriate data and methods) and is relevant to the proceeding. *Kumho Tire Co. v. Carmichael*, 526 U.S. 137 (1999), was a U.S. Supreme Court case that expanded the *Daubert* standard to expert testimony from nonscientists (e.g., technical or specialized knowledge), based on the premise that it could be difficult to distinguish between scientific and technical knowledge. The reliability of proposed evidence (e.g., a forensic evaluation) is to be evaluated on the basis of whether the methods and the background data have been subjected to empirical testing and received peer review and/or been published in peer-reviewed journals. Further, the known or potential error rates are also to be considered. The general acceptance of the substance of the expert testimony in the field can be a consideration. The potential relevance of the opinion from a forensic evaluation is that the information provided by the expert has a valid scientific or professional connection to the key issues in the legal matter. In Kumho, the Supreme Court clearly indicated that district courts have relatively broad latitude to determine how they will assess the reliability of expert testimony as a component of the decision to admit expert testimony.

Finally, the Federal Rules of Evidence were modified by Congress in 2011 so that the language was clarified; they now read:

A witness who is qualified as an expert by knowledge, skill, experience, training, or education may testify in the form of an opinion or otherwise if:

(a) The expert's scientific, technical, or other specialized knowledge will help the trier of fact to understand the evidence or to determine a fact in issue;
(b) The testimony is based on sufficient facts or data;
(c) The testimony is the product of reliable principles and methods; and
(d) The expert has reliably applied the principles and methods to the facts of the case.

Another U.S. Supreme Court decision of relevance is that of General Electric Company v. Joiner (1997) which allows the court to consider whether an expert has extrapolated appropriately (or in appropriately) from an accepted premise to a particular conclusion.

Relevant Issues in the Forensic Evaluation of Sexual Offenders

Understanding and Clarifying the Nature of the Specific Psycho-Legal Issue

As noted, the evaluator, both in conducting a comprehensive forensic evaluation and in providing a full and integrated report of the available data and opinions, is involved in an attempt to assist the court in its decision-making process. Initially, this task requires clearly understanding what question or issue is the focus of the forensic evaluation. Psycho-legal questions are typically based in statutory language and case law that has developed regarding the relevant issue. While the legal system and its relevant players should be expected to make available to forensic evaluators the relevant statutes and any subsequent amendments, forensic evaluators are responsible for and should make it a point to obtain a copy of and regularly review the relevant statutes and/or administrative codes relating to their forensic tasks. Ideally, evaluators should attempt to repeatedly seek clarification and updates about evolving case law and the specific questions their evaluations and reports should address based on who has requested their opinion. As noted later, it is useful to review the requisite statutory questions while preparing an evaluation and to note or paraphrase the language that directs the forensic evaluation within the body of a report.

The Forensic Opinion

As noted, the goal of a forensic evaluation is the education of the TFL by attempting a comprehensive evaluation of an individual, developing an opinion or appraisal regarding how a particular legal context applies to that individual, and describing in detail the basis for that opinion. Consequently, the forensic evaluator attempts to collect, review, consider, and integrate information ("the database") that can allow them to opine about the psycho-legal questions that exist in the current legal matter. At the risk of being simplistic, this means two things. First, the forensic evaluator should attempt to come to an opinion about the identified psycho-legal questions. It is conceivable that this may not be possible for a particular evaluator or expert and they should so inform the retaining party or the court. For example, it would be inappropriate for a MHP to agree to offer opinion or testimony relative to a statute that they do not regard as legal or acceptable to their personal values (e.g., constitutional, for example) unless that is the actual subject of a case. Second, the evaluator must conduct a sufficiently thorough and critical analysis of the available essential sources of information (e.g., primarily through record review and the results of a direct evaluation) and then be able to offer a credible explanation of how they reached particular judgments and opinions about a particular offender, in the context of the specific case information and existing science and other professional knowledge regarding issues related to sexual offending. Per Rosner's model, a forensic evaluation must provide clarity and depth relative to describing and explaining what and why critical elements form the basis of the expressed opinion. Heilbrun et al. (2009) proposed that: "Opinions should be data based, including thorough consideration given to all sources of information; comprehensive notes of litigant's interview responses; results of all psychological tests and instruments; information provided by third parties; and a

review of records. Relevant studies, published in peer review journals on issues related to the specific case, should be considered as well." (p. 55)

In providing an opinion via a written report and/or in live testimony, forensic MHP evaluators are almost always asked to affirm that their appraisal process was based upon records and procedures typically relied upon by professionals doing similar work and that they have a relative confidence of opinions generated in an evaluation or report, typically to "a reasonable degree of professional certainty." The term "reasonable degree of psychological or professional certainty" remains a concept without precise meaning; Heilbrun notes that there appears to be no consensus as to what this means. It is likely that scientific certainty is not the appropriate standard to use for FMHA because FMHA incorporates both scientific data (e.g., psychological tests, results of scientific studies) as well as idiographic data (information about and/or provided by a litigant). Faigman (2006) noted that the term medical or psychological certainty "has no empirical meaning and is simply a mantra repeated by experts for purpose of legal decision makers who similarly have no idea what it means. Case-specific conclusion, in fact, appears to be based on an admixture of knowledge of the subject, experience over the years, commitment to the client or case, intuition, and blind faith...." (p. 1224) Nicholson (1999, citing Black, 1988) points out that reasonable professional certainty refers to an evaluator or expert's confidence in their opinion and not to the accuracy or general acceptance of the theory.

Potential Limitations of Self-Report in Forensic Evaluations, Particularly of Sexual Offenders

By nature, as noted, forensic evaluations in general occur within an adversarial context: two parties are pursuing differing and opposing goals. Consequently, an independent forensic evaluation of the key party almost always involves some subtle or explicit element of perceived coercion and/or desired gain by the subject of the evaluation; these elements are viewed as playing a potentially significant role in the manner of presentation of persons subject to forensic evaluations in most contexts. As Heilbrun et al. point out: "Forensic assessments differ significantly from traditional clinical evaluations in the presence of substantial external incentives to deceive the forensic examiner." (p. 49) Melton, Petrila, Poythress, and Slobogin (2007) wrote of forensic evaluations generally: "… because of the greater need to consider alternative views and to corroborate examinee/litigant reports about legally relevant events, the examinee's unique perspective is only of secondary importance in forensic evaluations." (p. 45) Greenberg and Shuman (2004) called attention to the fact that a substantial number of required "diagnostic criteria" for psychiatric categories reference internal events (so-called subjective "symptoms," in contrast to more objective "signs" such as behavior) and thus involve the veracity or ability of an individual in providing self-report. Greenberg and Shuman also emphasize that litigants are likely to be motivated to report symptoms in line with the "incentives" or their goals for a particular legal case. Given the nature of how most sexual offenders find themselves in an evaluation context in a manner related to potential or pending legal actions, similar issues are likely to exist with regard to the evaluation of sexual offenders and may well be considerably more acute or significant than in the appraisal of other litigants.

Further and more specifically, a reliance on self-report by known sexual offenders has already been identified as quite problematic both as a source of general information about themselves and more specifically regarding their sexual offending history. Dissimulation, in particular defensiveness and outright lying, is viewed as a highly common, if not endemic, characteristic of both alleged and convicted sexual offenders, particularly when queried about their sexual offense history (e.g., Beckett, 1994). Generally, Gudjonsson (1990) showed that "other-deception" or impression management was particularly characteristic of violent and sexual offenders in a forensic evaluation, indicating that they underreported undesirable personality characteristics and psychopathology; he speculated that such persons attempted to give the impression that they were basically considerate people irrespective of what their alleged offenses suggested.

Generally, a significant group of sexual offenders are characterized by antisocial, narcissistic, and borderline traits and Personality Disorders; another, albeit overlapping group of sexual offenders are also characterized by significant psychopathic traits. Generally, persons with significant degrees of maladaptive personality traits experience those traits as "ego-syntonic" and not as problematic. Thus, Logan (2009) noted that both self-insight and honesty are likely to be questionable in the assessment of more self-centered individuals and is more meaningfully assessed via interpretations of interview responses and record review (as opposed to direct questions about the presence of maladaptive traits). Jackson and Richards (2007) reported that that offenders' ability to accurately report on their personality characteristics is hampered by their emotional and affective deficits. In addition, Logan also identified that egocentric or narcissistic individuals are not particularly useful sources of information with regard to their risk for potential future harm or success in the community. Clipson (2003) wrote: "The evaluation of sexual offenders offers a challenge unlike that found in either a general clinical practice or even in a forensic setting. All forensic assessments must address the possibility that the person being interviewed may minimize, deny, exaggerate, or feign a psychiatric disorder to obtain a desire outcome. The sexual offender in particular is prone to be dishonest about his behavior for several reasons" (p. 128). The Center for Sexual Offender Management (CSOM) in a paper on the role of

assessment in sexual offender management stated: "*Self-report is inherently unreliable*" (p. 5, emphasis added).

More specifically regarding their sexual histories, Earls (1992) has noted: "The reticence on the part of the offender is different from most clinical situations … it also poses difficulties when attempting to determine the nature and magnitude of the problem" (p. 233). More particularly, as one writer put it, "[S]exual aggressors have a marked propensity to lie about, deny, and minimize information concerning their deviant sexual behavior" (McGrath, 1990, p. 507). Context-based dishonesty about one's sexual offending history has been scientifically demonstrated. Kaplan et al. (1990) compared reports of sexual offenders on parole in two different settings. In a criminal justice setting, offenders disclosed only 5 % of the sexual offenses later admitted to in a traditional clinical or mental health setting (where confidentiality was provided). [Of note, Abel et al. (1987) reported that offenders revealed approximately 20 % more types of sexual deviancy when re-interviewed by experienced interviewers.] Consequently, regarding general behavioral history, personality characteristics, and sexual offending history, a sexual offender's comments in the records and in a direct evaluation must be carefully examined, compared and analyzed in terms of their context and not simply taken at face value. Alleged or convicted sexual offenders rarely present for evaluation in a truly voluntary manner; they are generally defensive relative to a specific evaluation. This defensiveness may be manifested by minimizations, by denial, or by statements that the individual cannot or does not remember. Kennedy and Grubin (1992) noted four patterns of denial from a cluster analysis of responses by convicted sexual offenders: (1) males who admitted offenses but denied causing any victim harm, (2) males who externalized responsibility for their sexual behavior by blaming their victims or others, (3) offenders who admitted their offense but attributed those behaviors to altered mental states or temporary behavioral aberration, and (4) offenders who were characterized by total denial of their offense (the largest group). Generally, such presentations are particularly true for evaluations that are part of an adversarial process, relative to those perceived as for treatment evaluations. Further, many sexual offenders, particularly repeat offenders, are characterized by single or multiple sets of cognitive distortions, rationalizations, and denial. These beliefs may, in certain cases, rise to the level of a delusional belief (such as non-bizarre, but firmly held convictions). Thus, in discussing their beliefs about historical circumstances of sexual offenses or themselves, such offenders may present as quite convinced of the validity of their beliefs and memories or recollections. Further, from the perspective of the offender, reporting their sexual offense histories may be viewed as possibly eliciting negative responses from evaluators (e.g., disapproval, condemnation). Perhaps more importantly, such reporting, particularly for alleged and non-adjudicated offenses, certainly carries a risk of eliciting further negative consequences from the judicial system.

In short, issues of veracity permeate the self-reports and therefore the records of most sexual offenders. Consequently, the availability of objective psychometric tests with validity scales in the records and their use in a current direct evaluation offer some means of gauging a respondent's approach to self-disclosure and impression management over time and at the time of the most current evaluation. Further, congruence between the offender's report and those of collateral sources (such as victims, probation or correction officers) and therapists can provide support for judging the quality and truthfulness of an offender's self-report and self-evaluation.

Importance of Multiple Sources of Information

Generally, psychological assessments should be multi-trait, multi-method evaluations (e.g., Campbell & Fiske, 1959). This involves collecting information about multiple aspects of an individual (e.g., varied personality, social and psychosexual characteristics) from multiple perspectives or methods (e.g., sources of information such as interviews, records, and self-report via structured psychological testing and ratings). This issue is of particular importance in the forensic evaluation of a sexual offender given the potential limitations of the self-report of the offender; the availability, use, and comparison of multiple types of information are considered essential. As Heilbrun (2003) pointed out "multiple sources of information serves several important functions in forensic assessment: minimizing the error associated with a single source, assessing the impact of evaluatee's deliberate distortion of sensitive information, and providing a way to communicate the thoroughness of the evaluation. Other writers have emphasized that forensic evaluators typically rely on three primary kinds of data to form their psycho-legal opinions: third-party information (e.g. documents or records and/or the reports of persons other than the examinee), standardized psychological testing, and interviews of the examinee. These three different sources of information have been labeled the so-called forensic data triangle" (Gagliardi & Miller, 2008).

When information from multiple sources such as self-report, collateral records, and collateral interviews provides a consistent portrayal of an individual, it is more likely that this information is accurate. Conversely, inconsistency and disagreement across sources should alert the forensic clinician to the presence of inaccuracy in at least one of the sources. Thus, any forensic psychological evaluation involving sexual offenders should include a multi-method, multisource assessment. No one method or source (self-report, records, testing, or collateral perspectives) is necessarily protected from the possible taint of distortion.

Consequently, the overall value of the evaluation, its reliability and validity, is dependent on the evaluator's ability to collect and review varied historical information, typically to obtain their own contemporaneous data (e.g., via direct evaluation involving structured psychological assessment), to test hypotheses by examining the body of extant data for convergence and divergence, and to assemble an integrated opinion based on the totality of available information. By its very nature, a forensic evaluation should be comprehensive; it should aim to collect, examine, analyze, and integrate the relevant information that allows for the psycho-legal question to be adequately addressed.

Record Review

A key principle of forensic mental health evaluations is the review of all relevant records available for the purposes of the evaluation and report. Many forensic evaluators would argue that in almost all forensic evaluations that record review is central and the *sine qua non* of most forensic opinions. Melton et al. (2007) stated "archival and third party information is a mandatory component of most forensic evaluations." (p. 53) These authorities noted that third-party data are more important in forensic evaluations due to a greater need for accuracy, differences in responses style of litigants, and the greater scrutiny that a forensic evaluator's conclusions receive. In addition, they note that efforts to confirm or disconfirm statements provided by examinees and to weigh their accounts against information from records and other sources can "significantly improve the weight assigned to the examiner's conclusions." (p. 53) Records often provide the most specific and contemporaneous description of past events that then informs many of the central questions, issues, and demands related to psycho-legal appraisals and opinions. Given the nature of the assessment issues that characterize the evaluation of sexual offenders, it is imperative that the evaluator have received and carefully reviewed the records *prior* to interacting with an examinee. Such a record review is important in that it can provide a range of perspectives on the offender, sometimes over multiple observers and over time. Heilbrun (2003) emphasized the importance of using relevant and reliable methods for seeking information and selecting data sources. He also emphasized that: "…the amount of historical information needed in FMHA is often greater than therapeutic evaluation, but the need for history also depends on the nature of the legal question and associated forensic issues…with specific sexual offender FMHA, there is consistently a question regarding the person's sexual offending and, often the risk of its recurrence. More detailed history on previous sexual offending, on the patterns of thinking, feeling, arousal, and behavior associated with offending and on protective factors, is therefore likely to be important." (p. 178) Relevant records for forensic evaluations of sexual offenders include such domains as criminal history; police reports; court records and presentence reports; offender and victim statements about crimes; records related to social history, previous psychological, social service, medical, and mental health evaluations and services (including any past treatment, particularly specialized sexual offender treatment); and jail, prison, and community corrections records.

Quite in contrast to a therapist who may often support the ego-syntonic perspective of a client, the forensic MHP's eventual role is to offer opinions regarding the validity of an examinee's personal history as well as the behavioral and psychological aspects of the subject's background and current status. Thus, as Meloy (1989) suggested the forensic evaluator necessarily engages in a critical "investigation" of what the examinee may represent as his characteristics and personal history. Rather than a posture of "support" and "acceptance" when it comes to reviewing and considering information about an examinee, the forensic evaluator necessarily takes a position of skepticism and scrutiny, whatever the potential disposition question may be. As Greenberg and Shuman (1997) pointed out: "A competent forensic evaluation almost always includes verification of the litigant's accuracy against other information sources about the events in question" (p. 53). This requires that all relevant and available records about a respondent be carefully and thoroughly reviewed, with particular attention paid to discrepancies between the respondent's past and present report (e.g., of sexual offenses, treatment course, perceived risk of reoffending) and the reports of others. Such collateral sources of information are used to either corroborate the respondent's report or to identify incongruities and to suggest possible sources of such divergence of opinion (e.g., defensiveness). Consequently, "[T] he need for historical accuracy in forensic evaluation leads to a need for completeness in the information acquired and for structure in the assessment process to accomplish that goal…" (Greenberg & Shuman, 1997, p. 54).

In reading records pertaining specifically to the history of sexual offenses, it is essential to bear in mind that much of this material was obtained through the criminal justice system. This context is an adversarial one, with possible punitive sanctions contingent on what was self-disclosed by an alleged or adjudicated offender. Further, victims of a sexual offense may refuse or be reluctant to testify or the testimony of minors may be considered problematic from an evidentiary perspective. Consequently, plea-bargaining is far more common than trials in criminal matters of sexual abuse (Brooks, 1996). Serious sexual crimes may then be bargained down to lesser sexual offenses or even nonsexual offenses. This may lead to a judicial record in which the nature of the actual sexual offense is not well described and may not result in an

adjudication that clearly conveys sexual motivation. Judges as TF or TFL may not become aware of an offender's actual history of sexual crimes and lenient sentences may result, which themselves may later be interpreted in a manner that minimizes the sexual offender's estimated future risk of dangerousness. As Rice et al. (2006) demonstrated, rapsheet sexual violence reflects approximately ½ of sexually motivated crime for particular offenders, particularly for more serious violent offenses. Consequently, it seems clear that a sanitized and minimized picture of sexual offenders and sexual offending provides the basis for the research literature; in turn, beliefs about sexual offenders based on these incomplete or misleading data are adopted and promulgated by the professional communities. In addition, just as the criminal justice system can obfuscate the actual nature of sexual offending, the same is often true in treatment settings. This can occur for several reasons. First, from a more benign perspective, the time demands on clinicians may lead to very circumscribed and generic records about treatment experiences, often reduced to numerical ratings with no specific referents for terms like "deviant arousal," "distorted cognitions," or "maladaptive attitudes." Second, and less benignly, when treatment settings (even forensic settings where sex offender treatment is effectively or directly mandated by the judicial system for purposes of public safety) view their role as primarily advocates for offenders, there can be both intentional and unintentional behavior on the part of clinical teams which results in obscuring the nature of the participation of an offender in treatment. As noted elsewhere, generic treatment notes indicating simply that certain types of interventions were employed with insufficient detail to know the basis for those interventions, the means used to measure relative success or failure, and/or reliance on self-report of the offender become effectively useless for many or most forensic evaluations. Unless treatment materials are "detail rich," so that an independent evaluator reviewing records can discern with some degree of precision what has actually taken place in sex offender treatment, relatively little can be concluded one way or another about an individual's relative progress in treatment, effectively rendering the records of that treatment experience moot or irrelevant for a particular offender. Given the more general findings of a lack of effectiveness for sex offender treatment for sexual offenders in general (e.g., Hoberman, 2015), the basis for determining treatment progress must be made on an idiographic level for a particular offender, requiring offender-specific detailed information about their offense-related treatment presentations and substantive individual, group, and assigned work. Consequently, forensic evaluators, who by definition serve the court and public, should be prepared to regard sex offender treatment records with skepticism; if an offender is alleged to have changed, such a claim must be supported via detailed, well-reasoned, and well-documented information about the nature of that offender's experience in a particular treatment setting.

Further, forensic evaluators must be aware of any "legacies of distortions or omission" from previous evaluators' ignorance of or disregard of actual records regarding both historical behavior and previous evaluations. It is often the case that previous evaluators have lacked access to some or often many original and/or relevant records and, as a result, their perceptions, findings, and conclusions about an individual reflect that. As a consequence, their context for appraising a particular offender and perspectives about that individual are based on distortions or omissions about important aspects of his background. Too frequently, prior summaries of "facts" about an individual's criminal history (and specifically their sexual offending history) have simply been "passed along" from one report to another. In addition, existing records essentially consist of a combination of the offender's self-report and professional judgment largely based on that self-report. Given the noted tendency of sexual offenders to dissimulate or distort information about themselves and their offenses, an evaluator must be vigilant regarding "legacies of falsehoods" based on the subject's biased or distorted view of his history that may run through the records. Alternately, biases about sexual offenders in general or a particular respondent's alleged or known sexual misconduct may influence the record review as preconceived biases color the manner in which both observations and interpretations of the offender's behavior in general and sexual behaviors are reported. Consequently, it is a best practice, to make a serious attempt to obtain all records regarding the subject, particularly the earliest ones available.

Records may be provided or authorized by the referral source or one or all parties to a legal matter may provide them. Generally, for forensic evaluations, it is useful to request that the attorneys for both parties in a legal proceeding provide what they deem are the appropriate set of records or identify records that they would like you to consider. If an evaluator does not receive expected or typical sets of documents from the referral sources, those records should be requested before initiating any interview with the respondent (with notice and communication to the court if necessary). As a forensic evaluator reviews the available records, one should be careful to consider and request relevant records (e.g., previous law enforcement and/or evaluation and/or treatment records) that may not have been available to you. Persistence about obtaining as comprehensive a set of documents as possible should be viewed as evidence of the forensic evaluator's competence and fairness. At some point during a direct evaluation, it can be useful to inform the subject of what records you have reviewed and inquire (and note) if there are other records they are aware of which they think exist and would like you to consider. If important record sources were not available for review, that lack of availability and the possible implications should be noted that in your report or testimony, in addition to the records that you did review, and discuss any implications for your

opinion related to the absence of such information. It is noteworthy that many forensic evaluations of sexual offenders (and particularly civil commitment proceedings) often represent the first time that a relatively comprehensive set of records regarding a particular individual has been compiled and able to be reviewed. Consequently, a different perspective of the examinee may emerge as a result of an MHP having the opportunity to examine and integrate many sources of information—including some previously unavailable—about the individual under consideration.

Archival records may reveal a number of important findings. First, there may be apparent and even blatant contradictions in the information a respondent shares at different times to different persons. While this may be simply a function of different levels of denial and/or rapport at different times and with different evaluators, it may be that the respondent's own recollections of his history of sexual offenses changes over time. It may also be a function of interviewer variability; different interviewers possess different levels of skill, knowledge, or commitment and their questioning reflects this status. As noted, Abel et al. (1990) reported that offenders revealed approximately 20 % more types of sexual deviancy when interviewed by experienced interviewers. In addition, interviews may be dominated by the agenda of a current issue or reflect an ignorance of previous criminal and/or sexual offense history so that certain questions are not asked and, as a result, relevant facts do not appear in the record. Second, records often demonstrate that sexual offenders' perceptions of themselves have often differed markedly from those who have evaluated them. Overall, then, an alleged or convicted offender's comments in the records must be carefully examined in terms of their context and not simply taken at face value. Third, the records can be critical to the determination of a respondent's actual sexual offending history and the presence of psychiatric and predisposing conditions; they are also essential for providing the basis for key risk assessment procedures for future dangerousness and for describing these and other elements that can provide the basis for a determination of the relative probability of sexual reoffending.

The types of records that should be expected to be available to an evaluator include but are not limited to:

- Criminal investigation or law enforcement reports, interviews with both offenders and victims about sexual offenses, including those that remained allegations and those that resulted in convictions;
- Juvenile records of criminal behavior and correctional and treatment experiences, particularly if a history of juvenile sexual offending exists;
- Mental health and Chemical Dependency treatment records;
- Any previous clinical or FMH assessments or evaluations, including previous test results or interpretive reports;
- Legal proceedings where charged sexual offenses were adjudicated, including judicial dispositions;
- Pre- and Postsentence Investigations, parole, and/or probation reports and records;
- Correctional system records, including those pertaining to education, work, mental health, medical, discipline, disposition plans, and specific sexual offender evaluations and treatment records.

Carefully reading this volume of original information, which may include handwritten, illegible, or poorly duplicated records, may take many hours; this is an important fact for the evaluator, the attorneys, and the TFL to be made aware of. As a practical note, it is critical to read and review the available records carefully. Just as the limited availability of records regarding an individual can limit a forensic evaluator's ability to draw a conclusion, a large number of available records may impose other burdens on an evaluator. If one is not being compensated for all of one's time or the review is otherwise time-limited, then the professional must make some determinations or negotiations as to what records will be reviewed, typically in consultation with the providers of those records. If this is the case, then the forensic evaluator should clearly indicate what records were and were not reviewed, any apparent ways this might have affected the evaluation, and most particularly the opinions and/or conclusions developed over the course of the forensic evaluation. In reviewing records, evaluators should be alert to evolving distortions or misinformation about a subject; anecdotally but quite commonly, there can be a drift from more extreme impressions regarding an individual to less extreme ones. This can occur because previous evaluators or treatment personnel were not familiar with the official earlier reports of an individual and have come to rely on the offender's representation (a typically more sanitized version) of his personal and criminal history and current presentation, often in a highly restricted environment. Subsequently, this representation comes to replace the original and more accurate observations or behaviors of the offender and creates a "legacy of distortion" about the offender's history that provides a contaminating filter through which they are viewed.

The Direct Forensic Evaluation of Sexual Offenders

Most commonly in forensic evaluations of sexual offenders, one has the opportunity to or is required to conduct a "direct" or in-person evaluation of a sexual offender as part of a forensic evaluation. The direct evaluation includes any personal contact with a sexual offender, typically including structured psychological assessment, e.g., the administration of standardized psychological testing and structured and unstructured

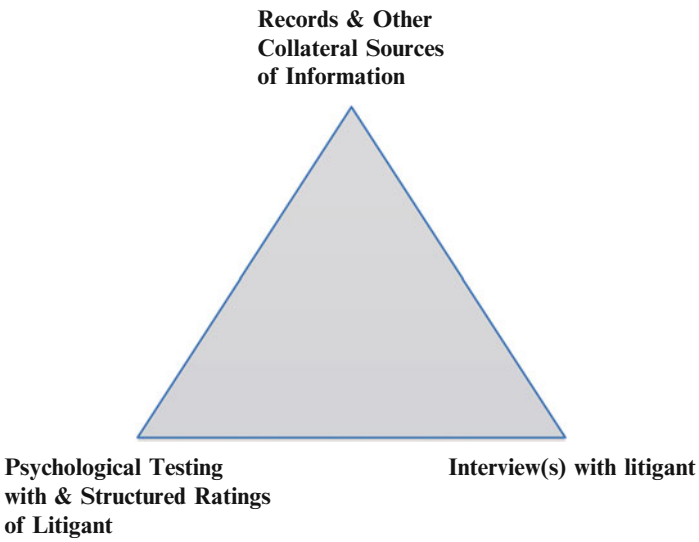

Fig. 1 Forensic data triangle

interviews. Depending on the type of forensic evaluation and the jurisdiction, the offender may be compelled to participate in the evaluation (e.g., may face some formal or natural sanctions if portions of the direct evaluation are refused). Other times, the offender may participate in a more voluntary capacity and may be invested in providing particular information to a forensic evaluator. This is particularly true in forensic evaluations relating to dispositions, treatment progress or status, and release decisions. Direct evaluations typically consist of two primary components: structured psychological assessment (e.g., psychological testing, structured interviews and rating scales) and case-specific interviews. Record review, structured psychological assessment, and structured/semi-structured interviews constitute the "three-legged stool" or "forensic data triangle" for developing the basis of a forensic findings and related opinion (Fig. 1).

Unique Elements of a Direct Forensic Evaluation

As with any FMHA—an evaluation with an explicit or implicit forensic context—the issue of deliberate misrepresentation for personal gain must always be considered; as Sewell and Salekin (1997) recommended, dissimulation should be considered in all evaluations with alleged or adjudicated sexual offenders. Meloy (1989) has suggested that there are six distinguishing characteristics of a forensic interview or evaluation; these are presented below.

1. Coercion or a lack of voluntary participation is inherent in such evaluations; the evaluator must consider the ways in which coercion will affect the process and tailor the assessment process to minimize the impact of coercive factors.
2. In forensic evaluations there is always a waiver of confidentiality and privilege.
3. The forensic direct evaluation is likely to be a critical means to obtain information that, in context, can be communicated to nonmental health professionals.
4. As a result of the coercive context, conscious distortion of information provided during forensic evaluations is almost always present. Among other distortions, Meloy speaks to dissimulation as the concealment or minimization of psychiatric "symptoms" and maladaptive personality characteristics that actually exist as well as historical information. Such "dissembling" is often indicated by the "suspicion index": a marked discrepancy between experiences and behaviors that the examinee reports and those apparent in the records, other objective findings (e.g., structured psychological assessment), and/or a lack of cooperation during the evaluation.
5. Forensic evaluations and their results will likely be "disliked and disparaged" by at least one party given the adversarial nature of litigation.
6. "Forensic [evaluations] compel the forensic clinician to assume the role of a *forensic psychological investigator.* The attitude is one of impartiality and objectivity. The expectation is that data will accumulate that will eventually answer the psycho-legal question that prompted the evaluation" (p. 340).

Given the identified issues regarding self-report relative to sexual offenders and the likelihood that an evaluator may be presented with a significant amount of archival records, the interview offers the subject a singular opportunity to provide his clarifications and perspectives on the records and to present himself in a manner that he wishes the evaluator and the justice system to consider in the context of his history.

Informed Consent and Limits of Confidentiality

In conducting an evaluation that is court-ordered or that one believes will be considered or reviewed by a court, it is imperative to disclose to the offender the specific purpose of the forensic evaluation, namely that it is a means to provide the court information to use in its decision regarding the relevant psycho-legal question (e.g., risk, treatment amenability, or meeting the criteria for civil commitment). It is also important to communicate that a forensic psychological evaluation is different from a clinical one. Most important, the examiner must address the issue of confidentiality—namely, that his or her evaluation will likely result in a written report and/or oral testimony and that the information the offender shares is not subject to confidentiality as it might be were the evaluator serving in a clinical role. In other words, one must clearly distinguish the evaluator's role as a court—or statutorily—designated examiner or as an expert witness for one or the other party. Relative to the *Specialty Guidelines for Forensic Psychologists* (2011) or other similar standards, evaluators should make clear that their role is to provide an impartial assessment and that they are neutral to outcome, regardless of being court-appointed, retained by a party to litigation, or in any way acting in a manner in anticipation of potential litigation or judicial decision-making.

It should be pointed out that there are often times when a sexual offender may elect to decline or refuse any direct evaluation by the forensic evaluator. This obviously should be noted in the report and/or in testimony. In such cases, professional ethical standards typically require that the evaluator indicate what, if any, limitations on the conclusions reached were affected by this lack of one particular source of information.

The Administration of Psychological Testing and Interviews in Forensic Evaluations

It is generally accepted that psychological testing will typically precede structured, semi-structured, and other forensic interview practices. Since psychological tests are self-report instruments, they provide a unique opportunity for the individual of concern to describe himself or herself to an evaluator at a particular time. While contextual factors will always play a role in potentially shaping the subject's responses, a goal of an evaluation is to minimize the effect of other influences. A key one is the potential effect of interview questions, both the topic of those questions and the developing perception of the interviewer by the subject. Consequently, to reduce such possible contaminating influences, forensic evaluators almost always administer psychological testing prior to initiating formal interviews. Ideally, psychological testing can be both administered and scored prior to such interviews, thereby providing opportunity for an evaluator to interact with and discuss the results or questions raised by such testing with the subject during the interview, both to seek clarification of information and to provide the subject the means to comments on what might appear to be particularly relevant findings. As a colleague noted: "One of the most significant ways to guide an interview is to utilize the content of the testing completed prior the interview. This also allows an evaluator to put some "meat" on the bones of the information one obtains from the testing and provide some direction for interpretation. In order to accomplish this, it's preferable to administer the tests first and follow this with the interview, not the other way around. There is another reason the testing should go first if possible. Often the litigant becomes defensive and/or the forensic interview gets adversarial; as necessary, the interviewer must confront the evaluatee with discrepancies in their own accounts or presentations of information or conflicts with the available records. The testing session(s) following possible confrontations will likely be affected and on more than one occasion after a tough interview the client refused to take the tests. In addition, doing the testing first typically allows the development of some rapport and cooperation that may even add legs to the interview even when it is adversarial and contentious" (Riedel, 2012)

While this should be obvious and well known to professionals, including attorneys representing alleged or adjudicated sexual offenders, testing is intended to be administered under standardized conditions. Per the American Psychological Association (APA, 2007): "Psychologists enhance the validity of evaluation results by adhering to standardized procedures (when the techniques they use outline standardized administration procedures) and by developing and sustaining rapport with the examinee. In most testing manuals, standardized procedures and recommended practices for developing and sustaining rapport specify that only the psychologist and the examinee are present in the assessment setting." (p. 1). The APA notes studies showing various compromised findings when testing is administered with third-parties present; such findings also have been demonstrated with interviews. Having additional persons present or observing the testing is likely to have particularly significant effects in forensic contexts, particularly when the outcomes are viewed as "high stakes" by the litigant.

Structured Psychological Assessment

Given the established issues and limitations of unstructured sexual offender self-report via interview, two sources of information become particularly significant in the forensic evaluation of sexual offenders. First, as previously discussed, records are typically paramount in providing previous

self-reports by an offender as well as third-party observations and/or reports by a variety of other sources regarding the offender in question (e.g., collateral reports), all of which most commonly carry the primary weight relative to psycho-legal considerations. However, the second key source of information in forensic evaluations of sexual offenders is Structured Psychological Assessment (see Hoberman & Riedel, 2015); as noted, in general, psychological testing and structured ratings are one of the three common legs of forensic evaluations in general. Structured Psychological Assessment (SPA) is understood as a structured, norm-based (nomothetic) set of methods or approaches for collecting and organizing subject self-report via psychological testing, structured interviews, and professional ratings. Standardized assessment tests and other measures served as controlled opportunities for data collection, quantification, and hypothesis-generating about personality and human behavior; as such, they reduce dependence on examiner's own subjective judgments and, consequently, minimize potential sources of bias and error in obtaining description of psychological characteristics. Results of valid psychological tests provide probabilistic or actuarial evidence that an individual shares personality and behavioral characteristics associated with similar-responding members of the comparison or reference group. Such standardized assessment practices create an opportunity to obtain information from various informants (particularly the subject of the evaluation) to be compared and contrasted with similar information provided by the informant in the past. Consequently, for some period of time, there has been an increased emphasis for mental health professionals in both clinical and forensic settings to utilize available and scientifically validated structured psychological assessments. As both Otto and Heilbrun (2002) and Archer, Stredny, and Wheeler (2013) note, there are limitations in the availability and empirical support for specialized forensic tests relative to specific forensic issues (e.g., there is no specific test for parenting capacity or for determining a mental defect or abnormality). As a result, such authorities point out that traditional "clinical" assessment tools have and continue to play a common and crucial role in most areas of forensic evaluation and per the latter authors "such tests have become widely accepted for use in forensic evaluations" (p. 7). Similarly, Otto and Heilbrun (2002) demonstrated that traditional psychological testing was widely utilized by FMHP in addressing a range of forensic issues; such psychological testing was rated as either essential or recommended by the majority of forensic evaluators in criminal matters for example. As Heilbrun et al. (2009) noted psychological testing data frequently serve as an additional source of information for forensic opinions; forensically relevant instruments provide a means of assessing clinical constructs most relevant to the evaluation of the individual and issues involved in the psycho-legal matter. Further, Heilbrun et al. emphasize that tests and related measures (e.g., structured clinical ratings) that quantify human abilities, traits, motivations, and "abnormalities" can serve to minimize effects of examiners' own judgments, thereby reducing sources of bias and error in describing psychological phenomena. Such formal nomothetic assessment procedures provide a key "third leg" of the elements of forensic evaluations. Psychological tests, in particular, by generating empirically based hypothetical interpretive statements based on persons who endorsed similar types and degrees of items (nomothetic perspective) provide a unique opportunity for comparison with collateral data, particularly archival data. This allows for determinations of current structured self-report relative to be analyzed for convergence or divergence over time, situation, and source of information (an idiographic perspective). Consequently, evidence-based assessment procedures such as structured psychological assessment methods should be the practice or aspiration of all evaluators of sexual offenders.

Certainly, SPA currently occupies a central role in almost all types of other forensic evaluations, including competency to stand trial (e.g., Goldstein, Morse, & Shapiro, 2003) and mental status at the time of a crime (e.g., Stafford, 2003), parenting and child custody matters (e.g., Otto, Buffington-Vollum, & Edens, 2003), and personal injury cases (e.g., Greenberg, 2003) for the range of issues that must typically be addressed to provide useful information for court-related matters. As each of those authorities indicates, psychological testing involving multiscale or multidimensional inventories are particularly important and useful, even if they do not necessarily provide a definitive answer to specific forensic questions. The elements of SPA can provide a broad perspective of an individual's past and current functioning, validity indicators (if present) can be a key source as to an individual's response style (e.g., defensiveness), and the findings of such instruments provide a potentially rich source of information to be combined with other sources of data (e.g., record review) and inform other structured assessment methods. Studies such as those by Borum and Grisso (1995), Lally (2003), Archer et al. (2006) and Archer and Wheeler (2013) indicate that the use of psychological tests in forensic evaluations is very common and generally accepted practice for virtually all domains of forensic psychological evaluations. In particular, Bow et al. (2010) conducted an online survey of experienced forensic psychologists that found that the Minnesota Multiphasic Personality Inventory-2 (e.g., Butcher, Dahlstrom, Graham, Tellegen, & Kaemmer, 1989, 2001) and the MCMI-III (Millon, Davis, & Millon, 1997; Millon, Millon, Davis, & Grossman, 2006, 2009) were, in that order, the two most commonly used tests among forensic psychologists. Almost all of these psychologists utilized the Pearson Assessments interpretation, with over 60 % and nearly 80 % (respectively for each test) relying on computer-generated interpretive reports. The majority of forensic psychologists recommended repeating these tests within 6–12

months after a previous administration. Over 90 % of the respondents opined that the MMPI-2 met admissibility criteria for expert testimony, while over 70 % indicated that the MCMI-III met such criteria.

Standardized psychological tests and professional rating scales provide a broad range of information relevant to almost all areas typically of interest in the forensic evaluation of sexual offenders and this information provides various perspectives, all of which are based on the subject's own self-report (but interpreted relative to standardized norms or structured professional ratings). Heilbrun (2003) noted that a primary principle for FMHA stresses "the value of assessing clinical characteristics using tests and tools that have been derived and validated for this purpose, a population similar to that of the individual being evaluated, and its validation process documented in published research and a test manual" (p. 178). Yet as he and others (e.g., Archer et al., 2013) acknowledge, few psychological tests exist for more narrow or circumscribed psycho-legal purposes or questions. Consequently, as Heilbrun notes that standardized psychological assessment must be considered and applied "somewhat broadly …with 'clinical characteristics' including the patterns of thinking, feeling, arousal, and behavior associated with offending" (p. 178). In addition, he noted the importance of using psychological tests and other specialized measures in the determination of exaggeration or minimization of symptoms (or other clinical characteristics) as particularly helpful in assessing an individual's response style. Heilbrun noted:

> Among other justifications, results of such testing can allow the evaluator to calculate how heavily to rely on self-report in the course of assessment. Sexual offender-specific FMHA would need to consider specialized measures that are particularly applicable to sexual offenders, particularly those sensitive to defensiveness…" (p. 179)

As noted, such testing can be utilized both in an idiographic manner (to compare individual's responses on current testing to their previous responses on the same or similar tests) and nomothetically (comparing their responses to a group-based or normative sample of persons). Later, the application of a particular test administration or series of administration in the context of records, other collateral sources, and interviews can be utilized by evaluators to draw integrated, data-based inferences about psycho-legal issues. In short, using tests and other assessment approaches that have been developed and validated for general and specific purposes can facilitate the informed consideration of how similar clinical conditions and personal characteristics are to those in "known groups" and to a particular individual relative to the relevant legal issues at issue.

Psychological tests are typically only sold to professionals who possess the requisite training and licensure to use them. For persons lacking such experience or credentials, it is highly recommended that some mechanism be developed so that a properly credentialed colleague can administer such tests. Since the "chain of custody" of testing materials is an important ethical issue for forensic psychologists, ideally it should be the evaluator's (or the designated test-administrator's) policy to be present or available when the respondent completes the test questions. Obtaining valid test results, where those results may play an important role in determining case disposition, certainly justifies the added expense of ensuring the quality and integrity of test-taking. Consequently, the evaluator or an appropriately trained representative of the evaluator should supervise all testing in such matters. When it is necessary to administer tests orally to respondents who are identified as having a reading disorder or other, more general intellectual limitation, then the evaluator should be the person who administers the tests, with more time devoted to the assessment approaches as necessary.

In addition, the validity of SPA is of particular importance in the context of adversarial settings such as forensic evaluations. First, such measures have been developed and studied scientifically, they are standardized and norm-referenced, and they demonstrate good psychometric properties that have been shown to be defensible and accepted across a variety of forensic contexts. Second, as with most forensic evaluations, it seems clear and likely that individuals on their own may or will affect particular presentations related to their "goals" or secondary gain. In sexual offender evaluations, an intent to appear less symptomatic or deviant may lead to a "press" on the part of the person being assessed to respond to test items or present information in such a way as to minimize maladaptive personality traits or deviant sexual behaviors or interests (e.g., to "fake-good" or affect positive impression management). Simple, transparent questionnaires are particularly suspect as substantive sources of information, particularly when they contradict the available behavioral information and thus may provide relatively useless information for the development of a forensic opinion.

Along with personal motivation to misrepresent or unconsciously distort information that potential or alleged sexual offenders provide during an evaluation, an additional source of contextual misinformation exists. It appears increasingly common for persons advising potential or alleged sexual offenders regarding their participation, presentation and even "history" in various assessment components of evaluations. Consequently, in forensic or "clinical"/forensic settings, one must be aware that there is evidence that a significant number of attorneys may attempt to "coach" or advise their clients in responding to standardized psychological assessment. For example, in one study, almost half of a sample of practicing attorneys and somewhat smaller percentage of law students surveyed believed that when clients were to participate in a direct evaluation involving psychological testing, the client should "always" or "usually" be given information about the nature of validity

scales used in such testing, as well as coaching as to what types of answers to provide or to avoid (e.g., Wetter & Corrigan, 1995). Other authorities have written about the implications and consequences (and sometimes negative to the evaluatee) as a result of advisers, including attorneys, relative to their client's presentatioins (e.g. Cato et al., 2002; Gutheil, 2003; Lees-Haley, 1997; and Youngjohn, 1995).

In addition, various information about psychological tests and clinical ratings scales is now available on various publically accessible web sites and, anecdotally, in correctional and other institutional facilities across jurisdictions. As Heilbrun (2001) noted the more information a subject possesses about validity scales of psychological tests, the more effectively they can dissimulate substantive "findings" on those tests; in situations, where an evaluatee produces test results markedly discrepant from collateral sources, this possibility should be considered. Consequently, there is always reason to be concerned that some individuals who are provided with or obtain information about the nature of tests and rating scales may be able to affect their presentation style on a test or to manipulate detection of maladaptive symptoms and traits.

Practically speaking, it may be increasingly important to ask an examinee in what ways he has prepared for the evaluation. Specifically, he might be asked generally what he has read or been told about the proposed nature, content, or approach for the evaluation, whether he has read or been told about any material regarding the specific tests chosen for administration (e.g., books about specific tests or rating scales), whether he has received advice from *any person* as to recommended responding for the specific tests ratings or other assessment procedures chosen for administration or if he has sought or received information from the Internet or other respondents about evaluations or specific tests, and what he knows about how responses to the particular tests or ratings may be utilized. This may become a particularly important concern if an offender's most recent test results are markedly discrepant from the results of previous testing or if the offender seems unusually "prepared" for the direct evaluation with circumscribed, seemingly "pat" descriptions of his sexual offense history. This may particularly significant if current accounts of sexual offending history are markedly discrepant from multiple, previous and convergent ones and/or the individual now blames external systems or factors for prior sexual offense admissions and/or the evaluatee now represents that he misunderstood terms (e.g., admitted to sexual arousal to children but claims they meant persons of age but under 18 or claims that they didn't understand the meaning of "forced" relative to a sexual offense. The evaluator may also ask the offender whether he has read or received verbal information or advice regarding the subject of risk assessment and/or ask him to affirm that he has not done so (as part of informed consent, for example).

Useful Psychological Tests in Forensic Evaluations of Sexual Offenders

SPA is of particular use in the forensic evaluations of sexual offenders. The primary meta-analyses have demonstrated a relatively consistent set of psychosocial characteristics or psychological meaningful risk factors have been shown to be associated with sexual reoffending (e.g., Hanson & Bussière, 1996, 1998; Hanson & Morton-Bourgon, 2004, 2005; Mann, Hanson, & Thornton, 2010). These psychological meaningful risk factors (PMRF) are viewed as manifestations of underlying vulnerabilities or predisposing characteristics toward sexual offending; they can also be understood as "criminogenic needs." They include deviant sexual interests; antisocial orientation and other maladaptive personality characteristics; social relationship issues and social deficits; and broad issues with self-regulation. In addition, it should be noted that as Heilbrun (2003) wrote: "For sex offender-specific FMHA, the area of 'mental disorder' must be interpreted sufficiently broadly and flexibly to include a focus on the patterns of thinking, feeling, and arousal that contribute to criminally deviant sexual behavior and the risk that such behavior will recur." (p. 177) Further, as Hoberman and Riedel (2014, 2015) have elaborated on in more detail, measures of SPA can provide valuable, even critical information about impression management, psychologically meaningful risk factors (e.g., both static and dynamic risk factors related to increased propensity for sexual offending), diagnostic and other functional psychological/psychiatric characteristics (e.g., such as self-regulation and self-control), and risk assessment.[2] Testing as a central component of SPA can provide a particularly valuable perspective on the potential mental disorders relevant to a forensic evaluation of a sexual offender [and from a unique source (the examinee)]. In particular, as DSM-5 and, more broadly, research in the mental heath field have identified that psychopathology increasingly appears best understood dimensionally, with individual differences in degrees of the presence or absence of key psychological characteristics. SPA provides a particularly useful means of identifying and quantifying relevant dimensions of thought, motivation, affect, and behavior from the perspective of the individual *and* compared to normative data.

Many of the commonly recommended and utilized psychological tests in the clinical and forensic evaluation of sexual offenders are comprehensive or "broadband" tests, typically personality tests, that include questions and produce results about numerous relevant areas for the evaluation of sexual offenders, including impression management and

[2]The reader is referred to Hoberman and Riedel (2015) for a considerably more detailed description of psychological tests, professional ratings, and structured interviews recommended for use in forensic and true clinical evaluations.

multiple substantive areas of interests (e.g., likely personality traits, information about attitudes and nature of deviant sexual interests and sexual preoccupation). Hoberman and Riedel termed such tests as Multi-Dimensional Psychological Tests (MDPT); among these tests, recommended choices of MDPT include the Minnesota Multiphasic Personality Inventory (MMPI-2; Butcher et al., 1989; 2001), the MMPI-2 Restructured Form (MMPI-2-RF; Tellegen et al., 2003; Ben-Porath & Tellegen, 2008), the Millon Clinical Multi-Axial Inventory (MCMI-III; Millon et al., 2006, 2009), and the Personality Assessment Inventory (PAI; Morey, 1991, 1996). Generally, as Clipson (2003) noted the MMPI-2 and the MCMI-III are the most typically utilized MDPTs in sexual offender evaluations. Meloy (1989) identified the MMPI as the forensic evaluator's "workhorse" in adult forensic evaluations "due to the enormous amount of research available concerning its clinical use, and the sensitivity of its various indicators of distortion" (p. 333); similarly Pope, Butcher, and Seelen (2006) identified that there is considerable research on the forensic application of the MMPI-2. In contrast, Mullen and Edens (2008) noted in published court cases, the PAI is rarely used in isolation; rather, it is typically utilized in conjunction with other MDPT tests, particularly the MMPI-2 and/or the MCMI-III. In part, this may have to do with its significant face validity generally and specifically regarding antisocial characteristics. Another MDPT that has a particular focus on deviant sexual experiences and behavior as well as key impression-management scales are the original MSI (Nichols & Molinder, 1984) and the more recent MSI II (Nichols & Molinder, 1996a, 1996b, 2000); these tests were designed to measure the sexual characteristics of adult male sexual offenders and can be used both as part of psychosexual or sexual deviance evaluation and also to measure treatment progress. As a note, with the exception of the MMPI-2, the various MDPT are all somewhat transparent to an examinee and it is not uncommon for persons with substantial, well-documented histories of particular behaviors and other personal characteristics to deny or minimize those on these tests. On the MMPI-2, regarding the higher likelihood of "faking good" for sexual offenders, Graham, Watts, and Timbrook (1991) found that L and K scale scores were typically much higher than the F scales but noted that the detection of fake-good profiles was more difficult than detecting fake-bad profiles. In a meta-analysis, Baer and Miller (2002) found traditional indices of underreporting yielded a mean effect size of 1.25, suggesting that underreporting respondents differ from those responding honestly by a little more than 1 standard deviation, on average, on these scales. However, they also found that when test takers had been coached about the presence and/or the purpose of validity scales, underreporting is more difficult to detect. The results of so-called validity scales and convergence of substantive MDPT results with personal history documented in the available records give confidence that the examinee is providing a straightforward and veridical portrait of himself. In contrast, divergence between test results and personal history should provide the basis for a higher "suspicion index" and seeking clarification or explanation from the examinee.

As a practical note, as is typically the case in forensic evaluations in general, MDPT and other self-report tests are best administered early in the sex offender evaluation process, typically at the time that informed consent is secured. If possible, such testing should be scored and interpreted prior to conducting direct interviews with an offender. In this manner, the evaluator is alerted to possible impression management on the part of the examinee as well as in possession of the more substantive findings of the tests (e.g., whether the offender has admitted, denied, or minimized specific types of personality characteristics and sexual experiences/behaviors).

Several books provide information about the MMPI-2 and, in particular, its use in forensic contexts (e.g., Ben-Porath, Shondrick, & Stafford, 1995; Caldwell, 1997; Pope et al., 2000, 2006). Weiner (1995) indicated that the MMPI-2 was a sound instrument for forensic purposes and was readily defended in its use in such contexts. Sellbom and Ben-Porath (2006) noted that, in general, the MMPI-2 meets both the criteria of evidentiary admissibility under both *U.S. v. Frye* (1923) and *Daubert v. Merrell Dow Pharmaceuticals, Inc*. (1993). Further, in terms of its admissibility, there are over 350 state appellate court and 250 federal court citations naming the MMPI as an issue in a case. Specifically, in *People v. Cooper* (64 111. App. 3d 880,381 N.E. 2d 1178, 1978), a case involving an allegation that an individual was a sexually dangerous person, the MMPI test report was noted to be the type of report normally relied on by psychiatrists and could be considered by an expert witness in determining the mental state of the individual in question (Greenberg & Greene, 1998). McCann & Dyer (1996), McMann (2002), Dyer (1997), Dyer (2005) and Craig (2006) have advocated for the use of the MCMI-III in forensic settings, while Rogers et al. (1999) have offered a more critical view of the test in such settings. Dyer and McCann (2000) have pointed out that the identification of personality disorders per the MCMI-III satisfies criteria for most scales and may be viewed as better than the MMPI-2. The case of *People* v. *Stoll* (783 P.2d 698 Cal. 1989) and other case law are cited by as providing support for the admissibility of the MCMI based on its widespread acceptance and its place as a standard part of the psychologist's testing battery. Regarding the PAI, its use in forensic settings has been summarized by Edens et al. (2001), while Mullen and Edens (2008) provide a survey of case law related to the PAI.

In addition, to the MDPT, at least one narrow-band measure of a construct strongly related to sexual offending should be routinely included in forensic evaluations of sexual offenders. Hare (1985) developed the Psychopathy Checklist (PCL); this measure was revised in 1991 as the Psychopathy Checklist-Revised (PCL-R, including scoring

sheet, rating booklet, and Technical Manual) and appeared in a second edition in 2003 (along with an updated form of the PCL-R rating scale scoring sheet, a new Interview Guide, and a significantly expanded Technical Manual, all published by Multi-Health Systems). The PCL-R is a rating scale designed to assess the personality traits and behaviors related to traditional concepts of psychopathy (Cleckley, 1950, 1982). The PCL-R-2nd identifies psychopathy as a constellation of interpersonal, affective, and behavioral characteristics, including such domains as impulsivity, lack of empathy, lack of remorse, conning/manipulative, etc. It has been regarded as the "gold standard" for the assessment of psychopathy (e.g., Burros Mental Measurements, 2005). Scores on the PCL-R correlate with the Psychopathic Deviate and Mania scales of the MMPI-2 and with the Antisocial and Narcissistic scales of the MCMI-III. Lally (2003) found that the PCL-R was rated as recommended for sexual violence evaluations (and violence evaluations more generally) by 62 % of experienced forensic psychologists; it was the only psychological measure that was recommended by the majority of those psychologists. DeMatteo et al. (2014) reported that challenges to the admissibility of the PCL-R in court were rare and typically unsuccessful. Although concerns have been raised about the reliability of the instrument in adversarial sexual offender proceedings (e.g., Murrie, Boccaccini, Caperton, & Rufino, 2012), Harris, Rice, and Cormier (2013) showed that file-only scoring of the PCL-R based on good archival material closely matched the clinical scoring typical of routine forensic practice. Harris et al. (2013) also found that file-only total scores were significantly higher than file-plus-interview scores. Agreement was best for PCL-R Factor 2 and Facet 4 scores (e.g., the more behavioral items). Harris et al. indicated that lower agreement in "clinical" use was related to (1) lower degrees of training and practice regarding the PCL-R (leading to measurement error); (2) "partisan allegiance" to outcome; and (3) the effect of more psychopathic subjects to contaminate the interview data and experience (as a result of their psychopathic traits). In support of this last point, it should also be noted that in their large updated meta-analysis, Leistico, Salekin, DeCoster, and Rogers (2008) also found that the association between violence and file-alone PCL-R scores was significantly larger than file-plus-interviews.

While the common method is for the PCL-R to be rated based on both records and the administration of a semi-structured interview, as several studies have demonstrated, with adequate archival materials, ratings for PCL-R items can be made in the absence of an interview (e.g., Quinsey, Harris, Rice, & Cormier, 1998, 2006). As the Hare Technical Manual notes in some situations "it may prove impossible to conduct a useful interview. In others, the individual may refuse to be interviewed or to cooperate with the clinician. A considerable amount of research…indicates that reliable and valid PCL-R ratings can be made solely on the basis of collateral information if it is of sufficiently high quality" (Hare, 2003a, p. 19). It is noted that a reliance on file review alone may lead to providing lower rated item scores on some of the interpersonal and affective (Factor 1) items, particularly for more psychopathic individuals. Consequently, "Descriptive statistics … indicate that field-based PCL-R ratings are, on average, several points lower than standard ratings" (Hare, 2003a, 2003b, p. 19).

Considerations and Strategies in Forensic Interviews with Sexual Offenders

Interviews should possess both a "scientific" and an "artistic" dimension, as others have suggested (e.g., Pithers et al., 1989). That is, such interviews should have some significant element of structure, to reduce information variance and to provide full coverage of the range of possible behaviors, historical events, and personal phenomenological experiences (e.g., sexual fantasies and urges). Clearly, simply using what is "known" about an offender through the available records is likely a mistake and risks perpetuating falsehoods and misconceptions that may exist within records, simply because no one has yet queried the respondent more broadly or in more depth.

The "artistic" element of the interview with a sexual offender is based on the evaluator's ability to establish a "working alliance" with the examinee, even in the face of adversarial perspectives. While a therapeutic alliance often entails accepting the client's report without challenge, a working alliance relates to treating the examinee with respect and neutrality as well as the likelihood of challenging reports that are discrepant with other sources at some point during the evaluation. With denial and minimization often strongly present, the possibility of reactance, resistance, and refusal to cooperate by the examinee may exist. An evaluator must be able to discuss an individual's criminal and sexual offense history without appearing judgmental or reacting in any obvious emotional manner; reviewing the records can help to desensitize an evaluator to any extreme aspects of a sexual offender's record. Early or abrupt confrontation of a sexual offender's report, beyond being disrespectful and relatively incompatible with forensic principles, may quickly lead to a refusal to cooperate with the forensic interview. However, in forensic direct evaluation, strategies designed to minimize defensiveness by framing the interview within a therapeutic context (e.g., Beckett, 1994; McGrath, 1990) are not entirely appropriate. Confrontation may be necessary at some point and/or around some issues presented by the offender. Generally, this may best be accomplished toward the end of the direct forensic interview, with the evaluator preserving for the later part of the evaluation those incidents or elements of the sexual offender's history that might be most likely to be experienced as provocative or otherwise problematic.

As with any individual participating in a forensic evaluation, an examinee should be treated with respect. The potential value of an interview from a sexual offender's perspective is to have an opportunity to present his view of his past behaviors and experiences and of his future risk to the community. Consequently, it is incumbent upon the examiner to create an atmosphere in which the subject feels that an attempt will be made to understand his perspective about himself and his history. Framing the interview portion of the evaluation in this manner can accomplish a great deal toward establishing an interactive and impartial framework for the evaluation.

Nonetheless, the adversarial context within which most forensic evaluations take place and its character as a forensic rather than a traditional or "non-forensic" therapeutic, clinical evaluation means that there are limits to the means by which information is elicited from a respondent. Particular strategies for the structure of the interview process for sexual offenders, many of which were also suggested by McGrath (1990), are ethical and useful to the goals of the interview; any of these strategies can work to minimize denial and maximize self-disclosure and discussion. These are actually quite similar to interventions recommended by Meloy (1989) to "ferret out" distortion in forensic interviews in general. Overall, per McGrath, the interviewer can begin with issues of a less threatening nature, such as personal history. Questions regarding an individual's youth and adult development can also be posed in such a manner as to develop an affirmative and collaborative set; such questions allow the evaluator to use his or her professional skills to facilitate the respondent's having a sense that his perspective is being heard and understood. Generally, posing questions likely to be responded to affirmatively (e.g., developing a so-called "yes set") can be productive. Using clinically "leading" inquiries such as "how often have you done such a behavior?" communicates an assumption of the behavior in question and places the burden of denial on the offender (McGrath, 1990). Similarly, Adkerson (1996) suggested using the techniques of prediction and mind reading to facilitate greater accurate disclosure. By communicating in such a direct fashion, the respondent may appreciate that the evaluator expects that such behavior may have occurred and will not be shocked by the respondent's response. Direct questions about sexual offense history can also provide a permissive tone; such a straightforward approach can communicate to sexual offender that he can respond more directly and clearly himself and with less hesitancy and deception. Asking similar questions or variations of the same question over the course of an interview(s) is also a valuable strategy in eliciting information about the offender and his history. There is particular utility in assessing a sexual offender over the course of several days of evaluation (or over time), typically with a mixture of testing and interview time; one is able to observe the individual during varying degrees of stress, boredom, and fatigue. Finally, the sequence of interviews should include attempts to present the sexual offender with any discrepancies that exist *within* the record or *between* the record and his current interview, particularly in the areas of sexual offense history, treatment course and progress, and information pertaining to his relative risk in the community. As Clipson (2003) suggests this is typically best left to the end of a direct evaluation.

Sometimes, if a sexual offender is clearly upset and angry at his involvement in the forensic evaluation at the initial meeting, it can be useful to begin an interview process by offering him a chance to speak to what is most important to him and for the evaluator just to listen. This opportunity to ventilate, in the face of an adversarial proceeding where much can be at stake, can defuse some anger, so that the possibility of later eruptions of anger and frustration is reduced. Rapport during the interview portion of the evaluation can also be initiated or maintained through the acknowledged use of a structured background and diagnostic interviews in which the evaluator demonstrates to the examinee that he or she must ask the same questions of all interview subjects for the integrity of the assessment. The range of questions, some or many of which may not apply to a particular respondent, and may even seem strange or "crazy" to him, can even serve as a source of some humor during the interview process. One can sometimes minimize denial and resistance either by reframing the question to ensure that the respondent clearly understands it or by offering the same question later in the interview.

As noted, if an offender provides information that is distinctly different from the available records or from previous evaluation sessions, it is usually wise to avoid confronting him about these discrepancies too early in the evaluation process. Eventually, however, an evaluator should address such discrepancies, perceived dishonesty, and most important, any differences in versions of the history of the respondent's alleged and adjudicated sexual assaults. However, as McGrath (1990) suggested this goal should be guided by a "progressive-approximation" strategy and best done within a context of some rapport and motivation on the examinee's part to cooperate. This way, information is obtained initially through what the sexual offender shares voluntarily. Typically, it makes good sense to reserve questions about broader or discrepant sexual offense and criminal history until later in the interview, particularly if there are differences between this current self-report or among past reports by the respondent, victims, and collateral sources. As noted, later in the interview process is typically the optimal time to confront a sexual offender about more general discrepancies or apparent dishonesty. Overall, then, an evaluator must start where the respondent "is at" and decide what optimal progression of interview topics and methods will work best with a particular individual.

From a practical perspective, if an interview is allowed or required, clearly, the most adequate forensic evaluation of a sexual offender through interview can best be accomplished through spending considerable contact time with the respondent. Extended contact may provide the basis for an acquired familiarity, reduce negative expectations and anxieties, and thus provide the opportunity for a working alliance to develop. This may be a difference from "traditional" clinical assessments of sexual offenders for treatment planning purposes; however, it is similar to assessments in other forensic contexts. Thus, forensic interviews should be comparable to interviews involving personal injury, sexual harassment, or civil commitments of the mentally ill and dangerous where similar issues are at stake. Further, as in all forensic interviews, the length of the respondent's sexual history, the complexity and severity of his psychological and psychiatric characteristics, and his manner of presentation at interview times should determine the actual length of time of contact with the subject. Ideally, the actual face-to-face contacts with the sexual offender should consist of lengthier sessions and occur over more than 1 day, depending on logistical factors, the offender's defensiveness, cognitive capacity (including intellectual and attentional abilities), and the extent of his sexual offending and other criminal, correctional, and therapeutic history. Often individuals present for forensic interviewers with some attempted, even coached, versions of their history and verbalized self-perspective. Often over an extended interview(s), such facades become vulnerable and the subject becomes much more open and genuine in their historical accounts and self-presentation.

Information acquisition is greatly facilitated by multiple interviews over a number of days, as just noted; this allows for multiple questions directed at similar areas of behavior, framed in somewhat different contexts to facilitate information comparison across interviews. Further, evaluation over several sessions can provide the opportunity to initially administer and score psychological tests early in the evaluation process and then to use later interview time to seek to confirm or disconfirm hypotheses generated by these tests. Finally, multiple interviews provide a much greater opportunity to observe a respondent's interpersonal style. However, this goal may often not be logistically possible given various contextual or situational factors.

In general, the process of the forensic interviews should be standardized both in terms of specific procedures and the areas to be covered. Content-wise, the interview portion of the evaluation usually takes the following order: (1) personal, developmental, social, and medical history; (2) diagnostic and personality trait evaluation; (3) general mental health, correctional, and sexual offender-specific treatment history; (4) sexual and sexual offense history; (5) risk assessment and proposed plans for the future; and (6) treatment amenability and expectations. In the course of this inquiry, likely criminogenic needs to be addressed in treatment should be identified and the type of treatment and/or other dispositions may also be discussed. Testing and questionnaire administration can be interspersed throughout the evaluation days, as they often serve as useful breaks from the demands of the interview format. Generally, it is useful to ask the individual to provide his perspective on his history of criminal and sexual offenses and any experiences with correctional and treatment programs. At the end of the interview process, the subject should then be confronted with information in the records about those same areas, including showing or reading those records to the examinee, and asked to provide clarifications of the discrepancies. Finally, it is important to ask the examinee, what topics or incidents that they consider relevant that may have been missed or what other information they wish the evaluator to consider in coming to an opinion.

Issues Regarding the Validity of Interviews with Sexual Offenders

It is notable that there is no empirical literature that indicates that a direct interview with a sexual offender necessarily provides reliable and valid information (e.g., Becker & Quinsey, 1993). As Salter (1988) wrote:

> …the clinical interview is used with sex offenders, without the degree of confidence one ordinarily assigns to it. A client entering therapy for depression, anxiety, or marital or family difficulties can be expected to be relatively honest with his/her therapist. The client is experiencing distress and is seeking help in alleviating it. It would be as foolish to lie extensively to a therapist regarding the distress as it would to show a physician one part of the body. There is, of course, a universal tendency for people to try to make themselves look good…[T]he clinical interview with the sex offender, particularly before he has begun the process of treatment, must be assigned different degree of weight in the overall assessment. He is typically afraid to tell you, and even himself, the truth… [E]ven a cursory reading of the literature should inform the novice sex offender therapist that a clinical interview cannot be trusted, especially one conducted prior to treatment. (pp. 186–187)

Salter pointed to the landmark study by Abel, Osborn, and Twigg (1985), which found that objective measures of sexual arousal (via plethysmograph) and self-report coincided in only 30 % of the sample despite a guarantee of confidentiality. Of the remaining the sample (e.g., those with discrepant information), when confronted with the discrepancy between their own report of deviant arousal and psychophysiological results, 70 % of the discrepant reporters subsequently admitted to additional deviant sexual arousal/behavior. In short, 50 % of this sample, despite confidentiality guaranteed, initially lied about their sexual deviance until confronted with other evidence of that deviance. As Salter

stated: "A clinical interview is thus utilized in working with sex offenders, but as much for a check on the offender's level of denial and to obtain information unrelated to the sexual deviancy as to obtain reliable information" (p. 187). Further, in many forensic evaluations of sexual offenders, with the likelihood of varying degrees of deception, distortion, and minimization, it is clear from reading the records of many sexual offenders that there are apparent and blatant contradictions in the information they share at different times with different persons and that their self-perceptions often differ markedly from the perceptions of those who have evaluated them. Thus, there may be differences in information revealed to law enforcement officials at the time of the investigation of a complaint, to a judicial officer at trial or sentencing, to a probation officer in a presentence report, and to evaluators and therapists in treatment settings.

As Earls (1992) concluded in discussing the assessment of sexual offenders: "[T]here is surprisingly little empirical research concerning the reliability and validity of the information obtained in a clinical interview (p. 234)… we can expect the validity of data obtained in the initial interview is fairly low (p. 235)… the end result may underestimate the frequency and seriousness of the client's previous sexual offences" (p. 237). A general interview itself is unlikely to produce "truth" regarding an offender's sexual offense history or his risk of future dangerousness, as is the case in other forensic contexts where self-interest may be significantly present. Nonetheless, the interview can provide important information about a sexual offender that can then be compared with and integrated with the other sources and types of information available to the forensic evaluator. However, the likelihood of underestimation of an individual's history of sexual offenses, experience of deviant sexual fantasies and urges, and other information relevant to the psycho-legal questions must be kept in mind throughout the forensic evaluation.

Thus for some the necessity of a case-specific interview in the evaluation of a sexual offender can be questioned. Certainly some forensic practitioners may consider this aspect of a direct evaluation of a sexual offender a potentially useful source of information but not an absolutely necessary one. For example, Jackson and Hess (2007) noted that in the high-stakes arena of Sexually Violent Predator (SVP) evaluations, while the majority of evaluators "recommended" the use of an interview, only 17 % considered the interview "essential" and 2 % considered that aspect of a direct evaluation as irrelevant. However, professional ethics typically require attempting a case-specific interview in addition to SPA relative to offering an opinion regarding the sexual offender's current mental status and present and past psychological/psychiatric characteristics. In addition, in most cases direct forensic interviews provide an opportunity for key or critical information, both about historical events from the perspective of the examinee and the particular manner in which the subject presents himself and manifests key elements of personality (e.g., the presence o absence of relatively psychopathic or other maladaptive personality traits). Repeated interviews over time often provide key information about the subject's veracity about key events related to their legal situation, attitudes about and affective experiences relative to their current situation and past behavior as well.

Structured Interviews

Personal and Social History Interview One of the best means of obtaining background information about an individual is to use the *Interview and Information Schedule* (IIS) included in the materials provided for administering and scoring the Hare Psychopathy Checklist-Revised (PCL-R). This IIS is a semi-structured interview that can elicit much of the information necessary to make the judgments required for scoring the PCL-R (Hare, 1991). However, it also provides coverage of educational, occupational, family, marital, and criminal history and ensures that the evaluator covers each of these areas in sufficient detail. Interviews such as the IIS, as semi-structured instruments, allow for such flexibility that an individual's characteristic interactional style is able to emerge. There are areas that the IIS does not cover, however, including developmental and sexual history, which should be addressed in this part of the evaluation. Further, to use the IIS, an evaluator should be familiar with and experienced in the background and scoring procedures of the PCL-R so that sufficient information is obtained to score the PCL-R using the norms that include interview-derived information. According to Hare (1991), the IIS will take 90–120 min. Other potential sources of formal questions for the evaluation of personal and social history in sexual offenders are provided by Beckett (1994) and the Psychosexual Life History (Nichols & Molinder, 2010).

Structured Diagnostic Interviews Traditional assessment among mental health professionals has typically relied upon unstructured interviews, where individual clinicians pose questions they select or which "occur" to them to particular individuals and record those individual's responses to those asystematic questions and behaviors demonstrated during the interview according to the clinician's personal perception and judgment. However, "standard" unstructured psychiatric interview procedures lack reliability and/or validity. Thus, in an early study of the nature of disagreement among clinicians, Ward, Beck, Mendelson, Mock, and Erbaugh (1962) found that *information variance* (differences among clinicians in questions asked and observations made) accounted for 33 % of the differences while *criterion variance* (differences among clinicians in applying uniform standards of the

degree of clinical symptoms present) accounted for 63 % of those differences; actual variability in the client's "presentation" accounted for only 5 % of the differences in clinician disagreement. Blashfield (1992) also showed that clinician's utilizing unstructured methods often did not systematically apply diagnostic standards; such an example of *criterion variance* resulted in misdiagnosis in over 50 % of the instances studied. As a consequence of such non-standardized practices, traditional clinical interviewing has long been recognized as lacking in the psychometric properties necessary for scientific and judicial acceptance.

Based upon findings such as those of Ward et al. (1962) and Blashfield (1992), mental health researchers have long understood and utilized more structured interviews [e.g., the Schedule for Affective Disorders and Schizophrenia (SADS; Spitzer & Endicott, 1978)] as well as formal diagnostic criteria [Research Diagnostic Criteria (RDC), the International Classification of Diseases (ICDs) or the Diagnostic and Statistical Manuals (DSMs)] to optimize reliable and valid diagnostic assessments. Such approaches have also been recommended for forensic evaluators as well (e.g., Hoberman, 1999; Hoberman & Riedel, 2014, 2015). As Nicholson (1999) pointed out, investigations incorporating the use of structured diagnostic interviews yield substantially higher reliability estimates for most personality disorder diagnoses. He wrote

> studies have demonstrated substantial discrepancies between research diagnoses based on structured interviews and diagnoses given in typical clinical practice, even for axis one disorders; moreover, the discrepancies are greater for patients diagnosed in state hospitals and community mental health centers and for those diagnosed in University—affiliated hospitals (p. 130)

That is, research involving structured interviews and diagnoses based on formal criteria are typically more accurate than diagnoses provided for clients diagnosed in community clinical settings.

Structured, or more commonly, semi-structured diagnostic interviews allow the interviewee to provide their own perceptions or opinions to standardized sets of questions but allow professional judgment by the evaluator as to whether symptoms or personality traits characterize the individual. As Rogers (1995) stated:

> The essence of structured interviewing is its standardization of the interview process … structured interviewing standardizes (a) the clinical inquiries and subsequent probes, (b) the sequencing of clinical inquiries, and (c) the systematic ratings of patients responses. The resulting uniformity allows for direct comparison across psychologists, clinical settings, and diagnostic groups." (p. 1)

He identified a number of advantages of structured interviews including increased reliability; reduction of information and criterion variance; comprehensiveness (more diagnostic possibilities are covered and diagnoses, particularly those of less frequency, are not missed as often). A primary disadvantage of existing structured diagnostic interviews is that existing interviews may not cover all of the diagnostic possibilities of interest.

Rogers (1995, 2001) presents a relatively comprehensive review of many of the available systematic diagnostic interviews for assigning diagnoses for both episodic and more chronic mental disorders. Regarding such interviews, a distinction is made between structured and semi-structured interviews; in the former, *only* the prespecified questions are asked, while in the latter, evaluators are allowed to utilize their own questions to *supplement* (but not replace) standard, required questions and optional probes. Quite recently, Samuel et al. (2013) in an extensive longitudinal study found that clinician's diagnostic ratings were collectively never more informative than those from a semi-structured diagnostic interview; semi-structured interviews and self-report questionnaire diagnoses consistently predicted significant variance in psychosocial functioning beyond clinician ratings.

Diagnostic Interviews: Personality Disorders: Meta-analyses of risk factors for sexual reoffending have identified a set of maladaptive personality-related predisposing risk characteristics associated with such recidivism (e.g., Hanson and Bussière, 1996, 1998; Hanson & Morton-Bourgon, 2004, 2005; Mann et al., 2010). Antisocial attitudes and behavior have been identified as one of the primary "paths" or causal factors associated with sexual offending (e.g., Barbaree, Langton, & Peacock, 2006; Doren, 2005; Roberts, Doren, & Thornton, 2002) and models of sexual offending also indicate the importance of these characteristics (e.g., Ward & Beech, 2006, 2015). In addition, narcissism/entitlement, callousness/indifference to others, dispositional/trait anger, violence-supportive attitudes, social neediness/desires for social acceptance, impulsivity, and other self-regulatory deficits have also been found to show significant associations with sexual offending per the aforementioned meta-analyses and other research (e.g., Hoberman, 2014a). Consequently, the assessment of such personality dimensions has particular importance. Antisocial, narcissistic/self-interested, and emotionally unstable personality characteristics are often ego-syntonic and, consequently, persons with such traits and behavioral histories are often unaware of or minimize the presence of such characteristics in themselves. In addition, persons with maladaptive characteristics associated with social anxiety, issues with belonging, interpersonally dominant, callous, lacking in remorse or guilt, social conflict, and detachment are also at risk for future sexual offending.

For forensic evaluations of sexual offenders, a formal assessment of relevant personality disorders is essential, both for treatment planning and in identifying PMRF. Per the former DSM-IV-TR (APA, 2000), a Personality Disorder is defined as an enduring pattern of inner experience and

behavior that deviates markedly from the expectations of the individual's culture. This pattern is manifested in two or more of the following areas: (1) cognition, (2) affectivity, (3) interpersonal functioning, or (4) impulse control. The enduring pattern is inflexible and pervasive across a broad range of personal and social situations and leads to clinically significant distress or impairment in important areas of functioning. A particular issue regarding the assessment of Personality Disorders is that such conditions are often "ego-syntonic" for the individual; that is, thought individual is not aware that their behaviors or traits are maladaptive, problematic, or impairing. One might say that they experience their particular cognitions, emotional style, social relations, and/or self-regulation as acceptable parts of their identity. Ten specific Personality Disorders were identified in the DSM-IV-TR as a category formerly known as Mixed Personality Disorder but later termed Personality Disorder Not Otherwise Specified (PDNOS). It is noteworthy that several studies cited by Rogers (1995) indicate that research studies have typically found that a very significant percentage of clinical samples received four or more Personality Disorder diagnoses on Axis II when systematically assessed; virtually none of the subjects in clinical samples met criteria for just one personality disorder diagnosis. In particular, if an individual satisfies the criteria for one diagnosis within so-called "dramatic-erratic-emotional" cluster, he is likely to satisfy the criteria or have other maladaptive personality traits for other diagnoses within that cluster. Similarly, Verheul, Bartak, and Widiger (2007) noted that PDNOS (as OSPD was known in DSM-IV) as a "mixed" Personality Disorder was the most commonly diagnosed Personality Disorder in clinical practice.

Most recently, the recent DSM-5 (APA, 2013) re-enumerated the same ten specific Personality Disorder categories described in DSM-IV-TR. They changed Personality Disorder NOS to either "Other Specified Personality Disorder" or "Unspecified Personality Disorder." The former category applies to presentation in which symptoms characteristic of a personality disorder that cause clinically significant distress or impairment in social, occupational, or other important areas of function predominate but do not meet the full criteria for any of the specific disorder among the ten specific disorders. The "Other Specified" category is used in situation in which an evaluator chooses to communicate the specific reasons that an individual's presentation does not meet the criteria for a specific Personality Disorder; in fact the example offered as the "specific reason" is "mixed personality features." However, the DSM-5 also recognized the various problems related to a categorical system of classification of mental disorder and, in particular, Personality Disorders. They noted that a categorical approach did not capture the significant clinical reality of overlapping or shared symptoms across more narrow diagnostic categories and the heterogeneity of conditions captured within specified categories. Consequently, the DSM-5 now provides an alternative DSM-5 model for Personality Disorders where Personality Disorders are characterized by two primary dimensions: (1) impairments in personality function (self and/or interpersonal) and (2) one or more pathological personality traits. While recognizing the validity and the significance of a dimensional approach to organizing and classifying mental disorders, including Personality Disorders, the DSM-5 elected to maintain a categorical classification of Personality Disorders as "bridge" to from past to updated more dimensional diagnostic practices.

Interviews for DSM-IV-TR/DSM-5 Several formal diagnostic interviews have been developed to assess the presence of maladaptive personality traits and Personality Disorders. Given the continuity between the DSM-IV-TR and DSM-5, they continue to offer a structured means of providing an examinee to provide self-reported information regarding personality characteristics. The Structured Interview for DSM-IV Personality (SIDP-IV) (Pfolhl, Blum, & Zimmerman, 1995) is a clinical interview to determine the presence of the individual symptom that in clusters define the personality disorders described by DSM-IV. Using questions that are grouped on a "thematic" basis (e.g., self-concept, social relations, etc.) to minimize response sets, this semi-structured interview allows for the systematic assessment of all elements or traits, which compose the DSM-IV personality disorders. Although the SIDP was developed to take approximately 90 min to administer, in actual assessments, it is rarely possible to administer the SIDP in less than 3–4 h, particularly if a respondent is quite talkative or elaborative. Per Rogers (1995), the SIDP's earlier versions (e.g., that for DSM-III-R) demonstrated good inter-rater reliability, relatively clear boundaries for specific personality disorders, and clarity in the assignment of the diagnosis of Mixed Personality Disorder or Personality Disorder NOS. Other systematic diagnostic interviews for Axis II disorders include the Structured Clinical Interview for Diagnosis on Axis II (SCID-II) (Spitzer, Williams, Gibbon, & First, 1990) and the Personality Disorder Interview-IV (PDI-IV) (Widiger, Mangine, Corbitt, Ellis, & Thomas, 1995). On the SCID-II (a structured interview), for each diagnostic criterion, the individual is typically asked 1–2 standard questions and, if affirmative responses are received, the examinee is then asked to provide examples.

The PDI-IV is identified as a semi-structured interview; it assesses diagnostic criteria for ten established and two proposed personality disorders. The companion book provides detailed information about the Personality Disorders, their relevant traits, and the interview itself. It can be administered in one of two formats: by thematic area (e.g., the questions regarding personality disorders are organized by nine topical

areas, similar to the SIDP) or by disorder. Each personality trait or criterion is assessed by at least two and generally three or four standards questions and there are a small number of branching questions as well. Given the number of questions, the complete PDI-IV can take up to 2 h to administer. Consequently, its optimal use can be in the application of questions to those disorders of greatest clinical and forensic interest. An advantage of the PDI-IV is that an evaluator can select one or more particular Personality Disorder categories to inquire about for a particular offender utilizing a semi-structured format. It is recommended that the section on Antisocial Personality Disorder should always be administered for sexual offenders, with additional utilization of sections on Borderline, Histrionic, Avoidant, Schizoid, and/or Schizotypal Personality Disorders as indicated by history (records), current testing, or earlier interview responses. There is mixed evidence for the reliability of the PDI-IV relative to the presence or absence of particular Personality Disorders, with Antisocial Personality Disorder having the highest level of reliability. While the earlier version of the PDI-IV was originally studied using graduate student ratings, experience has demonstrated that "the more talented, dependable, and insightful the interviewer, the better these results" (Widiger et al., 1995, p. 10).

As noted, the relative degree of Psychopathy that characterizes a sexual offender should be assessed and rated in all forensic psychological evaluations of such individuals. The IIS mentioned earlier provides an essential means of collecting relevant information when a direct interview can be conducted with an offender. In addition, Gacono (2000) developed a PCL-R Clinical and Forensic Interview Schedule that provides additional and useful questions to attempt to elicit specific information that informs the ratings of individual PCL-R items. This Interview Schedule can be used on its own or integrated into the use of the IIS itself.

More generally, aspects of the diagnostic evaluation of a sexual offender regarding Personality Disorders typically follow quite naturally from questions concerning general areas of his personal and social history. This is particularly true when assessing potential personality traits using thematically organized, structured interviews. Thematic areas of interest concerning an individual's mood, interpersonal relations, reactions to stress, and the like are an effective bridge to more specific questions about episodic psychiatric symptoms. While a structured approach presents the respondent with some unusual questions that he may at first experience with discomfort, the evaluator can point to the fact that he or she is using a structured instrument and must ask all respondents the same questions due to the structural requirements of the interview. Such interviews also provide continuity in the development of a limited rapport and cooperation.

More traditional psychiatric disorders (those formerly classified on Axis I of the DSM-IV-TR) may also be important to assess as part of an evaluation of sexual offenders, as such disorders appear more common among persons identified or referred for sexual issues (e.g., Kafka & Hennen, 2002; Marsh et al., 2010; Raymond, Coleman, Ohlerking, Christenson, & Miner, 1999). Consequently, for Axis I disorders, the Structured Clinical Interview for Diagnosis (SCID) (Spitzer et al., 1990) or the semi-structured Schedule for Affective Disorders and Schizophrenia (SADS) (e.g., Spitzer & Endicott, 1978) can be administered. Reliable and valid use of both the SCID and the SADS require that evaluator have received extensive formal training in the use of either instrument.

Unfortunately, none of the structured diagnostic interviews available include questions specifically referring to sexual disorders, including the paraphilias. As McGrath and Purdy (1999) have noted the DSM-IV-TR is characterized by distinct "limitations for the diagnosis of sexual offenders. For example, there is no specialized diagnosis for several types of sex offenders such as men who have a sexual preference for adolescents or who sexually assault adult women" (p. 67); others such as Marshall (2007) have pointed to the long time opposition of the American Psychiatric Association to defining a diagnostic category that "could obviously accommodate persons who rape" (p. 20).[3] Though the DSM-IV-TR is the most widely accepted authority in the United States for psychiatric diagnosis, other diagnostic systems such as the International Classification of Diseases (ICD) exist. The development of proposed criteria for sexual disorders for the DSM-5 was expected to correct for some of the limitations of the DSM-IV-TR. However, beyond distinguishing between paraphilias and paraphilic disorders, it appears that DSM-5 may simply maintain those perceived limitations. As McGrath and Purdy concluded, given the inadequacies of the DSM-IV, "descriptions of sex offenders problems that go beyond the formal diagnosis are often very helpful to the referral source" (p. 67).

Per DSM-IV-TR, the general diagnostic criteria for a Paraphilia indicate that the essential features of are recurrent, intense sexually arousing fantasies, sexual urges, or behaviors generally involving: (1) nonhuman objects, (2) the suffering or humiliation of oneself or one's partner, or (3) children or other nonconsenting persons that occur over a period of at least 6 months. According to DSM-5 (APA, 2013), the term Paraphilia now denotes any intense and persistent sexual interest other than sexual interest in genital stimulation or preparatory fondling with phenotypically normal, consenting adult human partners. In distinction, a

[3]However, it should be noted that the DSM-5 category of Sexual Sadism Disorder was reworded in such a manner that it likely would apply to many sexual offenders who perpetrate rapes: "Over a period of at least 6 months, recurrent and intense sexual fantasies, sexual urges, or sexual behaviors involving the physical or *psychological suffering* of another person."

Paraphilic *Disorder* is a paraphilia that causes harm to others or distress and/or impairment to the individual who is characterized by it. Initially, several additional or revised paraphilias were suggested for inclusion in DSM-5, some similar to ICD-10 and some that had previously been classified as "Not Otherwise Specified." Preliminary research found that the application of the proposed DSM-5 categories provided reliable and more discriminating results when applied to more persistent sexual offenders (e.g., Wilson, Pake, & Duffee, 2011). However, several proposed specific Paraphilic Disorders, such as Coercive Paraphilic Disorder and Hebephilic Disorder, were formally omitted by the DSM-5; while language applying to the former was included in the updated criteria for Sexual Sadism Disorder, the latter category would be classified as an Other Specified Paraphilic Disorder.

Unfortunately as suggested previously, relative to diagnosis, many sexual offenders undergoing a forensic evaluation are likely to deny the existence of identified deviant sexual fantasies and urges as well as offending or nonnormative behaviors. Consequently, just as questions about deviant sexual behavior (or criminal sexual history) are best reserved for the end of the interview, so should questions regarding the type, variety, presence, and intensity of the range of deviant or atypical sexual fantasies, urges, and/or behaviors.

An important consideration for forensic evaluators to increasingly be aware of relates to changing views of mental disorders and conditions. Prior to DSM-5 (Marshall, 2007) "concluded that these [DSM] criteria leave a lot be desired and that a more helpful approach would be to rate the features of each type of sexual offender along dimensions ranging from normal to seriously problematic….[It] is clear is that incidence of comorbid disorders is sufficiently high to warrant concerns about how to effectively address these additional disordered aspects of sexual offenders in treatment." (p. 16) Increasingly sophisticated and accumulating research is identifying that dimensional approaches to maldaptive and/or impairing behavior is largely dimensional (e.g., Krueger et al., 2002, Krueger, Markon, Patrick, Benning, & Kramer, 2007; Krueger, Skodol, Livesley, Shrout, & Huang, 2007; Markon & Krueger, 2005; Markon, Krueger, & Watson, 2005). Clearly, the conceptualization and classification systems of mental and personality disorders are moving steadily in the direction of dimensional models as opposed to more arbitrary categorical systems of such conditions. Obviously, DSM-5 took a big step in this direction by providing both a categorical and more dimensional perspective for describing personality disorders; it seems likely that such a dimensional approach will increasingly be applied to other mental disorders, including the Paraphilic Disorders. For example, there is increasing evidence that agonistic paraphilias (e.g., those involving coercive or nonconsent and sexual sadism disorder) are best viewed as related and dimensional (Knight, Sims-Knight, & Guay, 2013; Mokros, Schilling, Weiss, Nitschke, & Eher, 2014). Given the known and accepted heterogeneity of sexual offenders, particularly with the high degree of crossover sexual deviance in fantasy, urges, and behavior, it seems inevitable that the future will lead to persons (generally) and offenders more specifically being viewed dimensionally relative to a range of deviant sexual interests as well as the "degree" to which those interests apply to a particularly individual.

Other Areas of Inquiry for Forensic Evaluations of Sexual Offenders

General Criminal History Inquiring about apparently nonsexual criminal offenses can be an important source of information about several relevant areas for evaluations of sexual offenders; the range of types of criminal offenses, as well as the age of onset of arrests, is important information to acquire. First, information can be obtained about the onset, duration, and variety of general antisocial behavior. Second, a history of criminal behavior directed at or involving harm to others can provide useful information relevant to evaluating the respondent's propensity for violent behavior; the use of weapons or threats may inform an understanding of the person's psychological approach to or personal style of victimization. Third, certain criminal behaviors may actually represent potential sexual offenses that were interrupted or were undertaken for the purposes of gratifying deviant sexual interests (Adkerson, 1996). For example, breaking and entering charges may have been precursors to rapes; they could also have provided opportunities for collecting items for an individual's fetishes, as could the shoplifting of particular items. The details provided in the records and in the subject's accounts of their general criminal offending often provide useful information about personality and related characteristics of the offender, particularly relative to their motivators, dishinibitors, and responsivity to contextual factors.

Treatment and Correctional History It is important to ask the sexual offender to provide information about any prior mental health treatment experiences, including what diagnoses he may have received, the types of treatment he received, his experience of the therapists he has worked with, and his perception of his clinical progress. Regarding any previous experiences in sexual offender treatment, sexual offenders should be asked to describe in as much detail as possible the elements and course of their treatment, to the degree that they remember, those aspects of their treatment they found most valuable, why those aspects were viewed as valuable, and what specific cognitive, behavioral, and affective changes resulted from treatment.

Most institution-based sexual offender treatment programs are psychoeducational or cognitive-behavioral in nature. Consequently, much of the information, models, and intervention strategies are fully provided for sexual offenders via handouts, lectures, group discussion, and the like. Too often, it appears that sexual offender treatment is delivered in a manner akin to the common rule for public speaking: (1) tell the offender what you intend to tell them or want them to know about a treatment principle or practice; (2) tell the offenders to write what they've read or been told about a treatment principle or practice; and (3) then have the offender verbalize what they have read or been told about a treatment principle or practice in groups. This becomes apparent when sexual offenders are interviewed about their treatment experiences and are sometimes able to recite or name the elements of various treatment components, such as assault or offending cycle, victim empathy, and relapse-prevention. However, it appears that many offenders cannot explain the rationale for addressing these intervention areas in their particular case or describe them in any more detail than what they read from in a workbook or heard presented in group. It often appears that there has been little or no substantive understanding, let alone integration, of the substance of treatment content or any significant cognitive, emotional, or behavioral change as a result of the treatment. It is therefore critical for the forensic evaluator to conduct a careful, detailed assessment of the sexual offender's verbalized experience in treatment and then to critically consider their understanding and application (or anticipated application) of concepts, strategies, and changes that they have taken away from such programs. In addition, several practices have become increasingly common in forensic treatment programs, correctional and otherwise. First, sexual offenders are allowed to keep possession of their paperwork (e.g., homework such as journals, sexual autobiography, offense cycles, relapse prevention plan, etc.) and the treatment provider or agency maintains no copies. Too often such paperwork becomes "unavailable" (lost, destroyed) when a forensic evaluation takes place. In addition, treatment records themselves are often generic, indicating that someone "successfully" disclosed offense history, developed their offending cycle, worked on their relapse prevention plan, and so on. Unfortunately, no information is provided about the particulars of either the work product itself (its content) or the manner or means by which it is determined to have been a "successful" assignment completion. Consequently, treatment records may provide little useful information relative for a true forensic evaluation.

Failure to enroll in, dropout from, termination from, and/or non-completion of a sexual offender treatment program should be carefully explored. If the sexual offender reoffended after previously receiving treatment, query him about his perception of the relationship or lack thereof between treatment participation and/or completion and the subsequent reoffense. Any psychiatric or medical conditions he has been diagnosed with in the past or present should be defined and clarified; any medications he has been prescribed should be identified, as should his opinion about the relative effectiveness and specific changes, if any, which resulted from the medications.

It may be useful to utilize a structured means of reviewing key aspects of sexual offender treatment programming. Two examples of measures that can be used to guide an analysis and/or rate treatment progress are The Sex Offender Treatment Rating Scale (SOTRS; Anderson, Gibeau, & D'Amora, 1995) or the Sex Offender Treatment Intervention and Progress Scale (SOTIPS; McGrath, Lasher, & Cumming, 2012; McGrath, 2015). The SOTIPS is also described in McGrath (2015). As an example, the SOTRS was developed to provide a measure of an individual's relative progress in sexual offender treatment; it assesses elements of both process and outcome in such treatment. The SOTRS consists of several areas: insight, deviant thoughts, awareness of situational risks, motivation, victim empathy, and offense disclosure. Each area is rated on a 6-point scale, with each point defined by behavioral descriptors. Anderson et al. present data indicating that the SOTRS had high internal consistency, inter-rater agreement, and test–retest reliability. The SOTRS can be used as a guide for reviewing treatment records and interviewing a sexual offender with a history of sexual offender treatment in terms of his progress through sexual offender treatment and also to provide a relative rating in each of the six areas noted above. The SOTRS can also be used when the sexual offender has never participated in formal sexual offender treatment. Given the behavioral descriptions of the rating scales, the respondent can be interviewed about each area and assigned a rating.

Sexual Offense History Questions concerning a respondent's known and alleged history of sexual offenses are typically left to the last portion of a planned forensic evaluation. Typically, it is the area in which a sexual offender consistently demonstrates the most affect during the interview. Offenders may become upset and whatever fragile rapport may have existed previously can quickly become threatened. Alternately, some offenders offer remarkably circumscribed reports of alleged sexual offenders; this seems particularly true for persons who have participated in some time of offense disclosure as part of a sexual offender treatment experience. Open questions can provide the desired entry into this area, in which the respondent is asked to review what he believes his sexual offense history to be. Later, the evaluator should address more specific questions based on the available record of convictions and allegations. Discrepancies between current admissions or descriptions of sexual offenses and the offender's records should be

identified and the offender provided an opportunity to clarify those differences. Finally, discrepancies between the offender's reported history and what is known about sexual offenders in general may be explored.

A forensic interview can be particularly important for potentially obtaining information about an individual's course of sexual offenses from the offender's perspective. The interview can be a means of getting a more detailed picture of the sequence and nature of acts that constituted potential criminal sexual misconduct and its relationship to possible varied and/or cumulative predisposing conditions. This is particularly important in SVP cases, where an evaluator must opine about the presence of a "serious difficulty in control." Thus, an interview, particularly if it focuses on the behaviors involved in sexual offenses, provides a means of identifying the "modus operandi" of a particular sexual offender (e.g., Hazelwood & Burgess, 1995; Sjöstedt, Långström, Sturidsson, & Grann, 2004); it can allow for the clarification of the existence of a characteristic behavioral profile of a particular sexual offender. In reading law enforcement interviews of sexual offenders and the accompanying summaries, it is obvious that law enforcement have their own unique agenda in acquiring information; they are too often interested in an admission of the details of sexual acts only because it tells them what type or level of criminal sexual conduct will be charged. They may also attempt to identify general patterns of that type of sexual conduct over multiple victimizations or victims. Consequently, they may not attend to details about the nature of each specific sexual offense with each specific victim. Further, given the evidence that rapsheet sexual offending often misclassifies clear and likely sexually motivated offenses (e.g., Rice et al., 2006), it is particularly important to provide the opportunity for offenders to offer information that relates to the degree of sexual motivation related to rapsheet "violent" and criminal offenses. Although sexual offenders may deny or choose not to corroborate sexual motivation in likely sexual offenses, it can be useful to attempt to collect information via interview (in conjunction with information from criminal justice data) to create a "behavioral map" of each incident or set of incidents with each specific victim. McGrath (2015) has provided an outline that can serve as a guide to collecting information pertaining to an offender's sexual offense history. In contrast to earlier, more direct questions in a direct evaluation about an individual's background, in inquiring about a sexual offense history, it is typically more important to initially provide more open-ended queries regarding particular and suspected sexual offenses. All too frequently through leading questions, assessors provide the offender with easy—and potentially false—"answers" further; the potentially more detailed response to questions about sexual offense history may often provide a "window" regarding how the individual views himself, his victim, and/or other people more generally as well as his psychological mindedness and insight. Later, after an offender has had the opportunity to discuss his account of his sexual offending history, more specific questions based on the records should be utilized to identify and potentially resolve discongruities between previous accounts, the existing records, and current accounts.

In addition, alleged sexual offenders are rarely charged for each act or incident of sexual misconduct against each victim; rather, multiple acts may be collapsed into one or two charges. Charges for sexual offenses often result in plea bargains to lesser sexual offenses or even to nonsexual offenses (e.g., assault); several charges against an offender may be "merged" into one conviction or dropped altogether (e.g., Rice et al., 2006). This may be particularly true where an alleged victim is particularly young, vulnerable, or damaged by a sexual offense. In addition, since some sexual offenders may have victimized a specific victim more than once, they may evidence or report difficulty in remembering or reporting the details of particular incidents or sequences of sexual abuse. A forensic interview provides an opportunity to re-clarify the detailed nature of the behavior that the offender reports transpired and the basis for arrests or charges. Regarding undetected or uncharged sexual offenses, it is reasonable to ask a sexual offender to provide information about sexual acts or attempted acts that have not been reported, which may or may not be noted in archival materials. Obviously, sexual offenders have the protection of the Fifth Amendment, but such questions are appropriate topics to be pursued in a forensic evaluation (at least in a general manner) and both positive responses and refusals based on the right against self-incrimination are to be noted.

Sexual History and the Assessment of Deviant Sexual Arousal and Behaviors The evaluator should attempt a direct assessment of the respondent's deviant sexual arousal and behavior, followed later in the interview process by an attempt to obtain a formal sexual history. Topics to be covered include:

- First remembered sexual experience
- Childhood sexual behavior
- Age of onset of first masturbation
- Frequency of masturbation during childhood, adolescence, and adulthood (by day and week)
- Any periods of especially frequent masturbation, and factors that might account for the increased frequency
- Age of onset of first shared sexual experience
- Age of onset of first sexual intercourse experience
- Frequency and number of sexual partners during adolescence and adulthood
- Number and type of partners while in a "committed relationship"

Respondents should also be asked about their history of sexual fantasies and urges; however, as self-report about a central area to possible sexual deviance, it is quite likely that a sexual offender may not be honest about such fantasies. Sexual preference is probably best conceived of as consisting of sexual attraction gradients, where different categories of persons or behaviors exist on a continuum based on the degree of sexual arousal that they generate. Beckett (1994) offers a set of useful assumptions to inform the evaluator in querying about the sexual fantasies of an offender. The sexual offender should be asked about their ideal offense fantasy, one typically developed to create the highest arousal value. This may often represent the joining or integration of sexual preferences and nonsexual motivations. Adkerson (1996) suggests asking directly about the ideal victim profile (age, gender, physical features, genitalia and breast development, personality traits, and mannerisms), environmental conditions, interpersonal aspects, and the offense scenario. Given the substantial evidence of significant crossover paraphilic behavior, it is important to inquire about the wide range of possible atypical sexual fantasies and behaviors over an individual's lifetime. Areas to cover include use of pornography, attendance at adult book stores and video parlors, cyber porn, prostitution, obscene phone calls and 1–900 phone calls, voyeurism, exhibitionism, fetishism, frotteurism, bondage and other forms of sadomasochistic behavior, and bestiality. It can be useful to ask the respondent what other types of sexual behaviors he has been involved in that, if others were aware of it, might be problematic. Also ask about the age of onset and frequency of all fantasies and such behavior, as well as the age and gender of the target, the target's relationship to the respondent, and the circumstances of the imagined or real acts (e.g., the degree of force or threatening verbalizations). Further, it is useful to ask about the extent to which atypical sexual fantasies occupy the individual's mental life and his perceived control over urges to enact paraphilic thoughts and urges.

The evaluator should inquire about current masturbatory fantasies and frequency as well as the frequency of arousal (without masturbation) to inappropriate sexual images or to sexualization of staff, other inmates, and so on. While some sexual offenders will openly share deviant sexual fantasies spontaneously, experience has indicated that at evaluation, most subjects either offer socially "appropriate" reports of their sexual fantasies, claim that they no longer have sexual fantasies, or state that they have complete control over deviant fantasies. In addition, given the evidence that deviant sexual interests and urges are believed to persist over time (e.g., DSM-IV-TR and DSM-5) and that sex offender treatment is ineffective in changing such interests (e.g., Hoberman, 2015), if an offender claims that their deviant interests have simply decreased substantially or been "eliminated" after adjudication, it becomes important to inquire by what means such claimed "change" in those interests are said to have occurred.

Self-Reported Risk Assessment and Release Options Future dangerousness or risk of recidivism is a multidimensional concept that incorporates the likelihood of reoffending (and also the escalation or de-escalation of offending behavior). As part of the evaluation process, it is valuable to explore with a sexual offender his own perspective on his relative risk of reoffending. Assessing the risk of recidivism is typically a critical element of any evaluation of sexual offenders since it is often central to making a determination of the type and intensity of disposition. Since this is often a central question to forensic evaluations of sexual offenders, one can preface this discussion by the statement of the obvious, namely that there are concerns about his likelihood of reoffending; the subject is then asked to respond to this concern. It is useful to ask him to rate his likelihood of reoffending on a scale of 0–10 (where "0" represents no risk and "10" a very high risk). He can then be asked to explain the factors that he considers as ones which lower and raise his relative risk.

Further, if disposition is a relevant issue to the particular forensic evaluation, the sexual offender should be asked to explain in detail any plans he has made alone or with correctional personnel's assistance for his release. Both short- and long-term plans should be investigated; employment and treatment plans, specific sources and types of social support, and availability or plans for appropriate sexual outlets should all be explored. If any risk factors for reoffending have been previously discussed, he should be asked to comment on these and confronted if his explanation is inadequate. Further, he should be asked about the nature of the environment he expects to return to in the community; specifically, he should be queried about the types and number of stressors he is likely to encounter, as well as how he expects to cope with these stressors. It is useful to thoroughly explore the individual's expectations regarding the nature and sources of stress and his range of and experience with coping strategies, particularly if there may be issues of community notification and/or registration. Given the likelihood that a sexual offender may be subject to some form of ongoing state intervention (e.g., registration, probation) if released to the community, his insight into the stressful implications of these conditions should be explicitly considered. Again, the sexual offender should be specifically questioned about his judgment of the likelihood that this and other stressors may be related to an increased risk of sexual recidivism.

Collateral Sources of Information In general, forensic evaluations place a central and substantial role on the acquisition of information from so-called collateral sources. Such sources provide a context to obtain confirming or disconfirming information about a party's self-report of personality and behavior.

Collateral information is usually obtained from persons who have varying degrees of familiarity with the party, particularly in capacities that relate to the psycho-legal questions at hand. The forensic evaluation of sexual offenders almost always involves substantial amounts of records, which are, in effect, collateral sources. Generally, such records are the primary source of collateral perspectives on a sexual offender. However, in select cases, the evaluator may feel the need to contact particular individuals, including victims, treatment providers, and correctional case managers or parole/probation officers to obtain additional information or clarifications of such material in the records. However, unless court-appointed, it may be necessary to obtain proper informed consent from the subject of the evaluation or a court order authorizing such types of contacts in order to obtain such information.

Psychophsyicological Measures of Deviant Sexual Interest and Behavior Psychophysiological assessment instruments can be particularly valuable for forensic evaluations of sexual offenders. Procedures including the penile plethyhsmograph (PPG), the polygraph, and viewing time measures (VTM) rely on an individual's often involuntary physiological reactions. Consequently such measures can provide and independent and more objective means of collecting useful information that is not reliant on an offender's self-report. Both they are endorsed by the Center for Sex Offender Management (CSOM) and ATSA (2014) as potentially useful instruments for sexual offender evaluations. Per the ATSA (2014) Practice Guidelines, psychophysiological assessment measures are recommended as one component of a sexual offender evaluation; evaluators cautioned to interpret the results of such assessment measures in conjunction with all other relevant assessment information, such as the individual's offending behavior, in developing opinions about the offender. Psychophysiological measure results are not to be used as the sole criterion or source of data regarding decisions regarding sexual offenders. Per CSOM's recommendations for assessment, the PPG is "arguably the most objective and reliable method of assessing deviant arousal," although they noted issues with standardization and the possibility for subjects to use various strategies to suppress the manifestation of their arousal. Polygraph, by measuring specific physiological changes believed to be associated with deception, may be particularly useful as means of verifying an individual's sexual offending history. Various studies indicate that the administration of sexual history or full disclosure polygraphs is associated with greater admissions of deviant sexual fantasies and urges as well as much more extensive sexual offending behavior (e.g., Abel et al., 1985; Ahlmeyer, Heil, McKee, & English, 2000; Hindman & Peters, 2010). After post-conviction polygraphs, English, Jones, Pasini-Hill, Patrick, and Cooley-Towell (2000) found that reports of same sex victims, both male and female victims, juvenile and adult victims, and hands-off offenses doubled or tripled. Reports of unadjudicated victims are significant since non-adjudicated victims (typically disclosed in treatment) show an equal and independent association with later sexual offense recidivism (e.g., Hanson, Steffy, & Gauthier, 1993). As with other instruments, there have been issues raised regarding reliability and validity of the polygraph; in particular, like the PPG, the potential exists for some individuals to use "countermeasures" to regulate and dissimulate their physiological responses. As noted, extensive information exists via the Internet and, anecdotally, such information is available or can be made available to sexual offenders by peers or advisors even while incarcerated or otherwise institutionalized.

Regarding PPGs, Hall, Proctor, and Nelson (1988) found that fully 80 % of inpatient adult sexual offenders asked to inhibit all sexual arousal were "successful" in doing just that; Looman et al. (1998) reported similar results without instructing offenders. Marshall and Fernandez (2000a, b) concluded, "…numerous studies have shown that rapists and child molesters are able to both inhibit arousal to preferred stimuli and degenerate arousal to nonpreferred stimuli." (p. 293). As the updated ATSA Practice Guidelines state: "Because the sensitivity of phallometric testing is lower than its specificity, the presence of atypical/deviant sexual arousal is more informative than its absence. Results indicating no atypical/deviant sexual arousal may be a correct assessment or may indicate that a client's atypical/deviant sexual interests were not detected during testing." (p. 73). At the same time, there are no controlled research studies that indicate that persons can change their relative sexual interests via specific interventions often included in sex offender treatment (e.g., Hoberman, 2015). Consequently, defensiveness as a form of impression management seems the most probable explanation when sexual offenders with extensive histories of sexual offenses and/or high levels of sexual preoccupation "flat-line" the PPG results or show little or no arousal to sexual stimuli that match their past self-reports of deviant sexual interests or their actual criminal sexual history. PPG results are considered "sensitive" (evidence of deviant arousal indicates a true positive finding) but less sensitive (less accurate at identifying true negatives or persons who lack deviant sexual interests). Consequently, while positive findings on PPG typically provide useful and accurate information about an individual's deviant arousal patterns, little or nothing can be concluded from low or no arousal patterns to deviant sexual stimuli among individuals in general good health. Viewing time measures assess the amount of time spent viewing particular slides of types of persons and comparing them to self-reported arousal. Currently, available VTM research is more limited than that for the PPG and the polygraph. Relative to the issue of potential

dissimulation, increasingly evaluators are following a PPG or VRT administration with a simple single-issue polygraph to determine if the individual attempted to engage in deceptive practices during the psychophysiological measure; anecdotally, in practice this procedure appears to be particularly useful. From a legal, evidentiary perspective, while the results of psychophysiological measures may not always be admitted directly into evidence (most typically the polygraph), they may be considered by an expert witness or forensic evaluator as informing their opinion, given that they are usual and customary sources of potential information in sexual offender evaluations generally. In addition, the personal and sexual criminal histories collected from individuals prior to anticipated psychophysiological evaluations are often rich sources of information on their own and potentially to be discussed with the examinee.

Generally, as noted for forensic evaluations, with their significant emphasis on multiple methods of assessment, more sources of data are almost always preferred. Specifically, for forensic sexual offender evaluations, the potential utility of psychophysiological measures is directed at the areas that most sexual offenders are most likely to dissimulate about (e.g., deviant sexual experiences and behavior) and may be likely to provide distorted data about such experiences and behavior. Nonetheless, such sources of potential assessment data are potentially valuable and attempts to include such practices as a standard part of forensic sexual offender evaluations are highly recommended as one component of forensic sexual offender evaluations. Thus, Stinson and Becker (2008) examined a combination of instruments (including the PPG, a VTM, and the MSI II) and they found that the combined measures, plus a self-report test of sexual fantasies involving children, identified 98 % of their child molester sample. Similarly, Tong (2007) found convergent validity for three sex deviance measures [PPG, VTM, and the MSI II].

Treatment Amenability As McGrath has written, "Amenability to treatment refers to an offender's ability, willingness and motivation to enroll in treatment" (p. 148). McGrath identified consensus among treatment providers regarding whether a particular sexual offender may be amenable to sex offender treatment. These include (1) acknowledgment by an offender that he has committed identified sexual offenses and that he takes responsibility for those offenses; (2) an offender must consider his sexual offending problem; (3) an offender must have "at least some motivation to control the problem;" and (4) the offender must be willing to follow the requirements of available or designated treatment programs. In particular, McGrath emphasized that "Over time…acknowledgment of guilt and responsibility is critical because treatment interventions rely fundamentally on the offender's ability to identify and change the feelings, thoughts, and behaviors that were proximal to his sexually aggressive act" (p. 148).

However, as Garb (1998) pointed out, most research has revealed substantial variability in treatability decisions and that there was little evidence that FMHPs are able to predict treatment response with more than modest accuracy. Similarly, McGrath (1993) noted that opinions about amenability to treatment are not predictions about the likely *effectiveness* of treatment with a particular sexual offender. Thus, it becomes incumbent on forensic evaluators to identify evidence-based primary and secondary considerations that can serve to direct recommendations about the probability of the appropriateness of interventions and what might reasonably be expected in terms of sexual offender treatment course and outcome for particular individuals.

Forensic Risk Assessment

Sexual offender risk assessment involves using the results of a forensic evaluation to characterize or estimate the likelihood or probability that an individual with characteristics similar to the examinee will commit a future act of violence, particularly a new sexual offense. Thus, risk assessment is to be distinguished from "risk prediction," which involves a dichotomous decision that a particular sexual offender either will or will not sexually reoffend. Such absolute predictions that an examinee will or will not reoffend cannot be justified and are never warranted. Risk assessment can also be viewed as a component of risk management, where the likelihood of future sexual offending can inform decisions about possible dispositions and/or interventions. The nature and relative accuracy of sex offender risk assessment has improved markedly over the past 20 years and continues to evolve in its sophistication and comprehensiveness.

In considering the variety of potential approaches to gauging future risk of sexual recidivism including (1) general base rates for sexual reoffending; (2) the combined results of so-called actuarial measures; (3) other individual risk factors associated with sexual offending; (4) structured clinical or professional judgment; (5) dynamic measures of criminogenic needs of psychologically meaningful risk factors; and (6) special considerations.

Base rates provide a metric for considering the average risk for future sexual offending. However, the core of risk assessment involves the use of so-called actuarial instruments, which effectively provide adjusted base rates based on the consideration of multiple risk factors associated with sexual reoffending that have been statistically combined. It has been argued that actuarial methods have been recognized as superior to unstructured "clinical" judgment around psychological issues (e.g., Grove & Meehl, 1996; Meehl, 1954; Grove et al., 2000), including risk assessment (e.g., Quinsey

et al., 1998, 2006). For sexual offenders, recent meta-analyses and other multivariate studies of the sex offender recidivism literature have identified largely "static" or historical factors that are empirically related to recidivism (e.g., Hanson & Bussière, 1996, 1998; Hanson & Morton-Bourgon, 2004; Quinsey, Lalumiere, Rice, & Harris, 1995). Following directly from this body of research, actuarial risk assessment instruments (ARAI) have been developed largely through a so-called "actuarial" methodology; these ARAI can be considered as attempts to develop adjusted base rates for groups of sex offenders with particular numbers and types of easily measured risk factors. Actuarial methods are typically ones that rely on objectively identified factors associated with an outcome of interest; an actuarial scale specifies *which factors* are selected for examination and the relative *"weight"* that factor has as part of the assessment of some outcome. Actuarial scales are statistical means of selecting and combining easily obtained information and examining the degree to which those particular variables are associated with some future outcome (e.g., predictive accuracy). Starting in the mid-1990s, several ARAIs were developed that have been repeatedly demonstrated to show moderate predictive accuracy of sex offender recidivism for adult male sexual offenders. More specifically, these actuarial instruments provide estimates of the degree of risk (probability) of a future sex offense for sex offenders with particular numbers or degree of risk factors (Doren, 2002; Hanson, 1998; Quinsey et al., 1998, 2006). Different instruments rely on different "outcomes" to measure sex offender recidivism, ranging from convictions to arrests; other instruments rely on broader outcomes in an effort to address the dramatic underreporting of sexual offending. In short, actuarial measures have been developed which utilize statistical combinations of a limited number of risk factors and their association with the likelihood of rearrests or reconvictions for different behaviors for varying measures of future sex offenses.

Actuarial RAIs include the Static-99 (Hanson & Thornton, 1999), the Static-99R (Helmus, Hanson, Thornton, Babchishin, & Harris, 2012; Helmus, Hanson, Thornton, Babchishin & Harris, 2015), the Static-2002R (Hanson & Thornton, 2003; Helmus, Thornton, Hanson, & Babchishin, 2012; Helmus, Hanson, Thornton, Babchishin & Harris, 2015), the Minnesota Sex Offender Screening Tool-Revised (MnSOST-R: Epperson, Kaul, & Hesselton, 1998; Epperson, Kaul, Huot, Goldman, & Alexander, 2003), the Sex Offender Risk Appraisal Guide (SORAG, Quinsey et al., 1998, 2006; Rice & Harris, 1997, 2014, 2015; Rice, Harris, & Lang, 2013), or the Violence Risk Assessment Guide-Revised (the new VRAG-R, Rice et al., 2013). At present, per the Association for the Treatment of Sexual Abusers, actuarial assessment is regarded as one of the two core risk assessment methodologies for sexual offenders. There are now sufficient empirical studies in the scientific literature that provide independent cross validation of these actuarial instruments. Each has been found to possess at least moderate predictive accuracy. In addition, the confidence intervals for each of these ARAIs overlap; this means that their respective predictive accuracies are not significantly different from each other. Therefore, studies published to date indicate that there are at least several actuarial instruments that provide reasonable predictions of sexual recidivism, with no apparent advantage to any specific test.

Based upon several considerations, currently, the use of multiple actuarial measures has been endorsed by multiple individuals [e.g., R. K. Hanson, Personal communication, 2008; Barbaree in Langton et al., 2007; Doren, 2010) based on several considerations. Scientifically, there is no "best" instrument; they possess equivalent degrees of predictive accuracy from a measurement perspective. In addition, since the different actuarial instruments contain unique as well as overlapping variables they each measure recidivism using different sets of risk factors. The relative ranking of risk by the different actuarial instruments may be different for different individuals. Issues in scoring of the different measures will make less of a difference when multiple measures are utilized; multiple actuarial instruments lead to increased reliability in identifying the relative risk of a particular offender. Finally, to the degree that a "set" of (multiple) actuarial measures converge in identifying that an offender is at higher risk, then there can be increased confidence in concluding that that sex offender is at higher risk for sexual reoffending.

An alternative method for risk assessment and management of sexual offender recidivism is the use of structured clinical judgment or structured professional judgment (noted previously, abbreviated as SPJ). The PCL-R (Hare, 1991) is the most researched structured clinical rating scale in the area of violence assessment and has been shown by various meta-analyses to be specifically associated with sex offense recidivism (Hanson & Bussière, 1996, 1998; Hanson & Morton-Bourgon, 2004, 2005; Hawes, Boccaccini, & Murrie, 2013). Two other instruments also provide a structured professional risk assessment for sexual reoffending recidivism, the Sexual Violence Rating Scale (SVR-20; Boer, Wilson, Gauthier, & Hart 1997), and its putative replacement the Risk for Sexual Violence Protocol (RSVP; Hart, Kropp, & Laws, 2003).

In addition, recently, there has been a scientific and forensic interest in the manner in which additional "dynamic" or "psychological" risk factors ("criminogenic needs) may interact with static risk measured by the ARAIs. Several instruments have been developed over a period of time to provide scientifically reliable and valid measures of such risk factors. These include the Stable-2007 (Eher et al., 2012; Hanson, Harris, Scott, & Helmus, 2007), the Violence Risk Scale: Sex Offender Version (VRS: SO; Olver, Wong,

Nicholaichuk, & Gordon, 2007; Olver & Wong, 2014, 2015), and the Structured Risk Assessment-Forensic Version (SRA-FV) (e.g., Thornton & Knight, 2009, 2014).

Finally, other factors to be considered relative to mitigating or aggravating risk for sex offense recidivism include age (at onset of sexual offending and at release), medical status, past sex offender treatment experiences, and, the reported results of any recent or current sex offender treatment. Since there is, at best, minimal scientific evidence that sex offender treatment as it was historically or currently implemented has been scientifically demonstrated to reduce sexual offense recidivism or even to change personal characteristics (e.g., Hoberman, 2015), each offender must be carefully evaluated in an idiographic manner to determine if that individual has obtained substantive benefit from sexual offender treatment. Mere participation in sex offender treatment offers little information about actual or substantive treatment-related changes or gains. Specifically, an evaluator must utilize multiple sources of information to form an opinion about the range and depth of understanding (insight) of an offender's unique criminogenic needs as they have been operative in their sexual offending, the degree to which they were "taught," extensively practiced, and can implement interventions that have been empirically demonstrated to reduce sexual offense recidivism, the extent to which they have internalized both self-regulation and values associated with self-control, and the intensity and demonstration of their commitment to enacting significant cognitive, emotional, and behavioral change and the likely robustness of that commitment in the face of historical and general situational antecedents of offending pathways.

Report Writing: Developing and Documenting Opinions and Their Basis

In the process of conducting a forensic evaluation, the development of a written report is the typical means of memorializing the extensive review of information about a sexual offender and integration of that information with the results of the current direct evaluation and the extant scientific and professional knowledge. The forensic report provides the means to document available and relevant information that was considered by the evaluator and the process by which those sets of information provided the basis for conclusions or opinions offered by the evaluator. For forensic evaluations, the written report submitted prior to a hearing or trial provides the opportunity to provide detailed documentation of (1) what information in the records the evaluator considered, (2) the results of the current direct evaluation and its limitations as a source of information, (3) how the information from the records and the direct evaluation were considered or interpreted relative to the history of a particular offender (and against the background of the general literature regarding sexual offenders), and (4) what conclusions were inferred or derived from the database regarding the examinee and direct evaluation relative to scientific knowledge and professional experience. It is the multiple methods employed, the data available from those methods, and nomothetic and idiographic analysis of the subject in the context of available scientific/professional knowledge that determines the results of the evaluation—and not the offender or a retaining attorney.

It is relatively rare that after conducting a forensic evaluation of a sexual offender that one would not be required to compose a formal report. However, unless court-appointed, retaining attorneys can and do make decisions about whether an informed forensic opinion is likely to be favorable for their client and can choose to not have an evaluator produce a written version of that opinion. Thus, in a number of situations, unfavorable forensic opinions that are not court-ordered typically "disappear" from the potential consideration of those involved in making decisions or crafting dispositions about a particular offender. In most situations though, as Meloy (1989) argued, that one's "paper trail" via a report is more important in forensic work and to one's professional standing as an evaluator than in any other area of mental health. The forensic report is an essential means to present information and informed opinion that needs to be communicated to nonmental health professionals. If the essential forensic task is to provide assistance for the court or public in understanding and using the information obtained through a forensic evaluation, then the forensic report should be characterized by qualities such as thoroughness and clarity regarding reporting the extant data and the opinion of the evaluator. As Meloy (1989) has stated: "*Thoroughness* means that every issue is explored if it is relevant to the forensic issue being addressed" (p. 328). A written report memorializing the forensic evaluation and opinion is a critical, and often the central, evidentiary component of many specific legal proceedings for sexual offenders. It is often the linchpin for the discussion of the issues of a particular case. Consequently, the consensus among authorities in the general forensic community is that the report from a forensic evaluation must be comprehensive, thorough, and clear in its critical review and analysis of the "database" regarding an examinee. Further, as Weiner (1995) and others have pointed out, persons who conduct forensic evaluations should be able to express their opinions and conclusions in writing and testimony in a clear, relevant, informative, and defensible manner.

As has been emphasized at several points, almost all evaluations regarding sexual offenders are and should be regarded as forensic in nature. Consequently, the great majority of reports regarding such evaluations should be viewed as reports on behalf of a court, potential legal proceeding, or

"the public," regardless of who requested the evaluation. Written forensic reports can vary somewhat in length and content depending on the amount of relevant data collected about an individual, the number and complexity of psycho-legal questions and considerations to be addressed, and the perceived need to provide adequate documentation of the information and process utilized to develop each aspect or element of opinions. As a result, no single set of guidelines is appropriate for reports related to forensic evaluations. For very narrow referral questions, less elaborated or detailed reports may be acceptable, whereas for more complex or broad referral questions (e.g., initial civil commitment evaluations or release evaluations), a brief report should be viewed as quite inadequate. In addition, the length and detail of written forensic psychological reports may be related to jurisdictional standards or customs where TF/TFL may expect relatively lengthy and well-documented reports (which they may employ in drafting proposed findings of fact). In addition, certain "initial" and "progress/summary" reports will serve as foundational sources of information against which later forensic reports and opinions will be compared; consequently, such reports should be as comprehensive, detailed, and clear as necessary to provide an adequate basis for later comparison.

In addition, in composing a forensic report regarding a forensic sexual offender evaluation, it is important to keep in mind that such reports are likely to be considered and utilized within an adversarial context. While it might be argued that more abbreviated reports are preferable, in many instances of forensic evaluations of sexual offenders the nature of the adversarial process is such that it is important to report in detail the information relied upon by the evaluator to determine or inform the basis for his opinion so that it is more readily available to the evaluator (particularly if testimony may be required). Weiner (1999) wrote that whenever mental health professionals are called to testify in a legal proceeding, their testimony on direct examination would typically be based on their written report. That in turn means that everything within the report may be subject to question on cross-examination. As a result, an evaluator should be careful about the information that they report and the manner in which they identify how they weighed and integrated information with regard to reaching their opinions. Given the issues of memory generally and memory biases, careful documentation of relevant information in the body of the report is useful for potential testimony by an evaluator. Consequently, in composing a report, evaluators should consider and prepare for potential questions that an attorney or the court might pose about the source, nature, and implications of the information reviewed and opinions rendered. Weiner argues that as a basic principle, mental health professionals performing forensic evaluations should limit their reports to information and opinions that they would feel comfortable and confident stating in the courtroom and be able to defend their opinions and their basis against reasonable challenge. In reports and related testimony, the forensic evaluator should be careful to distinguish any elements of their opinions that they are basing on "clinical experience" and that may not have a valid scientific foundation. To the extent it is offered or requested in a court proceeding, "clinical" opinion or judgment must clearly be stated as one professional's opinion and not as an "expert opinion" (e.g., an opinion that is reasonably and reliably based in the scientific knowledge or particular experiences). Persons conducting forensic evaluation of sexual offenders should always attempt to be cognizant of the limitations of the foundations of their opinions and resulting conclusions. Any opinions are typically expressed with a "reasonable degree of professional certainty," which as Nicholson (1999) noted "refers to the expert's confidence in his opinion and not to the accuracy or general acceptance of that opinion" (p. 127).

Grisso (2010) analyzed critical reviews by experienced forensic evaluators of sample forensic reports by forensic psychologists. They identified a number of discrete factors recommended for improving forensic reports. Among the most relevant from our perspective are the following. First, in general, such reports should be organized in a manner that is logical and assists the court or public's understanding. Second, forensic reports should present multiple sources of data. Relative to multiple data sources, an examinee's self-reported data should be considered as a basis for an opinion; such data should play a primary role in the opinion only when other reasonably reliable sources of data offer corroborative or logically consistent support for that self-report. Third, evaluators a encouraged to describe and report all data that would be important (e.g., lay the foundation or provide the basis) in addressing the psycho-legal referral question and identify the sources of specific types of and methods by which such data were obtained. Fourth, when reporting on the results of past psychological testing or evaluations, an evaluator should report only those data they consider relevant for addressing the psycho-legal questions in the present case. In addition, when reporting test data from the current evaluation, offer explanations of their normative or nomothetic meaning related to particular scores and don't necessarily describe them as attributes of the examinee. Fifth, it was suggested that a report contain one section in which the relevant foundational evaluation data is reviewed and a separate section in which inferences and opinions are described in a manner that relies on the earlier database review. Sixth, it was suggested that, in relying on multiple sources of data, an evaluator describe the events and examinee's behavior that relate to attributes of the individual related to the psycho-legal questions. Lastly and more generally, with regard to interpretations and opinions, evaluators were encouraged to provide a clear explanation and justification for each important opinion

or conclusion that they offer, summarizing the relevant data that they view as either logically or scientifically supporting the elements of their opinion. Grisso (2010) summarized, stating: "…it is essential in forensic reports, because legal cases require that all evidence, and the basis for (origin of) any evidence in the case, must be revealed in the event that is needed for discovery and verification of evidence on which the examiner's opinions are based" (p. 111).

From these perspectives, several recommendations follow. To begin with, it is important that forensic evaluation reports identify the data sources relied on for the evaluation; these can be listed in paragraph form or as a bulleted list. It is also important to identify the relevant applicable psycho-legal standard or definition of the basic psycho-legal questions that directed the particular evaluation. Such standard definition should generally quote or paraphrase the language from the applicable statute or administrative code.

More importantly, several substantive considerations are particularly relevant in composing an appropriate forensic report of a forensic mental health evaluation of a sexual offender which relate to reviewing the information collected and considered about the individual, elaborating the basis of decision-making and opinions relative to the active psycho-legal issues, and providing a clear, comprehensive, and organized report that provides the basis for explaining the information and opinions

One primary aim of a forensic report is to provide formal documentation and critical analysis of the sources of information ("the database") that provide a basis for rendering opinions on the psycho-legal issues involved in a particular matter or with regard to a particular examinee. In almost all forensic psychological evaluations, evaluators should encounter a considerable amount of data that may vary in its informational value. A critical function of the forensic evaluator is to review and identify the most significant information found amongst the extensive information collected or provided as part of a particular evaluation process. As Gagliardi and Miller (2008) wrote: "Probativeness and information relevance comprise…overarching considerations for the forensic report writer. Probativeness is the degree to which evidence proves or disproves an asserted fact; relevance is whether a particular fact matters to resolving the legal issue in the case" (p. 543). Thus, a key function of the forensic evaluator in writing a forensic psychological report is to review and organize the large set of potentially available material from records (and other collateral sources), interviews, and testing in an organized and coherent fashion. In some cases, previous evaluations or reports may provide a summary of what seemed to be the relevant areas pertaining to a particular sexual offender. However, it is quite common, perhaps even the rule, that across previous reports regarding a particular individual, there are often discrepancies or inconsistencies in the information that had been provided by the subject/individual. In addition, previous evaluators may have incorporated inaccurate information or misperceptions into both reported history and conclusions that are markedly at variance with either the "facts" or historical conclusions about an individual. Both of these phenomena constitute what might be referred to as a legacy of mischaracterization. Consequently it becomes important to not simply "rubber-stamp" (e.g., simply reproduce) the earlier information provided by a particular sexual offender or a previous evaluator but to carefully and critically review information apparently provided by an offender (and others) in previous evaluations as well as "data" from the current direct evaluation so as to clarify what is known or not known about a particular offender with regard to the various areas of the offender's criminal history, self-description, predisposing psychological characteristics and criminogenic needs, and reports of previous treatment or personal change experiences. Meloy (1989) emphasized the importance of thoroughness in reviewing the database regarding an individual undergoing a forensic evaluation. For Meloy, as for most other forensic evaluators, records and other collateral information as well as structured psychological assessment typically trump possible or apparent self-interested and/or distorted (e.g., simulated or dissimulated) interview responses of an examinee. As Meloy (1989) stated "Nothing discredits a forensic clinician more than the mere regurgitation of the interviewee's perspective in the report or through testimony. It is evidence of the clinician's laziness and naïveté, and may be very embarrassing if easily contradicted by information that was available…" (p. 328). Thus, a forensic evaluator should provide a reasonably detailed review of all the information that is available, to highlight consistencies and inconsistencies in the information available, and finally to provide a platform for the subsequent integration and application of that database in the formulation of an opinion.

A second aim of a forensic report is typically to provide an opinion that relates to or addresses the psycho-legal issues based upon a professional and scientifically informed evaluation as it applies to the particular individual at the focus of the legal case. The development of such an opinion assumes that an evaluator is knowledgeable about the appropriate subject areas for a particular type of evaluation, methods of data collection that provide the most useful information, and the accurate and current scientific knowledge of the field. In addition, the process of coming to a conclusion or opinion about how particular psycho-legal issues apply to a particular examinee is an iterative process that involves considering both idiographic and nomothetic information. Previous reports of behavioral history constitute initial idiographic information about a subject. Past and current SPA (e.g., psychological testing and structured interviews/ratings) provide bases for nomothetic considerations. Developing a comprehensive, integrated forensic opinion innately builds upon the

review of the database collected regarding the individual—their behavioral and/or psychosocial history based on the available records and the results of the current direct evaluation (in the context of the psycho-legal questions). More specifically, developing such an opinion relies on critically reviewing that database. Next, nomothetic considerations become significant: how does the particular sexual offender compare to standardized norms and criteria from available structured psychological assessment tools as well as what is known about sexual offenders, generally and similar to persons with his relevant history? Thus, a critical component of a forensic sexual evaluation is applying scientific and professional knowledge—that is, placing the individual's database within the context of the subject's own self-report and the evaluator's structured rating in both a normative, nomothetic context and that of existing scientific knowledge and experience. Among such issues to be considered is in what ways this sexual offender is similar to and/or different from other criminal or sexual offenders. Finally, an evaluator must consider the particulars of the examinee in relation to the nomothetic data and considerations and render an idiographic opinion about the particular individual being evaluated. Relative to the psycho-legal issues, are there particular data or concerns that are mitigating or aggravating relative to the disposition of this particular individual? Thus, the consideration of specific information about the sexual offender who is the subject of an evaluation should both be considered in the context of general knowledge about sexual offending and as well as in the context of case- or person-specific issues.

An issue that has been raised through the available forensic psychological literature has to do with whether or not forensic reports should contain opinions about the "ultimate" psycho-legal question(s). While some authors such as Melton, Petrila, Poythress, and Slobogin (1997) recommended against opining on ultimate legal issues, other writers note (Gagliardi & Miller, 2008) that many or most actual forensic reports contain such opinions. Allnutt and Chaplow (2000) recommended forensic psychological reports include "the evidentiary bases for each level of inference" related to the psycho-legal standards and the way this information applies to the relevant legal issues." Clearly in many jurisdictions, it is the expectation of the court or the trier of law that the expert expresses an opinion on the ultimate psycho-legal issues either in testimony or in their forensic psychological report. Further, Grisso (2010) notes that, historically, there has not been a consensus among forensic mental health experts as to whether it is essential to fully explain in a report the reasoning for one's opinion. However, he noted that, in more recent years, commentators have increasingly emphasized that forensic reports should describe how the evaluator's opinion is more specifically supported by available data and reflects the logic with which the evidence leads to the particular forensic opinion. There appears to be an increased emphasis on more detailed documentation (e.g., "the database") along with delineation of what information from multi-method sources and its analysis provides the bases relevant to the psycho-legal at issue for the opinion.

Thus, the third critical component of a forensic report is to provide a discussion of the various key factors that relate to the psycho-legal issues. Clearly, interpreting and applying the database from an evaluation, in the context of case knowledge, mental health scientific knowledge, and experience, is generally inferential in nature. Most forensic psychological opinions involve such issues as cognitive-affective-motivational and other psychosocial characteristics (e.g., personality traits, implications of behavioral history, motivators and elements of self-control, impairments, risk and potential dispositions) and thus involve inferences and are matters of opinion. Heilbrun (2003) discussed the notion that "scientific reasoning" may be used to construe the results of one source of information such as self-report as providing "hypotheses to be verified" or "disconfirmed" through information provided by other sources such as psychological testing record review or collateral information. Thus, a central feature of a forensic psychological report and testimony is that it provides, if possible, a delineation of the particular inferences or opinions that are relatively directly tied to the identification, review, and integration of information collected as part of such an evaluation placed in scientific context. The value of presenting a detailed and analysis of the database earlier in a report is that it allows for a more succinct presentation of the bases for inferences and interpretations for the forensic opinions later in the forensic report. That is, by providing a detailed description of the database, initially in the report it lays the foundation for a more informed and cogent analysis and interpretation of relevant psycho-legal issues. In many respects, the database review and analysis should both implicitly and explicitly suggest or direct the forensic opinion.

Conclusion

The purpose of this chapter was to provide a perspective of the key elements and appropriate procedures for conducting a forensic evaluation of sexual offenders. As indicated, virtually all evaluations of such offenders are actually forensic in nature, meaning that their initiation and their results are or will be utilized in the legal process regarding dispositions about alleged or convicted sexual offenders. Many professionals are involved in or are consumers of such evaluations—varied mental health professionals, corrections and probation personnel, attorneys, and triers of fact and law. Mental health professionals, many of whom lack formal and substantive forensic training and formal experience, must be aware of the particular principles and procedures that inform—and even govern—

forensic evaluations of sexual offenders. Members of the legal profession and judiciary would also benefit from the delineation of elements of a comprehensive approach to the forensic evaluation of sexual offenders so that they can become informed consumers of what is recommended as constituting an informed and useful evaluation. To be meaningful, an evaluation must be based on reliable and valid principles and procedures of evaluation methods (e.g., structured psychological assessment) and scientific findings as related to the psycho-legal issues that provide the context for information that is both admissible in a court of law and useful to attorneys of litigants as well as triers of fact and law.

While it might be assumed that general mental health professionals would be able to enact a meaningful or "forensically adequate" evaluation of a sexual offender, experience suggests that this assumption is flawed. Among mental health professionals who do conduct such evaluations, there are often glaring gaps in knowledge of substantive domains regarding the current scientific knowledge about sexual offenders, the empirically validated and potential determinants of sexual offending (such as psychologically meaningful risk factors or predisposing conditions), determinants of and methodological issues regarding the probability of future dangerousness of sexual offenders, and the component procedures of a comprehensive, methodologically rigorous evaluation that meets judicial standards for admissibility in court. In particular, far too many mental health professionals are simply unaware of the nature, ethics, and legal requirements for forensic psychological evaluations—evaluations that provide information relevant to psycho-legal questions. The forensic context imposes critical guidelines on the following: the competencies, general methods, and approaches to gathering information before and during the evaluation: the nature of the specific psychological/psychiatric instruments, tests, and questionnaires used (e.g., standardize psychological assessment); and the manner in which a large set of multi-method, multisource information obtained is considered and integrated. In particular, forensic evaluations *require* the guiding dimensions of skeptical and critical analyses of information and not simply advocacy for or against a particular individual. Consequently, a high value should be placed on the availability and utilization of well-trained, knowledgeable, experienced forensic evaluators, particularly for significant psycho-legal issues.

The forensic evaluation of sexual offenders is an important process with very significant results and implications. The results and application of such an evaluation almost always bear on balancing issues of civil liberties of the individual and the protection of the community. Given the magnitude of these issues, it is critical that a very high level of knowledge about the psycho-legal issues and the substantive field of sexual offending as well as the appreciation of sound, thorough, and comprehensive methods enacting and processing the data collection of such evaluations characterize forensic evaluations. Those involved in the legal decision-making regarding sexual offenders should not tolerate, let alone rely on, casual, uninformed, "usual and customary" forensic evaluations by individuals who lack the necessary preparation in terms of their knowledge of relevant substantive areas or methods of evaluation related to the assessment of sexual offenders. Comprehensive forensic evaluations of sexual offenders must be rigorous, including the best available methods for providing relevant information that can serve as the basis for informed decision-making about a particular individual under consideration. Such evaluations offer both the offender under consideration and the community concerned about public safety an important means of obtaining and contextualizing information that can allow a court of law to make reasoned, educated decisions about the disposition of particular sexual offenders.

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Conceptual Model of Risk Versus Threat and Risk Management Versus Risk Reduction

Douglas L. Epperson and Christopher A. Ralston

The concept of risk is defined differently across diverse disciplines, such as mathematics, law, engineering, business, and even art and religion (Althaus, 2005). Given that sexual offender risk assessment and treatment sits at the crossroads of several disciplines (e.g., criminology, psychology, sociology, law, public administration), it is not surprising that risk is discussed in a variety of ways. The differences are often subtle and implicit, yet meaningful because they are sources of confusion and obstacles to constructive discussions about how best to assess, treat, and manage risk.

This chapter utilizes the epistemological traditions of mathematics, logic, psychology, and law to define risk as applied to sexual offender literature. In doing so, we will draw upon and refine previously specified models of risk, risk assessment, risk reduction, and risk management such as the Risk-Need-Responsivity Principle (e.g., Andrews & Bonta, 2003; Andrews, Bonta, & Wormith, 2006), the Integrated Theory of Sexual Offending (Ward & Beech, 2005), the Dynamic Supervision Project (e.g., Hanson, Harris, Scott, & Helmus, 2007), and Epperson and colleagues' Model of Risk and Threat (Epperson, Ralston, Fowers, Dewitt, & Gore, 2005).

After clarifying and reconceptualizing concepts and terms that are used somewhat inconsistently, we discuss the implications of this restructuring of risk assessment arguing that an accurate understanding of risk and related concepts, coupled with accurate risk assessment, can lead to more carefully thought out and effective risk management and risk reduction efforts. Finally, using the newly specified model of risk in conjunction with recent research findings, we provide possible explanations for both reduced rates of observed sexual recidivism and predictive validity indices in many established risk assessment tools over the past decade.

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Risk, Risk Factors, and Risk Indicators

What is *risk*? As noted earlier, the definition varies somewhat across scientific disciplines. The single common element in those definitions is "the application of some form of knowledge to the unknown in an attempt to confront uncertainty and make decisions" (Althaus, 2005, p. 580). As applied to the disciplines of mathematics and logic, risk is viewed as a probabilistic statement about the likelihood of some event occurring at some point in the future (Althaus, 2005). This probabilistic view of risk is commonly implied when people discuss risk of sexual recidivism. More explicitly risk, as applied to sexual offender recidivism, is commonly interpreted as the probability that a known and sanctioned sexual offender will reoffend within some time frame, such as the next 10 years or before a specified age.

On the surface, this seems to be a fully satisfactory definition of risk. However, there is a major problem, which is that the probability of reoffending is dependent upon many factors. Examples of such factors include internal predispositions, such as an offender's degree of sexual preoccupation and/or impaired self-regulation skills, and externally imposed constraints, such as the intensity of community supervision, which limit opportunities for further offending. Such confounding of internal and external factors makes it difficult to have meaningful conversations about risk assessment, risk reduction, and risk management. The lack of precision in definition impedes our ability to make rigorous and logical analyses of risk-related concepts and tools (Althaus, 2005). What is needed is a model that facilitates a thorough separation, analysis, and discussion of internal (psychological) and external (environmental/contextual) forces that give rise to or inhibit future sexual offending. Therefore, we argue

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for a definition of risk that includes the probabilistic elements of the mathematical-logical definitions, but limits them to the domain of internal factors per the tradition of psychology (Althaus, 2005; Heilbrun, 1997).

Within these parameters, we define risk as the probability that a known and sanctioned sexual offender will reoffend at some time in the future, in the absence of significant external constraints or modifications to the environment. In other words, if a detected sexual offender was released into the community without significant supervision, restrictions, or support resources, *risk* would be the probability that the offender would commit a new sexual offense within the specified period of time.

In this model, risk is viewed as inherent in the individual and resulting from the presence and dynamic interaction of relatively stable, individual characteristics that increase (risk factors) or decrease (protective factors) the likelihood of that individual reoffending sexually at some time in the future. Hereafter, these are collectively referred to as *stable risk factors*, and some examples are provided in Fig. 1. These stable risk factors are similar to Hanson, Harris, and colleagues' (Hanson & Harris, 2000; Hanson, Harris, Scott, & Helmus, 2007) stable dynamic risk factors and include deviant sexual interests, offense-supportive beliefs, sexual self-regulation problems, intimacy deficits, and impulse control dysfunction, among others (Hanson et al., 2007; Ward & Gannon, 2006). These factors not only correlate with sexual recidivism (Hanson et al., 2007) but likely also play a causal role in the offending process. Further, because these factors are assumed to be relatively stable, level of risk remains relatively stable over time. The assumption that underlies this psychological principle is that the best predictor of future behavior is past behavior. Past behavior does not cause future behavior; rather, it is the relative stability of personality that allows us to assume that roughly the same set of underlying stable risk factors that caused past behavior will be present in and influence future behavior.

The impact of stable risk factors on behavior is not simply additive because the simple presence or absence of one or more stable risk factors may be insufficient to explain behavior, particularly one as complex as sexual offending. Instead, these risk factors, though relatively stable within the individual, vary in degree from person to person and interact with each other to produce behavior. In other words, two sexual offenders may each have two risk factors present, yet represent different levels of risk because of the differing nature, strengths, and interactions of the two risk factors. One offender with high levels of psychopathy and moderate intimacy deficits may have a lower risk for a sexual reoffense than an offender with moderate deviant sexual drive and high impulse control deficits because of the greater salience and potential interaction of deviant sexual drive and impulse control deficits.

As described in the Integrated Theory of Sexual Offending (Ward & Beech, 2005), stable risk factors derive from complex interactions between the offender and social–cultural, developmental, and biological factors over the course of a lifetime (SEE Fig. 2). Because the resulting characteristics, including stable risk factors, are largely enduring, they

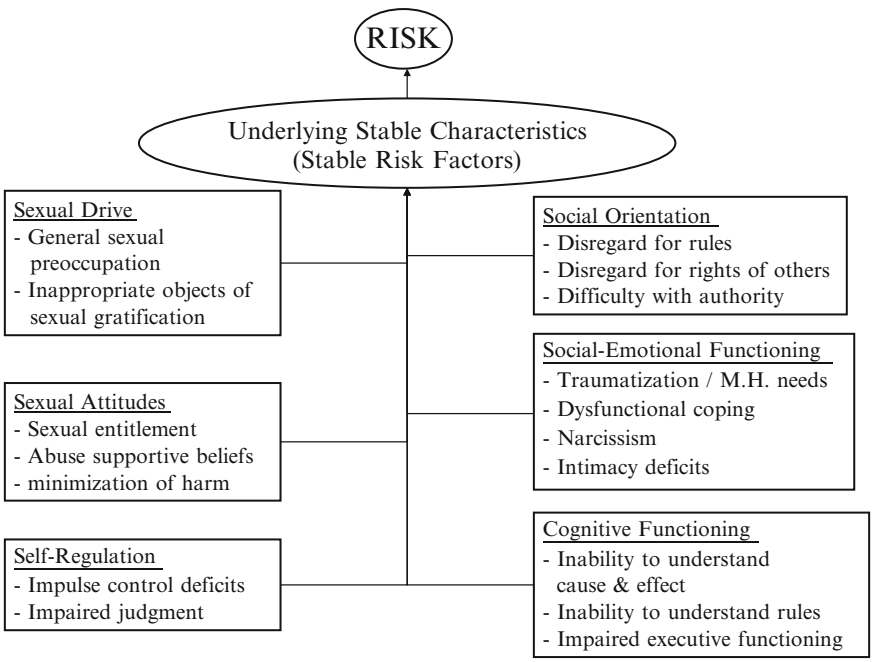

Fig. 1 Stable risk factors that increase the likelihood of an individual sexual offender reoffending sexually

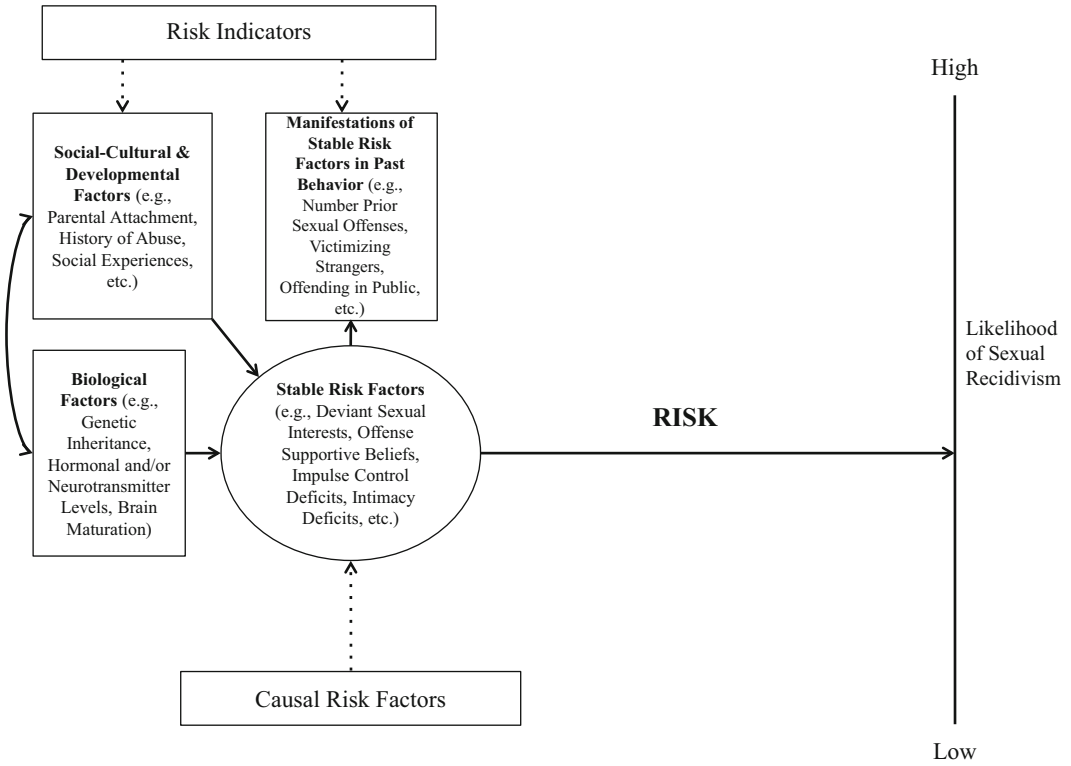

Fig. 2 Stable risk factors are influenced by biological and both socio-cultural and developmental factors. Prior manifestations of risk and both socio-cultural and developmental factors serve as risk indicators. In the absence of risk reduction or management, risk directly corresponds to the likelihood of recidivism

produce similar or patterned behavior over time. Consequently, past behaviors and historical events are correlated with, or predictive of, future behavior. In juvenile sexual offending, for example, historical events such as placement in special education or having been the victim of child abuse are correlated with juvenile sexual recidivism, as are past behaviors such as multiple adjudications for sexual offenses, committing a sexual offense while under court-ordered supervision, and committing a sexual offense in a public place (Epperson, Ralston, Fowers, DeWitt, & Gore, 2005). Other examples of historical events and past behaviors that are correlated with sexual recidivism can be found in the items of major actuarial risk assessment tools (e.g., Static-99, Static-2002, MnSOST-R, SORAG, etc.) or meta-analyses performed by Karl Hanson and his colleagues (e.g., Hanson & Bourgon, 2008; Hanson & Bussiere, 1998).

Presumably, prior actions that are correlated with future offending are behavioral proxies for underlying and relatively enduring risk factors and their interactions. For example, committing a sexual offense in a public place does not cause the individual to continue offending in the future. This action results from any number of underlying risk factors and their interactions, possibly sexual preoccupation or deviant sexual arousal, deficient self-regulations skills, or insufficient cognitive ability to understand rules or weigh risk and reward. Similarly, historical events that are correlated with sexual recidivism are presumed to be proxies or causal factors that shape underlying stable risk factors. Placement in special education may be a manifestation of underlying stable risk factors (e.g., impaired cognitive skills and/or self-regulation skills); whereas, having been a victim of sexual abuse as a child may have contributed to the development of underlying stable risk factors (e.g., distorted sexual attitudes, dysfunctional coping, and/or intimacy deficits).

Such events and behaviors are often referred to as static risk factors because they can change in only one direction (once you are a victim of abuse, you can only be further victimized, or once you have two convictions for sexual offenses, you can never have fewer than two such convictions). Because such events and behaviors are *indicative* of risk rather than causal, we refer to them as *risk indicators* to avoid any confusion, reserving the term *stable risk factors* to reflect causality.

In summary, risk is viewed as inherent in the individual, as defined by the constellation stable risk factors and their dynamic interactions. These stable risk factors derive from complex developmental interactions between psychological, social, and cultural factors that exert a causal influence on past and future behavior. Consequently, some historical events and behaviors identified by empirical research are

correlated with sexual recidivism. These are referred to as *risk indicators* in our model; environmental/contextual variables are not elements of risk in this model.

Environmental/Contextual Factors and Threat

Although environmental/contextual factors are not elements of risk in this model, they undoubtedly affect the degree of threat to the community presented by released sexual offenders. This section differentiates between *threat* and *risk* and describes the way in which environmental/contextual factors may increase or decrease *threat*.

It is clear that risk is more likely to manifest behaviorally (new sexual victimization) in some contexts than in others. In other words, the manifestation of risk is responsive to inhibiting and exacerbating contextual factors on a moment-by-moment basis (Hanson & Harris, 2000; Zamble & Quinsey, 2001). Contextual factors are those immediate environmental characteristics (e.g., presence or absence of antisocial peers) that interact with personal predispositions (risk), making the predisposition more or less likely to be manifested behaviorally in a new sexual victimization. Contextual factors often change as the individual moves from environment to environment.

Relative to *risk*, a person's *threat* to the community is the likelihood of reoffense, given the person's level of risk and contextual situation. In exacerbating contexts, threat can be higher than risk, and threat can be lower than risk in inhibiting contexts.

Contextual factors affect threat (the manifestation of risk) through their influence on acute internal states (see Fig. 3). Acute internal states are transitory changes within the individual (e.g., mood, impact of deviant thoughts, sexual arousal, intoxication) and are a direct result of the interaction between internal predispositions (stable risk factors) and the immediate environment (contextual factors). In the presence of certain contextual factors (e.g., substance abuse) and associated changes in acute internal states (e.g., intoxication and reduced inhibitions), threat may increase relative to risk. In contrast, other contextual factors (e.g., pro-social peers and role models in stable home and work environments) may produce changes in acute internal states (e.g., sense of well-being and life satisfaction, decreased negative affective states) and reduce threat relative to risk. Thus, it is threat rather than risk that changes across contexts.

Despite these moment-by-moment fluctuations in threat, risk remains relatively stable across time and situation because contextual factors impact acute internal states instead of altering stable risk factors. Consequently, the offender who is at "highest risk" to recidivate will still generally be a greater

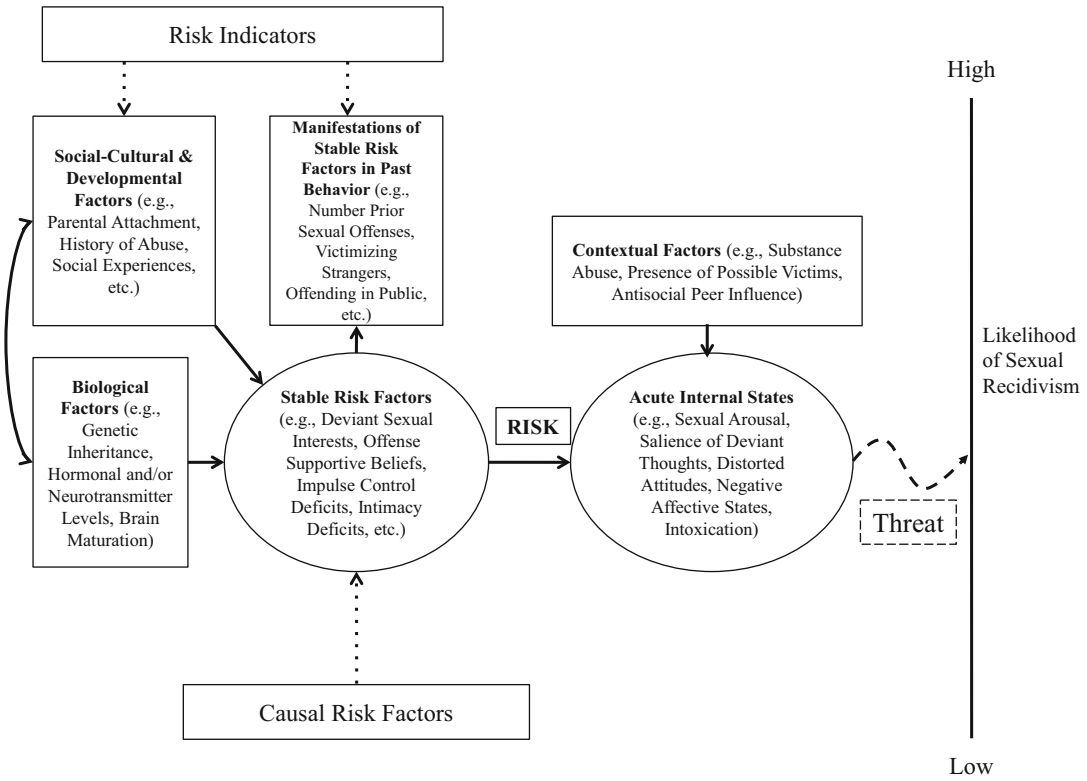

Fig. 3 The relation between stable risk factors and threat is mediated by acute internal states. Contextual factors can exacerbate or inhibit acute internal states

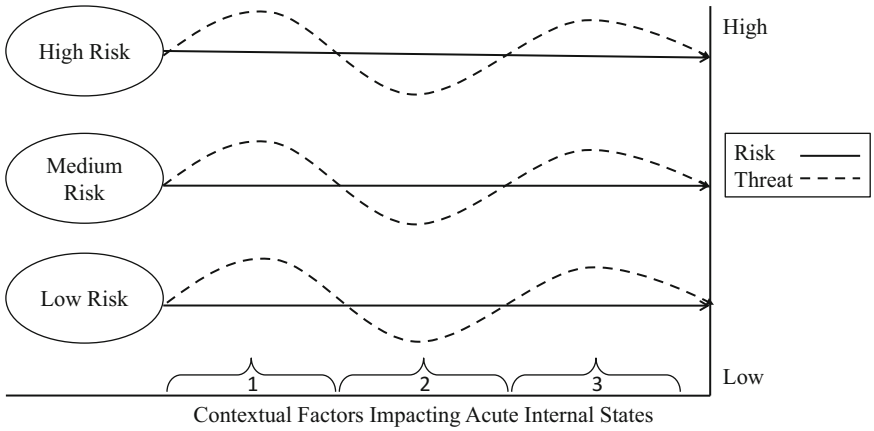

Fig. 4 Risk levels remain relatively stable, despite moment-to-moment fluctuations in threat

threat to the community in the presence of inhibiting factors than another offender who is "low risk" under exacerbating factors (see Fig. 4), unless highly controlled contextual factors are externally imposed as an intervention.

This distinction between risk and threat avoids confusion and results in more precise language. Models of risk in which contextual factors are counted as risk factors create an awkward and untenable situation in which the person's risk constantly changes despite there being no changes in the individual. Under those models, two offenders could have the same risk level but for very different reasons. Offender A could be moderate risk because of low levels of stable risk factors and a relatively unsupervised release environment, while Offender B could be moderate risk because of high levels of stable risk factors and a highly structured and supervised release setting. However, in the current model, Offender A would be low risk, but possibly approach moderate threat at times because of the unstructured release environment, while Offender B would be high risk, but possibly moderate threat because of his placement in highly structured and intensively supervised release conditions. As described below, this distinction between risk and threat enables us to more logically talk about placing offenders in more or less structured contexts based on risk.

Risk Management

The observation that contextual factors may alter threat relative to risk is precisely what opens the door to actively managing risk in the community. *Risk management factors* include all efforts external to the offender intended to constrain the contextual factors that might increase threat relative to risk, emphasize those contextual factors that might decrease threat relative to risk, and/or increase detection of pre-offense behaviors, all with the ultimate goal of inhibiting the expression of risk behaviorally in a new victimization.

In more common language, the goal of risk management is to make the threat of higher-risk offenders more similar to that of lower-risk offenders through interventions that control key components of the offender's environment and acute internal states. Using the same graphical representation, Fig. 5 completes the earlier diagrams in Figs. 2 and 3 by explicitly noting the potential for risk management efforts to lower threat relative to risk by constraining exacerbating contextual factors and emphasizing inhibiting contextual factors.

The ultimate goal of risk management, making the threat of high-risk offenders more like that of lower-risk offenders, is presented more vividly in Fig. 6. As with all interventions, the effectiveness of risk management efforts must be empirically verified and take into account individual differences in responsivity.

As described earlier, risk management factors indirectly affect threat through their influence on acute internal states (see Fig. 5). For example, one risk management strategy may be to reduce exposure to potential victims. Reduced exposure may, in turn, reduce the salience and potency of sexually deviant interests or arousal, thus inhibiting the expression of risk in the moment.

However, risk management factors also impact threat directly (see Fig. 5). Even if reduced exposure to potential victims does not reduce the salience and potency of sexually deviant interests or arousal, it still directly limits opportunities to reoffend. Intensive supervision provides an even more straightforward example. Because of intensive supervision, a probation officer may detect an offender in pre-offense behaviors that violate the offender's probation (e.g., contacting potential victims, substance abuse). Because of this detection of pre-offense behaviors, the offender may have his probation or parole revoked and be returned to custody, eliminating all opportunity to offend in the community, though a potential for sexual misconduct in custody remains. Correlational data suggests that well-developed, systematic tiered risk-management systems reduce the threat to the community, though we know less about the individual components of these systems (e.g., Duwe & Donnay, 2008).

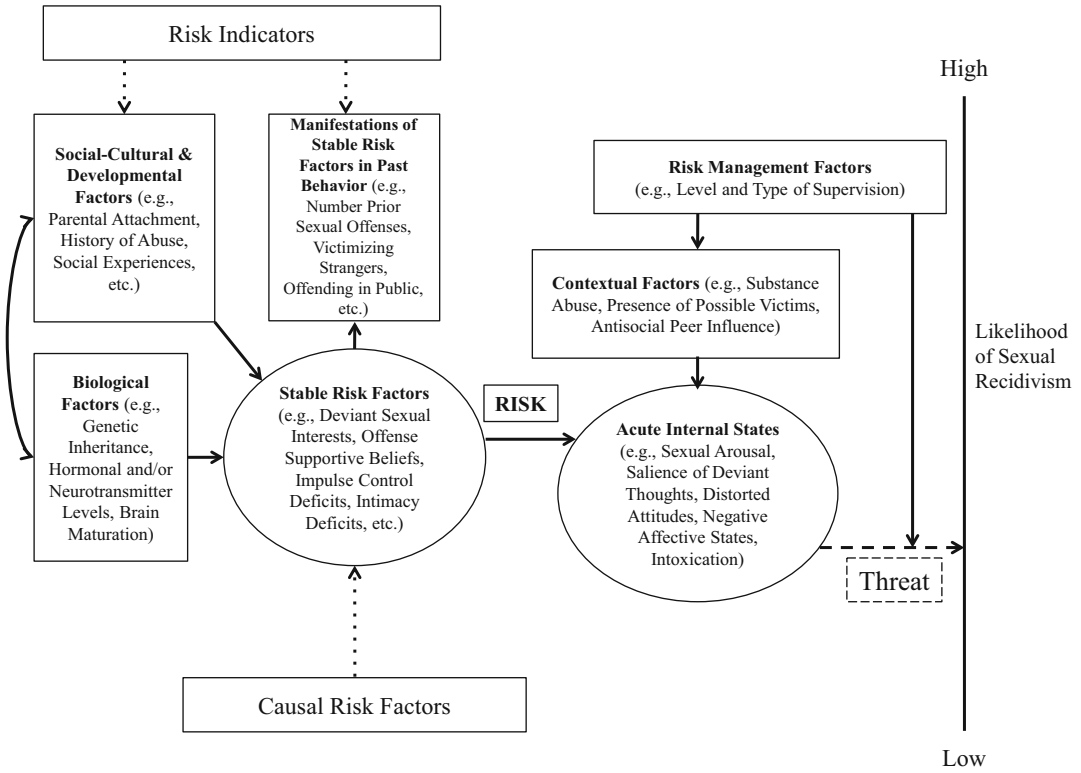

Fig. 5 Effective risk management reduces threat through its effect on contextual factors and early detection of pre-offense behaviors

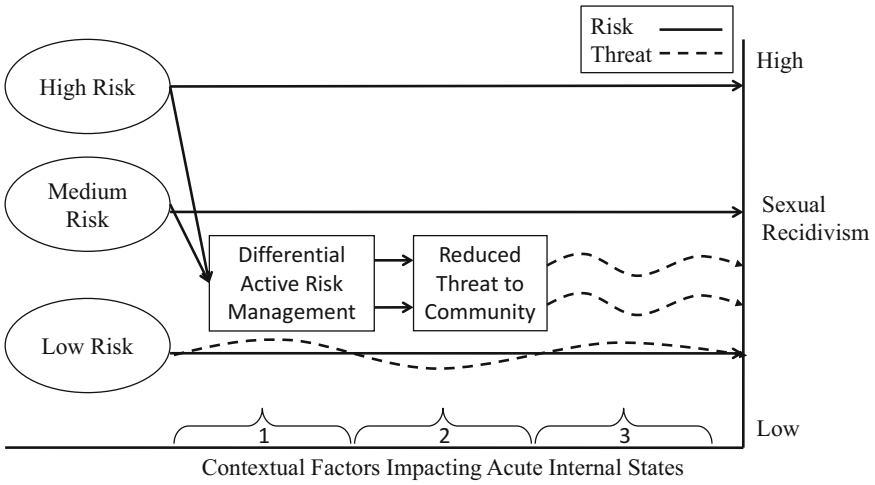

Fig. 6 The impact of effective risk management (risk is unchanged, but threat is reduced)

Risk Reduction

Risk management is not the only way to reduce threat to the community. Because stable risk factors are not static, sexual recidivism can also be prevented through the actual reduction of risk. *Risk reduction* necessarily results from changes in the individual because risk is inherent in the individual. If risk is reduced, so is the associated threat. Though there can still be changes in threat in response to contextual factors, the variance in threat has a lower baseline.

The majority of such changes in the individual presumably occur through treatment, and they would include decreased deviant sex drive, decreased distortions in sexual attitudes, decreased psychopathy, increased impulse control, the development of strategies to reduce "relapse," and the development of pro-social strategies to obtain a "good life" among others (e.g., Andrews et al., 2006; Ward & Gannon, 2006). Thus, the term risk reduction is reserved for conditions of documented changes in internal characteristics that reduce the individual's urge to sexually offend or increase the individual's ability to

internally inhibit acting on such urges. Reduction of risk, rather than the management of risk, is the goal and outcome of effective treatment as presented graphically in Figs. 7 and 8.

Historically, the results of treatment outcome studies have been fairly mixed; however, a recent meta-analysis by Hanson, Bourgon, Helmus, & Hodgson (2009) demonstrated positive gains for risk-need-responsivity-based treatments. A major limitation of many treatment programs is the poor quality of treatment outcome measures. Many treatment programs only measure outcomes based on whether or not treatment is completed. We believe that as treatment programs begin to measure treatment outcomes more specifically, and preferably behaviorally, based on important dimensions related to risk, resulting research will be able to better document who truly benefits from treatment and the associated reductions in risk.

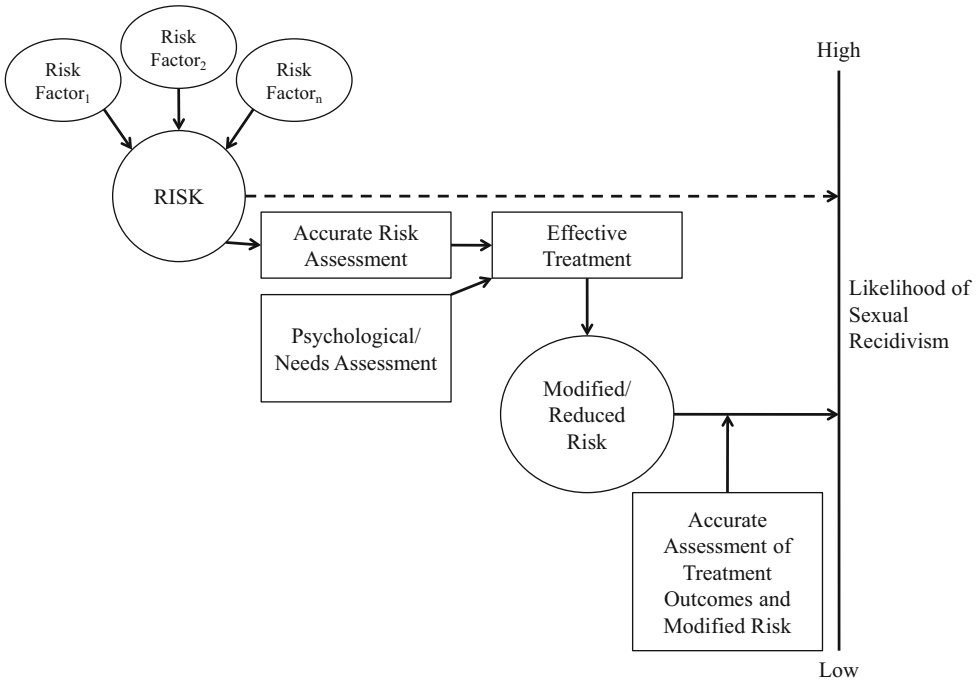

Fig. 7 Effective treatment reduced risk itself rather than managing risk

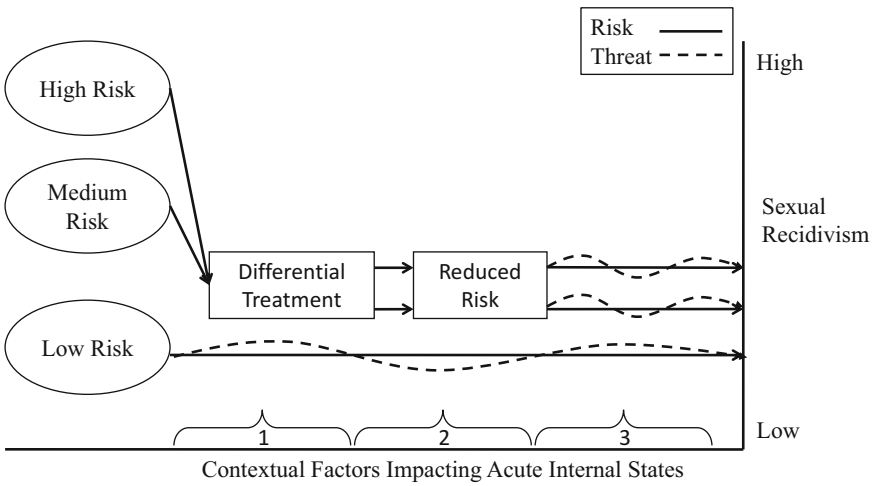

Fig. 8 The impact of effective treatment (threat is lowered by reducing risk itself rather than by managing risk)

Summary and Potential Benefits of the Current Model

In the current model, *risk* is inherent in the individual and is comprised of relatively stable characteristics that make individual offenders more or less likely to continue to sexually offend. Operationally, risk is the likelihood of the offender committing a new sexual offense within a specified period of time if left more or less to his or her own resources. Therefore, estimates of risk (sexual reoffense rates associated with risk levels) are generally best obtained from older samples of offenders released under conditions of "standard" supervision prior to the advent of broad community notification, intensive supervision, etc., in the mid-1990s.

Because risk is inherent in the individual, risk reduction results *only* through sustained changes in underlying, causal risk factors. Generally, such changes occur through focused treatment interventions. As treatment programs and outcome measures become more sophisticated and specific to underlying risk factors, better research can be conducted to determine what comprises effective treatment and to quantify resulting risk reduction.

The individual carries risk across a variety of contexts. Although contextual factors are not elements of risk and do not alter risk, they can increase or decrease the likelihood that risk will manifest in behavior (a new victimization). The increased or decreased likelihood of offending relative to risk as a result of contextual factors is defined as threat. Thus it is threat, not risk, that may vary across settings and situations.

This observation is the basis of risk management procedures, which are intended to reduce the threat relative to risk. Risk management interventions are defined as systematic efforts external to the offender to constrain the contextual factors that might increase threat relative to risk, emphasize those contextual factors that might decrease threat relative to risk, and/or increase detection of preoffense behaviors, all with the ultimate goal of inhibiting the expression of risk behaviorally in a new victimization. Operationally, threat is the likelihood of a new sexual offense given the offender's level of risk and risk management. If there is no risk management, risk and threat are essentially equal. With effective risk management, threat becomes lower than risk. In settings with active risk management programs, threat can be viewed as managed risk. Consequently, estimates of threat (sexual reoffense rates associated with risk levels and the management of that risk) are generally best obtained from more recent samples of offenders released under conditions of broad community notification, intensive supervision, etc.

Potential Benefits of the Model

We believe that this model provides greater precision of language and clarity of constructs. The clear distinction between risk and threat avoids some very confusing language. Without this distinction, one might state that an offender in a highly structured half-way house presents moderate or even low risk because of his release environment. When further queried about why this specific offender, rather than other offenders, was sent to the half-way house, or why this specific offender was not released under less restrictive conditions, the response is difficult. Essentially, the response would be because this moderate- or low-risk offender is actually a high-risk offender.

The description of this situation and response to the potential queries are very straightforward and parsimonious under the current model. The offender was sent to the highly structured half-way house because he is a higher-risk offender relative to others. By releasing him to a highly structured environment, his threat to the community is reduced relative to his risk and buys time for further efforts at risk reduction.

This model also more effectively sorts out elements of risk and risk reduction from elements of threat and threat reduction through risk management. Hanson and Harris (2000) found that an acute change in the offender's anger and subjective distress significantly predicted the short-term likelihood of sexual recidivism. They also noted that access to victims served as an acute predictor. Hanson and Harris (2001) included four "acute" factors in the *Sex Offender Needs Assessment Rating* (*SONAR*): substance abuse, negative mood (e.g., loneliness), anger, and victim access. It is important to note that in these discussions of "acute dynamic risk factors," no distinction was made between contextual events and acute internal states that inhibit or exacerbate risk. In the present model, acute internal states and external factors that modify threat are explicitly separated.

Acute internal states are the moment-to-moment changes within an individual that increase or decrease the likelihood that *risk* will manifest in a new sexual offense in that moment. They are "highly transient conditions that would only last hours or days… are rapidly changing environmental and intrapersonal stresses, conditions, or events that have been shown by previous research to be related to imminent sexual reoffence" (Hanson et al., 2007, p. i). Examples likely to exacerbate risk include sexual preoccupation, negative mood, sexual arousal, and intoxication (Hanson & Harris, 2001; Hanson & Harris, 2002), whereas positive mood and sexual satisfaction would inhibit risk.

Ward and Beech (2004) argued that some risk factors currently "labeled as acute risk factors would be better

viewed as triggering/contextual factors that push traits such as deviant sexual interests into states of deviant sexual arousal" (p. 275). Like them, we make this important distinction, describing all factors that impact acute internal states that either inhibit or exacerbate risk as contextual influences. Examples of contextual influences include substance abuse, presence and influence of social network (antisocial or otherwise), and presence of possible victims, among others.

The greater precision and clarity of constructs in the current model will also be used in following sections to highlight the critical importance of accurate risk assessment for effective risk management and risk reduction interventions, identify various approaches to risk assessment and their inherent advantages and disadvantages, discuss the problems of validating well-established risk assessment tools with more contemporary samples in the context of declining sexual recidivism base rates, and suggest some promising directions for future developments in risk assessment.

Critical Importance of Reliable and Accurate Risk Assessment

Distinguishing between *risk* and *threat* in the manner described earlier, as well as understanding that risk management factors can both decrease and increase threat, sets up the necessity for a "risk-need" approach to offender management (e.g., Andrews & Bonta, 2003). In such an approach, the highest risk sexual offender would be designated for the highest or more intense levels of risk management, and the lowest risk offenders would be designated for the lowest levels of risk management. The benefits are greater likelihood of prevention of new sexual offenses, effective allocation of very limited resources, and limiting possible negative effects of risk management for lower-risk offenders (e.g., warding off unintended exacerbation of risk in environments, particularly for lower-risk offenders).

The greater cost-effectiveness of matching risk management interventions with the level of risk presented in an environment of scarce resources is self-evident. Resources expended in trying to reduce the threat of low-risk offenders, who already pose a relatively minimal threat to the community, are resources that cannot be devoted to managing higher-risk offenders. Because effective risk management efforts in this population necessarily are more intense and costly, having inadequate resources dilutes or eliminates the effectiveness of risk management efforts. Without effective risk management, those higher-risk offenders pose a high threat to the community.

Unnecessarily expensive and restrictive risk management for low-risk offenders has two additional potential liabilities. First, it may unnecessarily deprive that offender of liberty interests that could be afforded to him or her by providing a less restrictive risk management strategy. Second, excessively restrictive risk management strategies with low-risk offenders may actually increase their threat to the community by creating negative acute internal states.

Unintended negative effects through risk management may be of even greater concern for juveniles because they are a low-risk population overall and are generally considered to be more malleable and responsive to treatment than adults. Examples of potential unintended negative effects of risk management efforts that are too aggressive may include stigma, isolation, alienation, vigilantism, lost opportunities, limited ability to reintegrate constructively into their community (Trivits & Reppucci, 2002), or contagion effects (e.g., Boxer, Guerra, Huesmann, & Morales, 2005). Such effects may actually exacerbate or even reinforce stable risk factors over time. For example, limiting participation in pro-social activities may induce further alienation and opportunities to develop the capacity for empathy and intimacy. In addition, simply mixing low- and high-risk juveniles who have offended sexually may increase the risk of the lower-risk juveniles through mere exposure to higher-risk offenders. So, in addition to appropriately allocating resources to those offenders that most require them, effective matching may also keep lower-risk offenders at low levels of risk and threat to the public.

Consequently, accurate matching of risk management strategies with risk is essential not only for cost-effectiveness but also for public safety. In order for optimal matching to occur, accurate assessment of risk is essential. In the absence of accurate risk assessment, decision makers must rely upon one of two strategies. The first is to apply an undifferentiated, "one-size-fits-all" risk management strategy to all sexual offenders, which is generally ineffective and problematic for the reasons already discussed. The second is to base risk management practices on idiosyncratic and unscientific judgments about the risk posed by individual sexual offenders, which is equally likely to be ineffective.

Just as effective risk management requires accurate risk assessment, so does effective treatment. Specifically, accurate risk assessment informs decisions about the necessary length and intensity of treatment, with higher-risk offenders presumably requiring a longer-term and more intense treatment experience to effectively lower their risk and divert them into a non-offending path. Of course, psychological and needs assessments would also be required to provide focus to treatment.

Failure to match treatment with risk and psychological needs based on accurate assessment generally produces undifferentiated, "one-size-fits-all," treatments. In an era of restricted resources, this often translates into treatments that are too intense and costly for very low-risk offenders and

inadequate for high-risk offenders. This approach to treatment is also more likely to mix low-risk and high-risk offenders, which may actually increase the risk of initially low-risk offenders through contagion effects. As noted earlier, contagion effects may be particularly problematic with juveniles, who are more malleable than adults; an important part of treatment may involve segregation of "low-risk" juveniles from higher-risk juveniles. In fact, for some very low-risk juveniles who have offended sexually, detection, segregation from higher-risk juveniles, and a basic psycho-educational intervention may be the only intervention needed. Resources saved with lower-risk offenders could be invested in longer-term, intensive treatment for higher-risk offenders.

This discussion emphasizes the importance of accurate risk assessment and the matching of risk with both risk reduction and risk management intervention to most efficiently manage scarce resources and maximize outcomes. The potential outcome of treatment is risk reduction and the associated decrease in threat. The potential outcome of risk management is managed risk and the associated decrease in threat.

Approaches to Risk Assessment

The model of risk and threat detailed above has important implications for risk assessment. The first is that risk is inherent in the individual and arises from the dynamic interplay of relatively stable internal risk factors. Thus, any type of risk assessment must focus on and account for the presence and interactions of stable risk factors within the individual and the likelihood that it will lead to future sexual offending behavior. The second is that valid assessments of risk can occur in three distinct ways, or some combination of the three ways: assessment of historical risk indicators, assessment of stable internal risk factors, or assessment of acute internal states that modulate stable risk factors. Each type of assessment has its own set of inherent advantages and disadvantages.

Assessment of Risk Indicators

One of the most widely known truisms in psychology is that the best predictor of future behavior is past behavior. This is not because past behavior causally determines future behavior; rather, it is because the underlying, relatively stable characteristics that produced past behavior are presumed to remain largely in place and will produce similar behavior in similar circumstances. In regard to sexual offending, past offense-relevant behaviors (e.g., prior offending characteristics) were the behavioral manifestations of underlying stable risk factors and their dynamic interaction. In other words, past offense behavior was the output of a complex, internal bio-psycho-social equation. Because we assume that those same stable risk factors persist, that internal equation would likely remain largely unaltered unless the sexual offender successfully completed a risk reduction program (i.e., sexual offender specific treatment). As a consequence, past offense behavior are *indicators* of risk, serving as proxies for underlying stable risk factors and their complex interactions (see Fig. 2).

Risk indicators not only include past actions that serve as behavioral proxies for underlying stable risk factors and their dynamic interactions but also historical events that are empirically linked to subsequent sexual offending. Some historical events represent classes of behaviors that represent behavioral proxies of underlying stable risk factors. For example, placement in special education, which emerged as a predictor of future sexual offending in research to develop the JSORRAT-II (Epperson et al., 2005) presumably results from a constellation of behaviors that reflect underlying deficits in cognitive ability, self-regulation skills, and/or emotional functioning.

Other historical events empirically linked to future sexual offending are indicative of risk through their presumed causal or etiological role in the shaping of stable risk factors (see Fig. 2). For example, an offender's own history of personal abuse has been shown to be associated with an increased likelihood of future sexual offenses in samples of juveniles who have sexually offended (Epperson et al., 2005). One could speculate that historical victimizations have an impact on cognitive scripts for intimacy, the offender's capacity for empathy and intimacy, or some other characteristic that could have a causal effect on future sexual offending (Connolly & Woolons, 2008; Simons, Wurtele, & Durham, 2008; Ward et al., 2006).

How risk indicators lead to stable risk factors is important to treatment (risk reduction) efforts; it is not essential information for risk assessment. Only the empirical relationship of indicators is essential to identify and weigh risk indicators in an empirically derived risk assessment measure.

Several validated risk assessments currently in use focus heavily on risk indicators. These include the Minnesota Sex Offender Screening Tool-Revised (MnSOST-R; Epperson, Kaul, & Hesselton, 1998), the Risk Matrix-2000 (Thornton, 2007), Static-99 (Hanson & Thornton, 1999), Static-2002 (Hanson & Thornton, 2003), Sex Offender Risk Appraisal Guide (SORAG: Quinsey et al., 2006), and the Juvenile Sexual Offender Recidivism Risk Assessment Tool-II (JSORRAT-II; Epperson et al., 2005). These types of risk assessments often rely on actuarial procedures for identifying a set of variables that optimally predict future sexual reoffense. Additionally, actuarial assessments fall into what is often described as second-generation risk assessments (Bonta, 1996; Campbell, French, & Gendreau, 2007). The hallmark of these assessments is that they are often atheoretical and rely on observation of reliable past behavior.

Such assessments have a number of advantages. As mentioned, they rely on observable risk indicators typically found in judicial case files. This is an advantage in three ways. First, there is no need to interact with the offender and risk presentation bias skewing the risk assessment. Second, most risk indicators are quite objective and rely upon specifically stated rules. For example, the first item on the JSORRAT-II, MnSOST-R, and Static-99 requires risk assessors to count the number of historical sexual offenses detected by the judicial system. Items of this type can often be scored quite reliably across scorer and time because they require little to no subjectivity in scoring. Third, most second-generation or actuarial risk assessments for sexual offenders require relatively minimal training to score. Usually, a 1- or 2-day workshop and some structure to avoid coder drift over time are all that is required to accurately score these tools, compared to years of post-graduate training required to score other psychological measures.

The second major advantage is that several risk assessments focusing on risk indicators have been validated with diverse samples across the U.S. and around the world. A recent meta-analysis of sexual offender risk assessment tools found the average effect size (*d*) for empirical-actuarial measures to be .67 in 81 validation studies (Hanson & Morton-Bourgon, 2009). Furthermore, this level of accuracy is a significant improvement over clinical judgment, which rarely exceeds chance level (Bengtson & LÅngström, 2007; Hanson & Morton-Bourgon, 2005; Hanson & Morton-Bourgon, 2009).

At the same time, a couple of key disadvantages accompany these types of risk assessments. Actuarial assessments, because they are atheoretical, provide little in focusing treatment and intervention. In the examples above, we noted that these risk assessments rely heavily on risk indicators. For these assessments, the criteria used to determine an item's inclusion is only that it correlates with sexual recidivism. Consequently, scores on such tools may not provide treatment providers enough information to strategically target their treatment interventions. Similarly, because these types of assessments rely heavily on historical risk indicators, they do not do a good job of determining when risk has been reduced through treatment or maturation.

Assessment of Risk Factors

Third-generation types of risk assessment attempt to improve upon the weaknesses of second-generation assessments. Specifically, the aim of these tools is to assist in determining appropriate intervention points for risk reduction efforts, as well as to determine when risk has been reduced (Campbell et al., 2007). Both are more theoretically derived than second-generation risk assessments and target underlying stable risk factors, acute internal states, contextual influences, or some combination of the three (see Fig. 2). Examples of tools primarily assessing stable risk factors that are typically used to target risk reduction efforts include the Sex Offender Treatment Needs and Progress Scale (McGrath & Cumming, 2003), STABLE-2007 (Hanson et al., 2007), Violent Risk Scale-Sex Offender Version (VRS-SO: Olver, Wong, Nicholaichuk, & Gordon, 2007) and, more recently, the Structured Risk Assessment-Forensic Version (SRA-F: Thornton & Knight, 2009). In addition, the ACUTE-2007 (Hanson et al., 2007) is an instrument that attempts to assess changes in acute internal states (e.g., emotional collapse) or contextual influences (e.g., victim access) that modulate risk upon release.

The advantages of these types of assessments primarily pertain to their ability to guide risk reduction efforts and potentially determine when risk has been reduced (or elevated). Compared with risk assessments focusing primarily on risk indicators, these assessments attempt to target potentially causal aspects of risk. Hence, they can be used to determine a course of treatment. In addition, many can be used to track treatment progress and to evaluate the effectiveness of treatment at termination.

Though there is some empirical support for the validity of several tools that focus on stable risk factors, there are also a number of potential problems. The degree to which these problems exist varies quite dramatically from tool to tool. First, because these tools tend to be more theoretically driven, they vary in terms of their use of risk factors that have received empirical support for their relation to sexual offending. For example, the Sex Offender Treatment Needs and Progress Scale asks risk assessors to gauge the degree of an offender's admission of offense behavior (Item #1) and acceptance of responsibility for their sexual offenses (Item #2). Both items are anchored on the highest risk end by denial. The literature on denial, however, has been fairly negative. A number of studies have shown no overall effect of denial on risk, which was also found in a relatively recent meta-analysis finding no relation to sexual recidivism (Hanson & Morton-Bourgon, 2005). Some more recent studies have reported mixed and sometimes contradictory results (e.g., Harkins, Beech, & Goodwill, 2010; Langton et al., 2008). Limited empirical support for a relation to sexual recidivism does not make such items theoretically unimportant in determining appropriate targets for treatment; however, insufficiently demonstrated relations likely limit the overall validity and usefulness in predicting future sexual offending.

The second potential disadvantage of these tools pertains to subjectivity in determining an offender's standing on some risk factors. Unlike most actuarial tools that rely upon counts of observable behavior, risk assessors are asked to judge the degree of specified characteristics. The extent of specific instructions, examples, and discrete categories for making

these determinations varies from tool to tool; however, most require some amount of subjective judgment on the part of the rater. This subjectivity has the potential to reduce reliability from scorer to scorer and across time without adequate training.

Third, some items on such scales also require raters to interact with and provide professional judgment about psychological aspects of the offender. This interaction has the potential to be influenced by the offender's presentation bias, or desire to fake good (or bad) and requires particular clinical skill to tease out truthful responses. This is problematic in two ways. First, an offender's reluctance or intentional attempts to present themselves favorably introduces problems for any tool's overall validity and reliability. Second, the skill required to tease out truthful responses may not necessarily be gained with 1- or 2-day training. Instead, it may require years of graduate-level training to obtain an advanced degree. This possible requirement, even if not explicitly stated in scoring manuals, limits who can potentially score such tools accurately.

The fourth disadvantage is really just a current limitation that can be remedied by additional research. Although early research on these tools is quite promising, there are relatively few validation studies completed to date—generally one to three studies for each of the instruments listed.

As this chapter was being completed, Mann, Hanson, and Thornton (2010) published a very informative meta-analysis of what they labeled "psychologically meaningful" risk factors or "propensities" (equivalent to what we have labeled stable risk factors). Their article advances the case for third-generation risk assessment tools and identifies empirically supported, promising risk factors. The reader is referred to that article for details. In brief summary, the empirically supported risk factors were: sexual preoccupation, deviant sexual interest, offense-supportive attitudes, emotional congruence with children, lack of emotionally intimate relationships with adults, lifestyle impulsivity or general self-regulation problems, poor cognitive problem solving, resistance to rules and supervision, grievance or hostility, and negative social influences. Promising risk factors included hostility toward women, Machiavellianism, callousness or lack of concern for others, and dysfunctional coping. Overall, there was strong congruence between the underlying risk factors previously listed in Fig. 1 and those identified as empirically supported in the Mann et al. (2010) meta-analysis.

Summary

In summary, risk assessments can take one or some combination of three approaches. They can assess historical *risk indicators*, an approach largely taken by second-generation actuarial risk assessments like the Static-99, Static-2002, SORAG, MnSOST-R, and JSORRAT-II. They also can assess *stable risk factors* or *acute internal states*, as in many newer third-generation approaches. All three approaches appear to have value, as demonstrated by significant improvements over chance-level prediction; however, their relative value may partly depend on the types of questions that are asked. If the question is "what is the likelihood of this sexual offender going on to commit a new offense?" assessments that target risk indicators will likely suffice. If the question is "how best should I target my treatment approach to reduce risk, and when will I know when risk has been reduced?" the choice of assessment should probably be one of the third-generation assessments.

Likely, the value of both approaches is maximized in a combined approach, such as the Dynamic Supervision Project (e.g., Hanson et al., 2007). In such an approach, actuarial assessment with a second-generation tool is used to determine base levels of risk. Assessment of stable risk factors is then considered in conjunction with base levels of risk to determine the offender's overall priority for sexual offender specific treatment, other risk reduction approaches, or risk management strategies. Should an offender be determined to be a sufficient priority for treatment or risk reduction, strategies could be targeted in areas identified through the assessment of stable risk factors. Once released, assessment of acute internal states could be monitored through supervision and environments modified by risk management to further reduce the overall threat the offender poses to the community. This approach necessarily relies upon valid risk assessment in all three phases, but if implemented successfully, benefits both the community and the offender by diverting them into non-offending pathways.

Possible Explanations for Reduced Rates of Observed Sexual Recidivism

Reports of sexual recidivism rates for sexual offenders from historical, landmark meta-analyses are approximately 13 % (Hanson & Morton-Bourgon, 2004; Hanson & Bussiere, 1998). Though an underestimation of the true rate of sexual recidivism due to underreporting, that rate has often been widely accepted as the typical rate at which sexual offenders are detected for a new sexual offense. However, there is reason to believe that rate is not stable and, in fact, declining over the past two decades.

Crime rates have fallen in both the United States (Federal Bureau of Investigation, 2007) and Canada (Public Safety Canada, 2007) over the past two decades, and this same trend appears evident for sexual offenses as well. Since the early 1990s, the observed rate of forcible rape reported through the FBI's Uniform Crime Reports has fallen from a high of 42.8 per 100,000 in 1992 to a low of 30.0 per 100,000 in 2007 (Federal Bureau of Investigation, 2007).

In addition, others have observed declining rates of sexual recidivism. For example, the Minnesota Department of Corrections (2007) found that 3-year rates of recidivism for sexual offenders released from correctional facilities dropped steadily from 17 % in 1990 to 3 % in 2002. Helmus, Hanson, and Thornton (2009) reported initial results from the aggregation of 18 Static-99 replications samples. They observed that the sexual recidivism rate for replication samples was approximately two-thirds the rate of recidivism found in the Static-99 development sample. The rate difference was reported to be most dramatic for sexual offenders scoring 4 or more, those at the "Moderate–High" and "High Risk" levels.

If these studies accurately reflect that the base rate for sexual reoffending is declining, what can account for this drop? Our distinction between risk and threat helps parse out the relevant questions to ask and identifies the types of data that could address those questions.

Recall that risk is defined as inherent in the individual and relatively stable across situations and time. Risk is reduced only through internal changes in key risk or protective factors, presumably through formal treatment. Thus, the goal of treatment is to reduce the risk of higher-risk offenders to levels of low-risk offenders. Operationally, the best estimate of risk would be the rate of sexual recidivism for unsupervised sexual offenders in an open environment, since their true rate of sexual recidivism would not be constrained by highly structured and restricted release environments.

In contrast, the likelihood of risk manifesting behaviorally in a new victimization can be constrained or exacerbated by external contextual elements acting on or triggering acute internal states, as described earlier. This varying likelihood of risk manifesting behaviorally across different situations was defined as threat. Thus, threat varies across situations, while risk remains relatively stable. Risk management involves the systematic imposition of external controls that minimize exposure to exacerbating elements and/or maximize exposure to inhibiting elements. When risk is being actively and effectively managed, threat can be viewed in some sense as managed risk. Thus, the goal of risk management is to manage risk in a way that the threat posed by high-risk offenders is more similar to that posed by lower-risk offenders. Operationally, the best estimate of threat would be the rate of sexual recidivism for sexual offenders released to highly structured environments (e.g., intensive supervision) relative to sexual offenders of comparable risk who were released to much less managed release environments.

The question of how to best explain decreased base rates of sexual recidivism in more contemporary samples condenses to whether the decrease is due to internal changes in contemporary sexual offenders (physiological, cognitive, personality), changes in conditions external to the offender (active risk management, passive risk management through cultural and social changes that effectively decrease opportunities to offend), or some combination of the two. Given that it is not uncommon for sexual offenders in contemporary samples to have been exposed to both treatment and risk management interventions (active and passive), it can be challenging to apportion differential responsibility for the decline in sexual recidivism rates.

There is evidence supporting the effectiveness of sexual offender treatment in reducing risk (Gallagher, Wilson, Hirschfield, Coggeshall, & MacKenzie, 1999; Hall, 1995; Hanson et al., 2002; Hanson & Morton-Bourgon, 2007; Lösel & Schmucker, 2005; Reitzel & Carbonell, 2006). However, can these modest effects account for the observed decline in sexual recidivism rates?

Just as treatments have evolved, so have risk management practices. Some of these changes were legally mandated. The Jacob Wetterling Crimes Against Children Act, which was passed in 1994, required states to set up sexual offender registries in order to better track sexual offenders in communities and to provide law enforcement with easy access to a pool of potential suspects in the event of a sexual crime. The Wetterling Act was amended in 1996 to allow law enforcement officials to release information about sexual offenders on the registries to the public. Also in the 1990s, a number of states enacted sexually violent predator laws that allowed states to indefinitely hold convicted sexual offenders in secure mental health institutions beyond the end of their prison sentence. Finally, a number of states implemented formal, tiered risk management systems anchored by actuarial risk assessment. This increased attention to sexual offending also resulted in community awareness and education that may have also limited opportunities for sexual offending.

Data from Minnesota (Epperson et al., 2011) provides an interesting illustration of this situation and some tentative answers. Epperson and his colleagues conducted a validation study of the Static-99 and the MnSOST-R with a more contemporary and exhaustive sample of 326 sexual offenders released from prison in 1997. In contrast to Minnesota offenders in the earlier development and validations samples for the MnSOST-R, these offenders were subject to registration, community notification, and civil commitment statutes. In addition, many had been exposed to more contemporary treatment and all were released to a tiered risk management system, with higher-risk offenders receiving more intensive supervision than lower-risk offenders. Both tools were successfully validated in that study. Using arrest for a new sexual offense (other than solicitation) as recorded in the FBI National Crime Information Center database as the criterion variable, the ROC-AUC was .66 for the MnSOST-R and .64 for the Static-99. Each of these values was statistically significant ($p \leq .004$).

Two interesting aspects of these data were the relatively lower indices of validity relative to older samples, which will

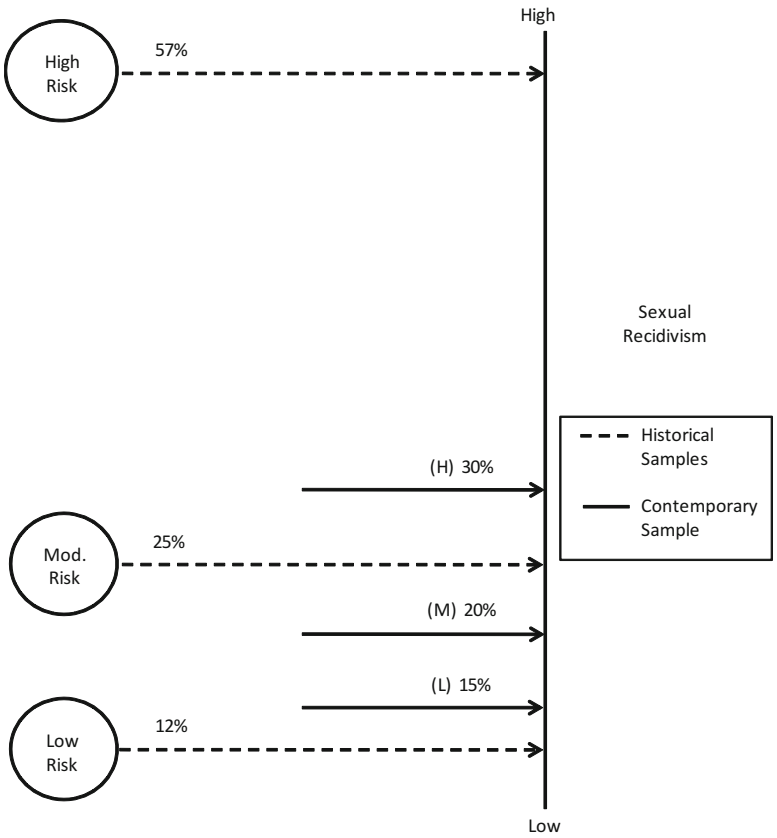

Fig. 9 Compressed sexual recidivism rates for high-, moderate-, and low-risk offenders in a more contemporary sample versus historical samples

be addressed later in this chapter, and the substantially lower rates of sexual recidivism for high- and moderate-risk offenders as summarized in Fig. 9. As indicated there, the range of sexual recidivism rates for the three risk levels is lower overall and much more compressed in the contemporary sample. The sexual recidivism rate for high-risk offenders in the contemporary sample was 30 %, which is a nearly 50 % reduction from the 57 % sexual recidivism rate for high-risk offenders in the historical samples. The difference in sexual recidivism rates for moderate-risk offenders in the two groups is not as dramatic; 20 % in the contemporary sample versus 25 % in the historical samples, but it still represented a 20 % decline. Low-risk offenders in the contemporary sample sexually recidivated at a slightly higher rate (15 %) than did low-risk offenders in the historical samples (12 %).

Because this was a naturalistic rather than experimental study, definitive explanations for this pattern were not possible. However, the authors noted that any explanation would need to account for the differential impact at the higher-risk levels and explored correlational evidence for consistency with one or more of the three primary possible explanations: (1) contemporary sexual offenders present lower risk relative to historical cohorts, presumably through more effective treatment focused on higher-risk offenders, (2) risk is unchanged, but threat is decreased relative to historical cohorts, presumably through more effective risk management focused on higher-risk offenders, or (3) both risk and threat are lower relative to historical cohorts.

Epperson et al. (2011) hypothesized that if the lower-risk explanation was accurate, two patterns would be apparent in the data: (1) a greater proportion of higher-risk offenders would enter and complete treatment, and (2) treatment completion would be associated with reduced rates of sexual recidivism. Their data was not consistent with either hypothesis. Low-risk offenders completed treatment at roughly four times the rate of high-risk offenders, and treatment completion was not associated with lower recidivism rates.

Civil commitment, which was in place for the contemporary sample but not for most of the historical samples, presumably partially explains the lower rate of sexual recidivism for high-risk offenders in the contemporary sample relative to high-risk offenders in the historical samples. If the lower threat explanation is accurate beyond civil commitment effects, Epperson et al. (2011) hypothesized patterns that should be apparent in the data. Given that higher-risk offenders, by policy, received more intensive supervision, they hypothesized that high-risk offenders would be more likely than low-risk offenders to be revoked and returned to prison. The rationale was that more intensive supervision of higher-risk offenders would allow for better detection of offenders engaging in pre-offense and other problematic behaviors, resulting in a revocation before a new victimization could

occur. In theory, without closer supervision, these offenders would not be detected until a new victimization had actually occurred. Additionally, a revocation often results in more prison time and a decreased opportunity to commit a new offense. The data was consistent with this hypothesis. The revocation rate of very high-risk offenders (65 %) was nearly twice that of low-risk offenders (33 %), and the revocation rate of high-risk offenders (56 %) was 170 % that of low-risk offenders.

Although not definitive, this data strongly suggests that the observed reduction in rates of sexual recidivism for higher-risk offenders, at least in this sample, was primarily due to external rather than internal factors. More specifically, there was no correlative support for a lower-risk hypothesis, but there was fairly strong correlative support for the lowered threat through risk management effects (imposition of external controls) hypothesis. Broadly speaking, risk management would include institutionally based risk management as well as social and cultural changes that make the greater possibility of detection evident to offenders (another type of external control). Duwe and Donnay (2008) reported similar conclusions about the critical role of external controls in reducing sexual recidivism in Minnesota based on extensive analyses of larger data sets spanning multiple years.

Some may mistakenly argue that the distinction between threat and risk is irrelevant to judicial or institutional actions such as civil commitment, community notification, and assignment to intensive supervision because only the likelihood of reoffending (threat in our model) is important to those decisions. In fact, the data just summarized suggests that the distinction is critically important because sexual recidivism rates could climb back to historical levels if we stop treating high-risk offenders as high risk.

This and other data emphasize the continuing importance of accurate risk assessment to ensure that both treatment and risk management interventions are appropriately matched with risk. Data continues to support and validate the basic correctional treatment principle of risk-need-responsivity (Andrews, Bonta, & Hoge, 1990). The accurate assessment of risk is an essential component of this principle.

While the questions of the relative contributions of treatment, active risk management, and passive risk management to lower recidivism rates are sorted out through larger and more refined research, the discussion above points to the importance of the distinction between risk and threat. This distinction also provides some insight into how to make sense of and use recidivism rates or risk estimates from different temporal cohorts. It suggests that if we are primarily interested in estimating risk (the likelihood of a new sexual offense under circumstances of relatively low or no supervision), then historical recidivism rates provide the best estimate. Conversely, if we are interested primarily in estimating threat (the likelihood of a new sexual offense given a specified level of risk and the relevant level of supervision), then more contemporary recidivism rates provide the best estimate.

Impact of Effective Risk Management on Sexual Offender Risk Assessment Validity Estimates

As indicated earlier, base rates for sexual recidivism have declined in recent years, but this reduction has not been uniform across actuarially determined risk categories. Instead, the reduced rates of sexual recidivism have occurred most prominently for higher-risk offenders (e.g., Helmus et al. 2009; Epperson, 2011). The potential origins of this trend and its impact on the risk and threat estimates associated with each risk level have already been discussed. However, this trend may also explain why validity indices from more contemporary samples tend to be smaller than in earlier studies, or even insignificant. Furthermore, it may serve as a warning that future validation attempts may see similar drops in validity coefficients if the criterion for failure is not redefined.

The area under the receiver operating characteristic (ROC) curve statistic (AUC) is one of the most commonly used indices of predictive validity for risk assessment tools. The AUC provides an advantage over correlational statistics because it is largely unaffected by the base rate of the event to be predicted (Quinsey, Harris, Rice, & Cormier, 1998; Swets, 1996; Swets, Dawes, & Monahan, 2000). However, this robustness assumes that differences in base rates do not reflect systematic bias in the samples. Relative to historical cohorts, sexual recidivism base rates for more contemporary cohorts of sexual offenders are biased in that the greatest reductions have occurred in the higher-risk categories as already described. Keeping in mind that the coordinates that form the ROC curve are defined by the sensitivity on the *x*-axis and 1-specificity on the *y*-axis associated with each of the possible cut scores of a risk assessment tool, the systematic bias just described flattens the ROC curve by decreasing the amplitude on the *x*-axis and increasing the distance on the *y*-axis for each coordinate. Because the curve is flattened, the area under the curve is decreased.

As an example, consider the data in Table 1 to represent the distribution of a historical cohort of sexual offenders on a hypothetical risk assessment tool with four possible scores (1 through 4). The frequency of non-recidivists and recidivists is listed by score, and the overall base rate of sexual recidivism is 17.5 %. Theoretical data showing a biased reduction in the base rate to 12.5 % are presented in Table 2. There are 20 fewer recidivists in this theoretical sample. The bias is that the reduction is entirely at the upper two scores. In this hypothetical example, successful risk management

interventions precluded new offenses by 10 offenders scoring 3 and 10 offenders scoring 4.

The impact of these changes on sensitivity and 1-specificity are provided in Table 3. As indicated there, for each possible cut score, there is lower sensitivity and higher 1-specificity for the hypothetical contemporary sample relative to the hypothetical historic sample. The resultant flattening of the curve is illustrated in Fig. 10. The concomitant decrease in the AUC in this illustration is from .81 (95 % confidence interval from .75 to .87) for the hypothetical historic sample to .73 (95 % CI from .65 to .80) for the hypothetical contemporary sample.

Table 1 Theoretical distribution of 400 historical sexual offenders without risk management at each of 4 possible scores on a hypothetical risk assessment device

Score	Non-recidivists	Recidivists	Row total
1	190 (95.0 %)	10 (5.0 %)	200
2	100 (86.2 %)	15 (13.8 %)	115
3	25 (55.6 %)	20 (44.4 %)	45
4	15 (38.5 %)	25 (61.5 %)	40
Column total	330 (82.5 %)	70 (17.5 %)	400

Table 2 Theoretical distribution of 400 contemporary sexual offenders with risk management at each of 4 possible scores on a hypothetical risk assessment device

Score	Non-recidivists	Recidivists	Row total
1	190 (95.0 %)	10 (5.0 %)	200
2	100 (86.2 %)	15 (13.8 %)	115
3	35 (77.8 %)	10 (22.2 %)	45
4	25 (62.5 %)	15 (37.5 %)	40
Column total	350 (87.5 %)	50 (12.5 %)	400

More important than the preceding statistical example is a conceptual explanation of the central challenge. When second-generation risk assessment tools were developed and initially validated, sexual offenders were generally released under standard correctional supervision for that time. By today's standards that supervision was mild, so risk and threat were largely equivalent because of the absence of effective, systemic social or institutional risk management programs. Consequently, it made sense to operationalize risk as a new sexual offense (sexual recidivism). In the absence of significant risk management, an individual's propensities to reoffend could reasonably be expected to manifest themselves in new offenses in proportion to the relative individual and interactive power of those propensities.

Systematic and aggressive risk management processes were implemented specifically to establish external controls in the environments of higher-risk sexual offenders in order to dampen or avoid triggering propensities and/or to make it

Table 3 Sensitivity and 1-specificity for all possible cut scores for the theoretical historical sample with no risk management and contemporary sample with risk management

	Historic-no risk management		Contemporary-risk management	
Cut score	Sensitivity	1—Specificity	Sensitivity	1—Specificity
1 & above	1.00	1.00	1.00	1.00
2 & above	0.86	0.42	0.80	0.46
3 & above	0.64	0.12	0.50	0.17
4 & above	0.36	0.05	0.30	0.07
5 & above	0.00	0.00	0.00	0.00

Note: The cut score of 5 & above, at which no offenders can score, is created to generate the origin of the ROC curve

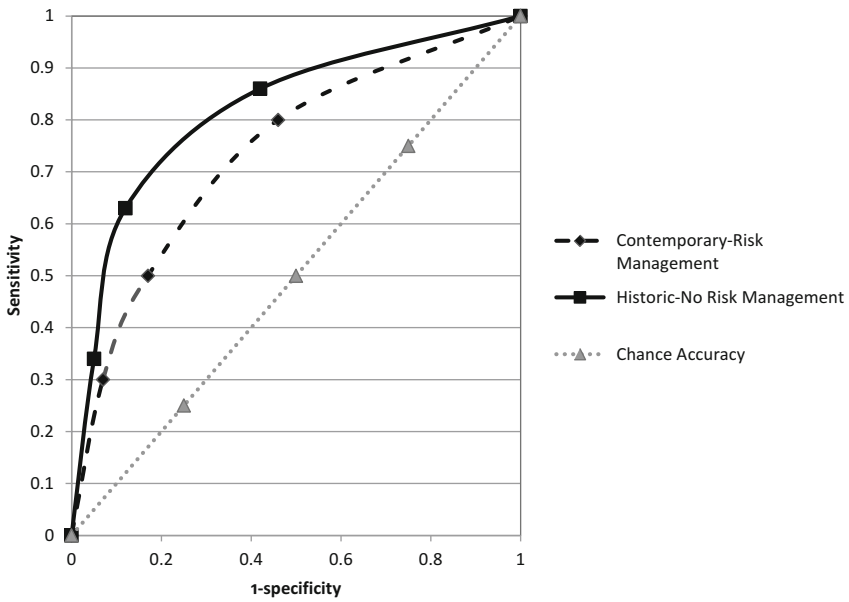

Fig. 10 Flattened ROC curve and decreased area under the curve resulting from a biased decrease in base sexual recidivism with fewer high-risk offenders recidivating potentially due to risk management effects

more difficult to act on them. The intended outcome of those risk management efforts was to decrease the threat of higher-risk offenders to a level as close as possible to that of lower-risk offenders. In other words, the objective of risk management is to make sexual recidivism rates of higher-risk offenders as similar as possible to those of lower-risk offenders. Furthermore, those risk management efforts were informed by actuarial risk assessments in many jurisdictions. In Minnesota, for example, a tiered risk management system anchored by actuarial risk assessment has been in place for more than a decade, and some elements have been in place even longer.

Consequently, attempting to validate an actuarial tool with a contemporary sample of sexual offenders released in the late 1990s or later, with failure defined as a new sexual offense, is like trying to validate a tool on its own residual variance—an impossible task. By way of illustration, imagine using a traditional research design to validate the MnSOST-R on an exhaustive sample of sexual offenders released from Minnesota prisons in 2003.

Each and every offender in that sample would have been classified largely based on his MnSOST-R score and either civilly committed or released to the community with a level of supervision that matched his risk. Consequently, to the degree that risk management is effective, higher-risk offenders correctly identified by the MnSOST-R would sexually recidivate at lower rates that are much closer, or even equivalent, to those of lower-risk offenders. When the analyses were conducted in this hypothetical study, they revealed a lower or even nonsignificant AUC. The obvious moral to this story is that successful risk management anchored by accurate risk assessment tools can result in those tools later being deemed inaccurate and abandoned if traditional validation methodology remains unchanged.

Clearly, second-generation tools have proven to be moderately accurate, as reflected in the recent meta-analysis by Hanson and Morton-Bourgon (2009). More importantly, they appear to have played a role in improved risk management and significant reductions in sexual recidivism by higher-risk offenders. To avoid the resulting paradox of abandoning them as a result of their success (lower or insignificant AUC's), we must at least partially evaluate tools by the success of the systems they anchor. If an actuarial tool anchors a risk management and/or risk reduction system that appears to be effective, caution should be exercised before abandoning the tool and the information that it provides because the cost could be increased sexual recidivism.

This in no way suggests that we cannot improve on the accuracy of risk assessment tools; rather, it suggests that we exercise some caution in how we proceed. For example, it may be possible to develop an actuarial tool (second or third generation) that predicts sexual recidivism better than older tools with contemporary samples. However, that would not suggest that the older tool should be automatically replaced with the newer tool. It would definitely mean that the newer tool predicts threat better than the older tool, but it does not necessarily mean that it assesses risk better. Before making that conclusion, it would be important to also validate the new tool on an older sample, if older data permitted, or use an alternative method for establishing its accuracy in assessing risk as well as threat. In some scenarios, it may make sense to replace an older tool with a newer one, but in other cases it may make sense to use both tools to assess risk and threat.

Conclusion

The research, treatment, and justice communities often discuss "risk" for a new sexual offense in varying ways. The present chapter was intended to propose specific definitions and clarifications to terms and to propose a model of risk and threat in the hope that these clarifications will facilitate future communication. The keys to this model are the distinctions between *risk* and *threat*. Whereas *risk* is a relatively stable set of characteristics that differentially predispose individuals to continue to commit sexual offenses, *threat* is the reduced likelihood of an individual of a given risk level to commit a new sexual offense in the presence of a modified environment (e.g., intensive supervision as part of risk management).

The chapter also proposed that there are at least two major ways to do risk assessment, one that focuses on indicators of risk and the other that attempts to assess risk directly. Both approaches have advantages and disadvantages and are better used to address different types of questions.

Finally, understanding the difference between *risk* and *threat* is potentially important to understanding two recent phenomena: the observed reduction in sexual recidivism rates and an emerging potential trend of reduced validity indices in newer validation studies with contemporary samples of offenders released with more aggressive and structured risk management systems. As risk management and reduction efforts improve, one would expect observed rates of recidivism to decline because both threat (through risk management) and risk (through risk reduction) are reduced. This is a positive result. At the same time, cross-validations of risk assessment tools will likely see a deflation in validity indices beyond what would normally be expected by shrinkage alone because in those validation attempts the tools will be predicting threat and risk, as opposed to risk alone. Thus, interpretation of the usefulness of any tool based on these newer indices must necessarily include a healthy amount of caution.

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Risk Factors and Risk Assessments for Sexual Offense Recidivism

Dale Arnold and Marianne Davis

Research into risk factors for sexual recidivism is important for a number of reasons. Such knowledge can provide assistance to allocate resources to those most in need of intervention, it helps us identify the interventions that are most likely to be effective, and it helps us improve our understanding of the etiology of sexual reoffending. This chapter will review the risk factors that have been found to be related to sexual recidivism, with a focus on the static risk factors identified via meta-analysis. Limitations with sexual recidivism research and meta-analytic techniques will be described, and select variables, particularly those associated with counterintuitive findings from meta-analytic studies, will be discussed. Finally, the state of current sexual offender risk assessment methods will be described, and recommendations for improvement will be suggested.

Introduction

Current social policies for managing previously convicted sexual offenders include community notification, lifetime registration, and post-confinement detention. Although these efforts have stimulated fierce debate among the various stakeholders, there is no debate that it is critical, in light of the life-altering consequences of these policies, to be as accurate as possible in identifying those offenders who are most at risk to sexually reoffend.

One key element in accomplishing this goal is to identify the risk factors associated with sexual recidivism or repeated sexual offending (in contrast to risk factors for an *initial* sexual offense). In their influential article, "Coming to Terms With the Terms of Risk," Kraemer et al. (1997) define a risk factor as "a measurable characterization of each subject in a specified population that precedes the outcome of interest and which can be used to divide the population into two groups [the high-risk and the low-risk groups that comprise the total population]."

In sexual offender recidivism research, the outcome of interest is inherently difficult to measure. In part this is because many sex offenders do not reoffend, or, at least, most are not detected of reoffending. We are thus attempting to measure factors associated with a somewhat infrequent event, and it is always more difficult to detect significant relationships under such circumstances.

One of the reasons most sex offenders are not detected of reoffending is because a high proportion of sexual crimes are never reported to authorities. The US Department of Justice, which annually compares National Crime Victimization Survey data to law enforcement reports, found that only 55 % of the sexual crimes committed in 2009 against victims age 12 and older were reported to police (Truman & Rand, 2010). In 2008, 41 % were reported (Rand, 2009). In 1995 the figures were even lower in that only 32 % of rapes and sexual assaults were reported to law enforcement (Greenfield, 1997). Of the crimes that were reported that year, only about one-half resulted in an arrest (Greenfield, 1997). Looking at aggregate figures shows similar results in that Bureau of Justice Statistics findings for the years 1992 through 2000 documented that just 36 % of completed rapes, 34 % of attempted rapes, and 26 % of sexual assaults were reported to the police (Rennison, 2002). Because sexual crimes often go unreported, finding reliable risk factors for sexual recidivism is more difficult. Indeed, rather than identifying risk factors for sexual recidivism, the task might better be characterized as evaluating risk factors associated with particular offenders being arrested, charged, or convicted of sexually reoffending. It is possible that different risk factors are present for those who reoffend, but are not caught. Evaluating the

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potential differences in these groups, however, is exceedingly difficult, if not impossible to conduct.

In order to overcome the fact that a high percentage of sexual offenses do not result in a new charge or conviction, some researchers have used broader definitions of recidivism by including institutional rule violations, reports to child protective services, and parole/probation violations. Studies that use more restrictive definitions of reoffense, such as convictions or sentencing occasions, show relatively lower rates of recidivism, while studies that use more inclusive definitions show higher rates (see Prentky, Lee, Knight, & Cerce, 1997).

Criminal justice system practices can also contribute to problems accurately identifying sexual recidivists. In looking at a sample of Canadian criminal histories, Rice, Harris, Lang, and Cormier (2006) found that 33 % of the offenders had convictions for nonsexual crimes that were either "clearly" or "probably" sexually motivated and that the Record of Arrest and Prosecution (RAP) Sheets identified only 60 % of the violent offenses that were sexually motivated. They came to the conclusion that one would need to multiply the number of offenders with convictions for violent sex offenses on their records by 1.48 to get a more accurate estimate of the actual number of offenders who had committed a violent, sexually motivated crime. Again, this affects researchers' ability to identify potential risk factors for sexual reoffense because they end up studying only the minority of offenders who have been convicted of committing a sexual offense. They miss studying a relatively larger group of offenders who have committed a sex offense, but are not identified as such.

Another issue to consider when evaluating sexual offense recidivism research is the follow-up period that is used. Although most recidivistic events occur within the first 5 years the offender is in the community, the cumulative number of recidivists will increase as the follow-up period increases (Harris & Hanson, 2004; Prentky et al., 1997). Thus, higher rates of recidivism will be detected the longer the samples are followed. Further, different types of offenders are known to recidivate at different rates, which can also affect outcome data, especially in studies with shorter follow-up times. For example, incest offenders have routinely been found to have a lower recidivism rate than extrafamilial child molesters. Likewise, Hanson and Bussière (1998) demonstrated that rapists tend to reoffend more quickly, but Prentky et al. (1997) suggest that over time, child molesters tend to reoffend more often. More recently, Helmus (2009) found significantly different recidivism rates among sex offenders depending on whether they came from routine correctional samples or from higher-risk samples where the subjects had undergone some type of preselection process.

Yet another issue related to this area of research is related to how the variables are statistically related to sexual offender recidivism. Specifically, most available studies of risk factors are those that investigate the effects of a single factor, that is, the relationship of a factor independent of other factors, to sex offender recidivism. It is possible that some risk factors act as mediator variables or moderators of other risk factors so that they only function as risk factors if other conditions are also present (e.g., a history of sexual abuse may only act as a risk factor for sex offender recidivism when an individual is unsuccessful at establishing intimate adult relationships). However, demonstrating statistical interactions between two or more factors is difficult. Thus, a conditional relationship between two possible risk factors, that is, one where a variable is a risk factor only when moderated by one or more other risk factors, is difficult to demonstrate.

Still another limitation to risk factor research is that most studies are conducted upon convenience samples. That is, they use the available information collected about offenders in a particular institution or country at a particular time, determine what factors can be gleaned from the information, and then investigate the relationship between the factors and sexual reoffending. Very few, if any, studies of risk factors for sex offender recidivism set out with a plan to collect information theorized to be related to reoffending and then evaluate those possibilities. Also, if important information is not collected, is collected but then rated inconsistently, or the ratings are not measured in the same way, a factor may not show a reliable (stable) association with later recidivism. For example, if information is not collected about the number of undetected sexual offenses an offender reports committing, then that variable (undetected sex offenses) may not be shown to be a "true" risk factor.

In short, there are a number of challenges to conducting research on risk factors for sexual recidivism. Given the nature of the construct, there is little that can be done to compensate for these inherent limitations, and competent researchers acknowledge these limitations and, as best they can, devise studies designed to address them.

Prior Research on Risk Factors for Sexual Recidivism

Prior to the oft-cited meta-analysis by Hanson and Bussière (1996, 1998), there were dozens of studies designed to identify which offenders were most likely to reoffend. For example, Rice et al. (1990, 1991) and Rice, Quinsey, and Harris (1991) found that subjects convicted of a new sex offense had previously committed more sex offenses, had been admitted to correctional institutions more frequently, were more likely to have been diagnosed as personality disordered, had higher scores on measures of psychopathy, and had shown more inappropriate sexual preferences. Using largely the same sample followed for a longer period of time (mean of 50 months), Quinsey, Lalumiere, Rice, and Harris

(1995) found that previous record of sexual offenses, previous general criminal history, non-married status, Psychopathy Checklist-Revised (PCL-R) score, and phallometric deviance index significantly differentiated sexual recidivists from non-recidivists. Similarly, Hanson, Steffy, and Gauthier (1993) found the variables that best predicted sex offense recidivism among child molesters were prior sexual convictions, admitted prior sexual offenses, boys only as victims, and no history of marriage.

Prentky et al. (1997a) identified three risk factors associated with recidivism as measured by rearrest among child molesters, including a degree of sexual preoccupation with children, more paraphilias, and number of prior sexual offenses. These three factors predicted a high percentage of child molesters who committed future sexual offenses when released from a treatment center for sexually dangerous persons.

Proulx et al. (1997) found that child molesters subsequently reconvicted for a sexual offense had higher pedophilic indices, had more previous sexual charges, more frequently had male victims, more frequently had extrafamilial victims, were more likely to live alone, and were younger. Relative to rapists, Proulx et al. (1997) found that rapists reconvicted of a sexual offense were younger and had more previous convictions.

Several other individual studies identified potential risk factors for sexual recidivism (see Craig, Browne, & Stringer, 2003, for a review). Although the findings from the various individual studies provided valuable information to examiners who were tasked with the job of selecting out the riskiest offenders, prior to having a meta-analysis that compared the factors, approaches to risk assessment were often idiosyncratic and included at least some variables that were subsequently found to be unrelated to risk (e.g., poor victim empathy). Likewise, there was little guidance on how one should go about combining risk factors, so that a final opinion (with good interrater reliability) could be reached. As criminal justice policies to manage sexual offenders began to be more restrictive and expensive to implement, it became increasingly important to accurately distinguish between relatively low- and high-risk offenders. Ultimately, the meta-analyses of sexual recidivism risk factors (and the actuarial scales that were subsequently developed) helped to address these needs.

Overview of Meta-analytic Procedures

The Hanson and Bussière meta-analysis (1996, 1998) and a subsequent meta-analysis by Hanson and Morton-Bourgon (2004, 2005) provided valuable information in the quest to identify and compare reliable risk factors clinicians can use to discriminate between lower- and higher-risk offenders. The risk factors identified in these studies became the building blocks for the development of several actuarial risk assessment instruments that are now routinely used to triage sexual offenders into different risk groups. Prior to describing the outcome of those studies, however, it's important to review the relative strengths and weaknesses of meta-analytic techniques.

Meta-analysis refers to the systematic statistical analysis of a large number of individual studies for the purpose of integrating the findings (Glass, 1976). The procedure takes the statistical results from different independent studies and combines them, thus potentially allowing effects to be discerned that perhaps could not be detected in the original studies (e.g., due to a small sample size). The power of a meta-analysis to detect relationships among variables is greatly increased by the large sample size that generally results from combining the studies. It is argued that meta-analysis is more objective and more comprehensive than traditional literature reviews and has the advantage of offering a quantitative means of ordering and integrating data (Wilson & Rachman, 1983).

At the same time, meta-analytic studies do have some important limitations. For example, Schlank (2010) points out a meta-analytic study can only compare the relationship between two variables. As a result, potentially important interactions moderated by a third variable may be overlooked, such as when a variable acts as a risk factor only when another variable is also present. She also notes that any limitations in the original studies will be carried over into the meta-analysis.

Criticisms of meta-analysis specific to the field of sex offender research have tended to revolve around a few particular issues. These include the selection process (which studies to include and which to exclude), the possibility of confounds (extraneous variables) affecting important variables, heterogeneity in the studies used (differences in sample sizes, subjects, definitions of variables, and follow-up periods), and the generalizability of the results.

The selection process, in general, and issues around the quality of the studies included in performing a meta-analysis, in particular, have raised intense debate over the years. Glass and Kliegl (1983) argue that Eysenck's (1978) comments regarding "garbage in–garbage out" are beside the point when it comes to meta-analytic procedures. All studies have some methodological flaws, and with meta-analysis, less than perfect studies can still provide useful information. Shapiro and Shapiro (1983) acknowledge that meta-analysis cannot transcend the limitations of the data used but suggest that rather than exclude studies of questionable quality, one can keep the data and examine the results of including marginal studies empirically. Beech et al. (2007) noted the difficulty among even experienced sex offender researchers to agree on what constitutes a good quality study. They note that it's not that one group of researchers is more stringent or restrictive than another when it comes to study quality but

rather that most of the studies deemed credible by one group may be considered inherently biased by another. They describe examining the reliability of experts' ratings of study quality and finding the degree of agreement among them was poor. In later discussions with the experts, they found they disagreed in principle, often vehemently, over what constituted a "good enough" study.

Lund (2000) writes that the ability of a meta-analysis to give practical answers to important questions depends on the nature of the studies that comprise the analysis. Looking specifically at the variable of denial, he reviewed the 1996 Hanson and Bussière meta-analysis and noted that when studies that defined denial differently were all included, sources of measurement error were combined and the likelihood of detecting a meaningful relationship reduced. Thus, a meta-analysis that shows a correlation of zero between two variables may or may not mean there is no relationship, depending on the consistency of the definitions used in the studies. Likewise, heterogeneity in other factors (e.g., different sample populations, different settings) can also act as sources of error. Lund (2000) concludes that though a strength of meta-analysis is the power it provides and thus the ability to detect even small effects, when it comes to looking at specific variables (e.g., denial or victim empathy), low base rates of recidivism combined with small effect sizes and small sample sizes can result in low statistical power, possibly resulting in a meta-analysis showing no relationship when in fact one exists. On the other hand, if large effect sizes are still observed despite all these, the relationships are likely to be more convincing (Lund, 2000).

In sum, meta-analysis is a powerful tool that has made significant contributions to the research into sexual recidivism risk factors. It is a tool with limitations, however, and the prudent practitioner will have an appreciation of both its strengths and weaknesses and use the results of meta-analytic studies with the appropriate caution.

Results of the Major Meta-analytic Studies of Sexual Offender Recidivism Risk Factors

While keeping in mind its limitations, when it comes to identifying risk factors for sexual recidivism, a meta-analysis has a clear advantage over a single study, as it becomes possible to more confidently comment about the consistency and reliability of an apparent relationship. Likewise, it allows the relative magnitude of the relationship between different risk factors to be compared (Hanson & Broom, 2005).

The Hanson and Bussière (1996, 1998) meta-analysis summarized 61 different data sets from six countries in an attempt to identify factors associated with sexual offender recidivism. Another goal was to determine if the factors associated with sexual recidivism were the same as or different from the factors associated with nonsexual violent recidivism and general recidivism. In the meta-analysis, the statistic used to measure the association between variables was *r*, drawn from Rosenthal (1991). (*r* is a correlation coefficient that looks at the magnitude and the direction of the relationship between two variables.) Aggregate findings were reported using the median *r* value and the weighted averaged *r*. Correlations from .10 to .19 were considered small, correlations from .20 to .29 were considered moderate, and correlations greater than .30 were considered large. In the end, 70 factors that had statistically significant correlations with sexual recidivism were identified. Most of these variables were either related to criminal lifestyle or sexual deviance. Some of the variables presumed by many to have a relationship with sexual recidivism were not supported (e.g., negative clinical presentation). The study also found that the strongest predictors for sexual recidivism were not the strongest predictors for nonsexual violent and general recidivism, which indicated a need for risk assessment procedures designed specifically to assess the risk for sexual recidivism (Harris & Hanson, 2010).

One of the most important findings from the Hanson and Bussière study was that no one factor was strongly enough correlated with sexual recidivism to function as a sole or primary predictor. Currently, then, the best decisions about future risk are those that are made by relying upon consideration of multiple variables or factors. It was also not clear, however, to what degree the more strongly correlated variables were associated with each other and shared overlapping variance, as no multivariate analyses of the data were conducted. (If there is overlapping variance, the variables are contributing both individually and jointly to recidivism and it is unclear to what extent any one variable is predictive.)

General findings from the Hanson and Bussière meta-analysis are summarized in Table 1, while individual findings will be described in more detail later in this chapter.

In 2004, a second meta-analysis studying predictors of sexual recidivism was completed, this one by Hanson and Morton-Bourgon (2004, 2005). This study was conducted to update the findings of the prior meta-analysis by incorporating data that had been collected since Hanson and Bussière completed their initial study (i.e., to include data gathered since 1996). This second meta-analysis was both more limited and expanded than the original study. Rather than repeating an analysis of all of the variables from the prior study, Hanson and Morton-Bourgon focused on findings that (a) were considered important to applied risk assessment and (b) were weak or controversial in the earlier review (e.g., denial, victim injury). Further, in contrast to the Hanson and Bussière study, which primarily examined static factors, the second meta-analysis also included dynamic risk factors. Static risk factors are those that, for the most part, do not change over time, such as number of prior offenses and having had boy victims. Dynamic factors are those that might change over

Table 1 Correlations (*r*) with recidivism for each category of predictor (Hanson and Bussière (1996))

	Type of recidivism		
Category	Sexual	Nonsexual violent	Any
Sexual deviance	.19 ± .01	.01 ± .03	.12 ± .02
Criminal lifestyle	.12 ± .02	.16 ± .03	.21 ± .02
Psychological maladjustment	.01 ± .03	.02 ± .08	.02 ± .03
Negative clinical presentation	.00 ± .07	–	.15 ± .07
Failure to complete treatment	.17 ± .07	.08 ± .09	.20 ± .07

Note: values represent average correlations ± 95 % confidence interval

Table 2 Predictive accuracy (*d*) of the main categories of risk factors (Hanson and Morton-Bourgon (2004))

	Type of recidivism			
Category	Sexual	Nonsexual violent	Violent	Any
Sexual deviance	.30 ± .08	−.05 ± .17	.19 ± .08	.04 ± .08
Antisocial orientation	.23 ± .04	.51 ± .07	.54 ± .05	.52 ± .04
Sexual attitudes	.16 ± .12	.17 ± .22	.14 ± .11	.24 ± .10
Intimacy deficits	.15 ± .11	.12 ± .21	.12 ± .12	.10 ± .10
Adverse childhood environment	.09 ± .08	−.02 ± .17	.14 ± .08	.11 ± .07
General psychological problems	.02 ± .10	.21 ± .14	.00 ± .10	−.04 ± .11
Clinical presentation	−.02 ± .09	.16 ± .20	.09 ± .09	.12 ± .08

time, such as degree of sexual preoccupation and impulsivity. However, the distinction between what is a static and what is a dynamic risk factor is not always clear. Some writers have suggested that static risk factors may simply be a manifestation of dynamic risk factors. Thus, Beech and Ward (2004) suggested that static risk factors are significant because they act as markers of the past operation of dynamic risk factors.

Hanson and Morton-Bourgon's study used 95 data sets, 51 of which had not been included in the Hanson and Bussière meta-analysis and 12 that had been updated since the initial study. This time the standardized mean difference, *d*, was used instead of *r* to measure the association between variables and recidivism. The *d* statistic was chosen because it was deemed to be less influenced by recidivism base rates and more sensitive to variability than *r*. In other words, the *d* statistic was thought to better reflect the reliability of the relationship between a specific variable and sexual recidivism (Hanson & Morton-Bourgon, 2004).[1] Further, both the median *d* value and the weighted averaged *d* were provided. Values from .2 to .49 were considered small, values from .5 to .79 were considered moderate, and values greater than .8 were considered large.[2] It was pointed out that these thresholds were roughly equivalent to those used in the prior meta-analysis. In other words, *d* of .2 is similar to *r* of .1, *d* of .5 is similar to *r* of .2, and *d* of .8 is similar to *r* of .3.[3]

General findings from the Hanson and Morton-Bourgon meta-analysis are summarized in Table 2, while individual findings are described later.

More recently, Mann, Hanson, and Thornton (2010) have proposed that variables associated with risk for sexual recidivism, whether static or dynamic, are better termed "psychologically meaningful risk factors." These are conceptualized as individual propensities that may or may not manifest during a particular timeframe. They argue that static risk factors have predictive significance because they are markers of the past operation of dynamic risk factors. In the course of advancing this proposal, Mann et al. essentially updated the results of the two prior meta-analyses by Hanson and his colleagues, though only for four variables. This was done by integrating data from studies by Knight and Thornton (2007) and from the Dynamic Supervision Project (DSP; Hanson, Harris, Scott, & Helmus, 2007) using cumulative meta-analytic techniques described by Hanson and Broom (2005). The extent to which this analysis impacted the findings from the prior meta-analyses will be discussed when different categories of variables are described in the next section.

Review of Select Variables

In this section, specific results from the three meta-analytic studies described above will be presented in clusters of related variables. Because this chapter is most concerned with sexual recidivism, the data and discussion will not include nonsexual violent or general recidivism, and the interested reader is encouraged to review the original articles for more information pertinent to those types of recidivism. Further, as noted earlier, the distinction between purely static and purely dynamic variables is becoming increasingly fuzzy, and Mann et al. (2010) have proposed the term "psychologically meaningful risk factors" be adopted as a result. Because of this recommendation and because it is useful to review related concepts (e.g., a "static" factor of deviant

[1] However, Rice and Harris (2005) note that Cohen's *d* was designed for use where the scores being compared are continuous and normally distributed, a condition seldom met in risk assessment.

[2] Though in offering these operational definitions for small, medium, and large effect sizes, Cohen (1988) himself notes that the values chosen had no more reliable a base than his intuition (p. 478) and suggests they not be used if possible (p. 532).

[3] Rice and Harris (2005) also point out that when you have a base rate other than 50 %, the *r* values corresponding to the small, medium, and large effect sizes are even smaller.

sexual preference is related to the dynamic factor of "sexual preoccupation"), this section will list both static and dynamic factors when data is available. However, most of the discussion will be focused on the static nature of the factors. Finally, it should be noted that results from the meta-analyses considered most reliable are those where there was low variability between the individual studies underlying the finding. One way this was monitored in the meta-analyses was to calculate the *Q* statistic (Hedges & Olkin, 1985), which tests for the generalizability among the studies that contribute to a meta-analytic finding. A significant *Q* statistic indicates there was more variability across the studies than would be expected by chance and there would be *less* confidence in the finding. However, as Hanson and colleagues (1998, 2004) pointed out, when sample sizes are very large (e.g., greater than 1,000), even small differences between studies may be statistically significant. When the individual findings are presented below, a significant *Q* will be denoted by an *a*.

Sexual Deviance Variables

As expected, with few exceptions, variables related to sexual deviancy were found to be related to sexual offender recidivism. The findings from the three meta-analytic studies are summarized in Table 3.

Relative to these findings, it was expected by Hanson and colleagues that variables related to sexual deviancy or sexual preoccupation would be related to sexual offender recidivism. Likewise, according to Doren (2010), four factor analytic studies of risk assessment instruments, all done on independent samples, found that sexual deviance was a significant factor that contributed to the prediction of sexual offender recidivism. Further, in the first meta-analysis by Hanson and Bussière (1996), a phallometrically determined sexual interest in children was the single largest predictor. However, when reassessed with additional studies in 2004, that finding was not as robust. According to Hanson (personal communication, 2004), this was probably due to the fact that a single very large study (i.e., 4,000 subjects; Maletzky, 1993) was not included in the 2004 meta-analysis because it had used a liberal definition of recidivism (including "treatment failure").

Another finding that warrants comment is related to sexual preference for rape. Neither the 1996 nor the 2004 meta-analysis found this to be a significant predictor of sexual recidivism. However, when Mann et al. (2010) added the findings from Knight and Thornton (2007) to the 2004 meta-analytic results, the overall finding was significant (eight studies with no significant variability noted). Though the relationship was relatively small, it was deemed reliable and indicated that sexual sadism or a preference for coercive sex was associated with increased risk for sexual recidivism.

At this point, a discussion regarding why the correlations between variables assumed to be closely linked with sex offense recidivism are seemingly so low is warranted. First, as mentioned earlier, the low detection rate for sexual recidivism limits the extent to which two variables can be shown to have a relationship with recidivism (i.e., low base rate of detected recidivism). Second, finding seemingly unimpressive relationships between predictor and criterion variables in an applied context is not unique to meta-analytic studies of sexual offender recidivism. Meyer et al. (2001) illustrated significant,

Table 3 Select variables related to sexual deviance and victim choice

Variable	Hanson and Bussière (1996) r_+	Hanson and Morton-Bourgon (2004) *d*	Mann et al. (2010) *d*
Any deviant sexual interest	.22	.31	–
Sexual interest in children	–	.33	–
Multiple paraphilias	–	.21	–
Sexual interest/preference children (PPG)	.32[a]	.33	–
Any noncontact sex offense	–	.31[a]	–
Sexual preference for rape	.05 (NS)	.12 (NS)	.18
Sexual preoccupation (dynamic)	–	.39	–
Sexualized coping (dynamic)	–	–	.27
Prior sex offenses	.19[a]	–	–
Early onset of offending	.12	–	–
Diverse sex crimes	.10	–	–
Force or injury to victim	.01 (NS)	.09	–
Related child	–.11	–	–
Stranger victim	.15	–	–

NS nonsignificant
[a]Denotes significant *Q* statistic (high variability)

Table 4 Select antisocial orientation variables

Variable	Hanson and Bussière (1996) r_+	Hanson and Morton-Bourgon (2004) d	Mann et al. (2010) d
PCL-R	–	.29	–
MMPI-4 (psychopathic deviate)	.10	.46	–
ASPD	.14	.21	–
Any personality disorder	.16[a]	.36[a]	–
Self-regulation problems	–	.37	–
Impulsivity/recklessness	–	.25	–
Employment instability	.07 (NS)	.22	–
Substance abuse	.03 (NS)	.12[a]	–
Intoxicated during offense	–	.11[a]	–
Grievance/hostility	–	.17	.20
Noncompliance w/ supervision	–	.62	–
Violation of conditional release	–	.50[a]	–
Prior offenses (any/nonsexual)	.13[a]	.26	–
Prior violent offense	.05[a] (NS)	.18[a]	–
Admissions to corrections	.09	–	–
Poor cognitive problem solving	–	.14	.22
Offense supportive attitudes	–	.22[a]	–

NS nonsignificant
[a]Denotes significant *Q* statistic (high variability)

but low effect sizes (using *r*) from daily experiences. They found, for example, that the relationship between chemotherapy and surviving breast cancer was reported to have an effect size of .03; the relationship between post-high school grades and job performance was listed as .16; and the relationship between elevation above sea level and lower daily temperature in the USA was listed as .34. None of these correlations appear to be very large. In practical terms, however, they are meaningful. For example, Rosenthal (1990) reports that a study on daily aspirin use and reduced risk of death by heart attack had an effect size of .034. This translated into a 3.4 % reduced risk of heart attacks among the study participants. The results were significant enough that the study was terminated prematurely and the recommendation promptly made that men begin taking a baby aspirin a day to survive heart attacks. Looking at an example from the sex offender research, in the 1996 Hanson and Bussière meta-analysis, the correlation between prior offenses and recidivism was found to be .19, which may seem small. Yet Harris and Hanson (2004) found that offenders with a previous sex offense conviction reoffended at twice the rate as offenders without a prior sex offense conviction. In a practical sense, then, the correlation is meaningful. Therefore, although the effect size (especially when using *r*) may appear to be low to those unfamiliar with meta-analytic results, such a conclusion is unwarranted. Instead, it's important to interpret the results within the guidelines provided within the studies and described earlier (e.g., *r* of .2 and *d* of .5 are considered moderate effect sizes for the meta-analytic studies described in this chapter).

Antisocial Behavior and Psychopathy

One of the more robust findings in the research on sexual recidivism is the role of an "antisocial orientation," referring to a broad set of variables tapping antisocial behavior, self-regulation, problem solving, and substance abuse. Hanson and Morton-Bourgon (2004) found antisocial orientation to be one of the strongest predictors of sexual recidivism; in fact this variable set was second only to sexual deviancy in terms of its predictive power. Mann et al. (2010) also identified a number of these antisocial variables as "empirically supported risk factors," including general self-regulation problems, impulsivity and recklessness, employment instability, poor cognitive problem solving, offense supportive attitudes, grievance and hostility, noncompliance with supervision, and violation of conditional release. Noncompliance with supervision and violation of conditional release were the two strongest single predictors in the 2004 Hanson and Morton-Bourgon meta-analysis as well, though this was based on a limited number of studies (N=2,159, k[4]=3, and N=2,151, k=4, respectively) (Table 4).

Although the relationship between personality disorders and recidivism is addressed elsewhere in this book, it is worth noting that psychopathy, as measured by the PCL-R (Hare, 2003), was found to be a significant predictor of sexual recidivism. Several studies (though not all) have found

[4]N=number of subjects; K=number of studies.

those offenders who have the combination of high psychopathy and sexual deviance reoffend more often and more quickly than those offenders who do not have this combination (for a detailed discussion, see Jackson, 2008). Given the consistent findings that sexual deviance and antisociality are consistently the best two predictors of sexual recidivism, it's not terribly surprising the most extreme form of antisociality (psychopathy) is an especially robust predictor of sex offense recidivism. In fact, as Doren (2004) pointed out and a later meta-analysis demonstrated (Hawes, Boccaccini & Murrie, 2013), measures of psychopathy and deviant sexual interest interact to create a powerful "dynamic duo" for sex offense recidivism; that is, the presence of both primary factors for sexual reoffending indicates particularly elevated risk for future sexual offenses.

Demographics

Demographic variables were reviewed only in the 1996 meta-analysis (Hanson & Bussière), and other than age, none were found to be related to recidivism. Relative to the finding on the relationship between age and sexual recidivism, there was a small negative correlation indicating younger offenders were at higher risk than older offenders. Given the number of studies focused on this single variable since Hanson and Bussière first reported this finding in 1996 (i.e., at least a dozen studies per Doren, 2010), this variable serves as an excellent example of how a meta-analytic study can mask a rather complicated relationship between a single variable and sexual recidivism. To illustrate, it's noted that when the Static-99, the most researched actuarial instrument to date (Hanson & Morton-Bourgon, 2009), was first released, the age item was given a score of one if an offender was under the age of 25 and a score of zero if the offender was 25 or older, meaning that if a 30-year-old offender and a 60-year-old offender had the same score on the instrument, the associated group estimates would be identical. In particular, Barbaree and colleagues (see Barbaree & Blanchard, 2008, for a review) disputed this assumption and argued that older offenders were at considerably lower risk to reoffend sexually than younger offenders. Other researchers (e.g., most notably Doren, 2010) were skeptical of a uniform effect of "age" and pointed out that much of the data supporting a reduction in sexual recidivism risk among elderly offenders was based on cross-sectional data (e.g., groups of men at different ages) rather than well-controlled longitudinal studies involving the same offenders (Table 5).

More recently, a master's thesis by Helmus (2009), which included the largest combined sample of sexual offenders scored on the Static-99 at that time ($N=9{,}261$), discovered statistically significant variability in recidivism rates associated with the cut scores on the instrument (cut scores separate subjects into different groups based on their scores on the test). It was subsequently determined that age added to the prediction of sexual recidivism after Static-99 scores were controlled for, and it was determined this was one of the sources of variability observed during the process of updating the norms for the instrument. Further analysis by Helmus, Thornton, Hanson, and Babchishin (2012) demonstrated that when the original age item from the Static-99 was replaced with a revised age item with more differentiated age categories (i.e., <35 = 1; 35 to 39.9 = 0; 40 to 59.9 = −1; 60 + = −3), age no longer added to the prediction of sexual recidivism after the revised Static-99 (known as the Static-99R) was entered into a regression formula. Although debate about the impact of age on sexual offender recidivism continues, the modification to the age item on the Static-99R illustrates an acknowledgment that this single variable with a "small" correlation of −.13 has a far more complex relationship to sexual offense recidivism than the earlier finding by Hanson and Bussière (1996, 1998) suggested.

Table 5 Select demographic variables

Variable	Hanson and Bussière (1996) r_+	Hanson and Morton-Bourgon (2004) d	Mann et al. (2010) d
Age	−.13[a]	–	–
Low education	−.03	–	–
Minority race	.00[a]	–	–
Social class (low)	.05	–	–

[a]Denotes significant Q statistic (high variability)

Relative to minority race, it's worth noting both the median r and the weighted mean r were .00 ($k=7$, $n=2{,}505$). Further, this nonsignificant finding was replicated in Hanson and Harris (2000). To date no studies have shown a significant difference in sexual offense recidivism rates that is reliably linked to minority status within a Western culture. A related but separate issue is associated to whether or not actuarial risk assessment instruments (ARAI) predict equally well for different ethnic groups. Nicholaichuk (2001) found the predictive validity of two common ARAIs that primarily include static risk factors (e.g., RRASOR and Static-99) were equally predictive for Canadian native (Aboriginal) and nonnative sexual offenders. In contrast, a Swedish study by Långström (2004) found the Static-99 and RRASOR did not predict sexual recidivism for minorities (e.g., African Asian offenders) as well as they did for Nordic and European sexual offenders. However, it was noted those findings were confounded by the disproportionate number of recent immigrants among the minority groups studied. More recently, Babchishin, Hanson, and Helmus (2012) described preliminary results suggesting the Static-99R was more effective in predicting sexual recidivism with Aboriginal offenders than the

Static-2002R, while there was essentially no difference between the predictive validity of these instruments in other samples. Therefore, although recidivism rates may not be affected by minority status, it's possible that some ARAIs are more effective at predicting sexual recidivism for certain minority groups.

Social and Relationship Variables

Of the intimacy/social variables from Table 6, Mann et al. (2010) identified being never married, conflicts in intimate relationships, emotional congruence with children, and negative social influences as "empirically supported risk factors." This was defined as those risk factors where at least three studies, when "meta-analytically integrated," showed significant predictive ability for sexual recidivism. The effect for the risk factor needed to be "more than trivial" (i.e., average $d > 0.15$). Hostility toward women, Machiavellianism (i.e., use of deception and manipulation, from Thornton, 2003), and callousness/lack of concern for others were found to be "promising" risk factors, that is, risk factors where at least one study showed significant predictive ability for sexual recidivism and where there was some additional supportive evidence.

Loneliness, a Mann et al. (2010) "unsupported but with interesting exceptions" risk factor, predicted recidivism in the Dynamic Supervision Project (Hanson et al., 2007; $d = .35$), however not in the 2004 meta-analysis ($d = .03$). When the Hanson et al. (2007) findings were combined with the Hanson and Morton-Bourgon (2004) findings, the effect ($d = .09$) was nonsignificant. Mann et al. (2010) noted the considerable difference between the two studies and suggested further research was needed to clarify the role of loneliness. Likewise, Hanson and Morton-Bourgon (2004) pointed out the key issue may not be that an offender is lonely but rather how the offender copes with that loneliness. For example, those who retreat to masturbation (e.g., using sex to cope) might be at a relatively higher risk to reoffend than those who use nonsexual coping mechanisms.

Clinical Presentation Variables

Relative to victim empathy, neither the 1996 (Hanson & Bussière) nor the 2004 (Hanson & Morton-Bourgon) meta-analyses found it to be related to recidivism ($k = 3$ and $k = 5$, respectively). Mann et al. (2010) speculated that this could be because much of what is considered problematic victim empathy is actually the offender trying to distance himself from a deviant identity. They also speculated that lower-rated empathy may be part of the more general problem of callousness and lack of concern for others, factors that have been associated with recidivism (Hanson et al., 2007; Knight & Thornton, 2007). Other researchers (e.g., Fernandez & Marshall, 2003; Marshall, Hamilton, & Fernandez, 2001) suggest empathy is better construed as a cognitive distortion, particularly as it relates to distorting evidence of victim harm. This allows offenders to avoid a negative self-appraisal and continue to offend without feeling constrained by sympathy for their victims. Marshall, Marshall, Serran, and O'Brian (2009) also noted the "person specificity" of empathy and how, with respect to sex offenders, the research suggests they are not devoid of empathy per se but rather selectively fail to show empathy toward their own victims (Table 7).

One of the more surprising results of the 1996 Hanson and Bussière meta-analysis was the lack of a relationship

Table 6 Select intimacy/social variables

Variable	Hanson and Bussière (1996) r_+	Hanson and Morton-Bourgon (2004) d	Mann et al. (2010) d
Single (never married)	.11	–	.32[b]
Married (currently)	–.09	–	–
Conflicts in intimate relationship (dynamic)	–	.36	–
Emotional congruence with children (dynamic)	–	.42	–
Negative social influences (dynamic)	–	.22	.26
Hostility toward women (dynamic)[c]	–	–	.29
Loneliness (dynamic)	–	.03 (NS)	.09 (NS)
Machiavellianism (dynamic)[c]	–	–	1.29
Callousness/lack of concern for others (dyn)[c]	–	–	.29
Social skills deficits	–.04 (NS)	–.07 (NS)	–

NS nonsignificant
[b]From Hanson and Bussière, transforming r to d (assuming 13.4 % base rate)
[c]Supported by only one study

Table 7 Select clinical presentation variables

Variable	Hanson and Bussière (1996) r_+	Hanson and Morton-Bourgon (2004) d	Mann et al. (2010) d
Lack of empathy	.03 (NS)	−.08 (NS)	–
Lack of concern for others/callousness	–	–	.29
Denial	.02 (NS)	.02 (NS)	–
Minimizing culpability	–	.06 (NS)	–
Low motivation for treatment at intake	.15[a] (NS)	−.08 (NS)	–

NS nonsignificant
[a]Denotes significant Q statistic (high variability)

between denial (of a history of sexual offending) and recidivism. Denial was also found to be nonsignificant in the 2004 Hanson and Morton-Bourgon meta-analysis. Given the number of offenders who deny their sexual offending (between 50 and 87 %; Yates, 2010), these results were met with some skepticism. Lund (2000) qualitatively reviewed the studies Hanson and Bussière (1996, 1998) used in their analysis of denial and found some serious methodological concerns. He noted that denial was defined variously as denial (or minimization) of the offense, denial of responsibility for the offense, and as thinking errors. Some of the studies did not include a definition of denial. In many of the studies, deniers were excluded from treatment and thus had no opportunity to reduce their risk through receiving treatment. Lund also noted the studies examined in the meta-analysis had low base rates of recidivism, small sample sizes, low power, and a high probability of type I (false positive) errors. Also, denial was not the focus of the studies and was typically only assessed as a peripheral variable, further reducing the likelihood of detecting a meaningful effect. Lund suggested denial could also be interacting with other variables, such as level of risk, something that would not be detected in a meta-analysis. With regard to the 2004 Hanson and Morton-Bourgon meta-analysis, minimization was considered separately in order to provide a more coherent operationalization of denial. Still, in most of the studies examined, denial was conceptualized as a dichotomous variable (denier/admitter), which others have suggested is a poor proxy for such a complex factor (Langton et al., 2008). As with the Hanson and Bussière meta-analysis, the potential moderating effects of other variables on denial were not considered.

Yates (2010) reviewed the literature on denial and noted it has been variously defined as complete denial of the offense, minimizing the impact of the offense, external attributions of responsibility for the offense, denial of sexual deviance, denial of planning, and denial of denial.

She suggested most forms of denial represented common cognitive distortions that are used by many people, not just sex offenders, to justify and minimize responsibility for their behavior. In their review, Mann et al. (2010) identified denial as a risk factor that is "unsupported but with interesting exceptions", that is, a risk variable where the meta-analytic studies have not shown a significant effect but where either one large credible study did have a significant result or a significant result was found by examining subgroups of sexual offenders.

Nunes et al. (2007) also examined denial and found it was associated with increased sexual recidivism among low-risk offenders and with decreased recidivism among high-risk offenders. Analyzing their results, they found the risk item most responsible for the interaction effect was "relationship to victim." Denial was not associated with increased recidivism for offenders with unrelated victims, but was associated with recidivism for incest offenders. They subsequently replicated the results with two additional independent samples. While the pattern was not statistically significant in any one study, it was significant for all three samples combined and consistent across the three samples ($Q = .40$, $p = .82$). They hypothesized that denial could be a minor risk factor, more relevant when there are few other risk factors present, but losing relevancy when more powerful risk factors, such as sexual deviancy and criminality, are present. Harkins, Beech, and Goodwill (2010) found a similar complex relationship between denial and recidivism, reporting that for the high-risk offenders in their sample group, denial was consistently associated with decreased recidivism. For low-risk offenders, they found little difference in the recidivism rates for admitters versus deniers. Looking at the low-risk offenders' perceptions of their own risk, they found that those who denied they were at risk for reoffending were less likely to reoffend than those reporting they were at high risk for reoffending.

Treatment Variables

Evidencing poor progress in treatment was not associated with increased risk for sexual recidivism. Likewise, length of treatment was unrelated to recidivism. However, failure to complete treatment was a significant predictor in the 1996

Table 8 Select treatment variables

Variable	Hanson and Bussière (1996) r_+	Hanson and Morton-Bourgon (2004) d	Mann et al. (2010) d
Poor progress in treatment	–	.14 (NS)	–
Length of treatment	.02 (NS)	–	–
Failure to complete treatment	.17[a]	–	–

NS nonsignificant
[a]Denotes significant Q statistic (high variability)

meta-analysis, and this finding has since been replicated in several other studies. Given that attrition rates in sex offender treatment programs have been found to be quite high (from 30 to 50 %; Beyko & Wong, 2005), this relationship is important. As noted in Table 8, Hanson and Bussière (1998) found a significant correlation between treatment noncompleters and recidivism ($r_+ = .17$; $n = 806$; $k = 6$). This can be translated into a 17 % difference between the recidivism rates of treatment completers and those who drop out of treatment. There was a significant degree of variability across the six studies examined; however, the weighted r and median r were very similar (Mdn = .18), suggesting the results were reliable. In another meta-analytic review of the effectiveness of treatment, Hanson et al. (2002) found that those offenders who dropped out of treatment had consistently higher sexual recidivism rates than treatment completers ($Q = 21$, $p > .10$; $k = 18$). The effect was so consistent that the authors identified failure to complete treatment as a "reliable and robust predictor" of sexual recidivism (Hanson et al., 2002, p. 187). The authors speculated that noncompleters may be at higher risk due to preexisting characteristics associated with higher recidivism (e.g., youth and impulsivity). They also noted that factors associated with a lack of treatment motivation are often correlated with recidivism (e.g., hostility toward authority, noncompliance). Similarly, it was suggested that interrupted treatment may make offenders worse in that they are exposed to novel deviant sexual fantasies and behaviors, deviant role models, and cognitive distortions from the other offenders with whom they are in treatment.

The Hanson and Morton-Bourgon (2004) meta-analysis did not look at treatment completers versus noncompleters. The authors did look at poor progress in treatment and low motivation for treatment but found that neither were significantly related to sexual recidivism. Losel and Schmucker (2005) in their meta-analysis found that dropping out of treatment doubled the odds of reoffending and that this effect was consistent across the 13 studies that contained this variable ($Q = 11.52$, $p = 0.57$). Langton, Barbaree, Hansen, Harkins, and Peacock (2007) also found that treatment dropouts showed the fastest failure rates when compared to treatment completers, who showed the slowest rates of sexual offense recidivism by comparison. In one of the few randomized studies using longitudinal data, Marques (1999) also noted a high reoffense rate for noncompleters, though the number of subjects in this group was small (noncompleters = 34). Approximately half of the noncompleters in that study were dropped from the treatment program due to creating serious management problems, suggesting that preexisting conditions such as impulsivity and poor self-control were factors in their dropping out. Further, Marques noted that early treatment dropouts, defined as those who terminated the program within the first year, had the highest rates of sexually reoffending (21 %). In a follow-up article analyzing this same data set (Marques, Wiederanders, Day, Nelson, & Ommeren, 2005), comparisons between treatment completers ($n = 167$) and dropouts ($n = 37$) found they did not differ significantly on measures of static risk, treatment need, or demographic variables other than age (dropouts were significantly younger than completers).

With regard to factors that might influence treatment completion and non-completion, Langevin (2006) looked at 778 sex offenders assessed from 1960 through 2000. Approximately 35 % of the sample completed treatment. He found no significant differences in age, education, or marital status for treatment completers versus noncompleters and no differences by offender subtype or by degree of sexual deviance. More offenders without a substance abuse problem completed treatment, fewer cases with antisocial personality disorder completed treatment, and treatment completers had significantly lower mean PCL-R scores than noncompleters. Langton, Barbaree, Hansen, Harkins, and Peacock (2006) also found noncompleters had significantly higher PCL-R scores ($M = 19.47$) than offenders who completed the same treatment program ($M = 16.40$). Nunes and Cortoni (2008) examined the Static-99 scores of treatment noncompleters ($n = 52$) compared to program completers ($n = 48$) and found, consistent with Langevin (2006), that dropping out was significantly associated with the general criminality items on the instrument but not the sexual deviance items. Beyko and Wong (2005) also examined factors leading to treatment attrition. They found two sets of variables predicted attrition: disruptive, rule-violating behaviors and poor treatment engagement (e.g., poor attitude toward treatment, denial,

lack of motivation, etc.). Dropouts were more likely to act aggressively, to be noncompliant with institutional rules, and to have histories of rules violations. They also had longer offense histories and were generally more criminalized. More rapists than pedophiles dropped out of treatment, which would be consistent with the study's findings as rapists are, in general, more aggressive and violence-prone than pedophiles. The Static-99 did not predict attrition, indicating risk level (as defined by that instrument) was not a factor. Also not predictive of attrition were sexual deviance, past employment history, education, intellectual ability, cultural background, and marital status.

Developmental History and Family Variables

Other than those variables associated with criminality and an antisocial lifestyle (i.e., childhood behavior problems and juvenile delinquency), none of the developmental/family variables have been consistently related to sexual recidivism. Notably, being a victim of sexual abuse as a child was not predictive of sexual recidivism, though it is often associated with onset of sexual offending (e.g., offender groups tend to report a higher-frequency of child sexual abuse than normative samples). As for the significant finding for separation from parents in the Hanson and Morton-Bourgon (2004) meta-analysis, the effect was small, but reliable, and based on a large sample size ($N=4{,}145$; $k=13$) (Table 9).

General Mental Health Problems

Relative to major mental illness (defined as severe disorders involving psychotic symptoms), Mann et al. (2010) classified this as a factor "unsupported overall with interesting exceptions." They pointed out that while the meta-analytic findings from 2004 didn't support this being linked to recidivism, a large unselected sample from Sweden had found a robust relationship. Depression was identified as a variable generally unrelated to sexual recidivism, which is consistent with the general correctional literature. Substance abuse was not found to be a consistent or generalized predictor of sexual recidivism in the first meta-analysis. However, it was considered to be an indicator of lifestyle impulsiveness by Mann et al., with impulsivity in turn showing a small but significant relationship to sexual recidivism. Of note, while just one study, Looman and Abracen (2011) recently demonstrated that substance abuse, particularly alcohol abuse, was an important predictor in their sample of 250 sex offenders, a group considered to be preselected for high risk/need (Table 10).

Table 9 Select developmental history/family variables

Variable	Hanson and Bussière (1996) r_+	Hanson and Morton-Bourgon (2004) d	Mann et al. (2010) d
Separation from parents	–	.16	–
Childhood sexual abuse	–.01 (NS)	.09 (NS)	–
Childhood neglect, physical/emotional abuse	–	.10 (NS)	–
Childhood behavior problems	–	.30	–
Negative relationship with mother	.16	.09 (NS)	–
Negative relationship with father	.02 (NS)	.07 (NS)	–
Juvenile delinquency/childhood criminality	.07	.24	–

NS nonsignificant
[a]Denotes significant Q statistic (high variability)

Table 10 General psychological problems

Variable	Hanson and Bussière (1996) r_+	Hanson and Morton-Bourgon (2004) d	Mann et al. (2010) d
Severely disordered/major mental illness	–	–.03	.24[a]
Anxiety	.04(NS)	.07(NS)	–
Depression	.03(NS)	–.13(NS)	–
Any substance abuse	.03(NS)	.12	–
Alcohol abuse	.00	–	–

NS nonsignificant
[a]Denotes significant Q statistic (high variability)

Comments About Individual "Risk Factor" Research to Date

Kraemer et al. (1997) offered some important cautions about the nature of risk and the potential meaning of risk factors. They noted that statistical significance often indicates only that the sample sizes were sufficiently large and the research design and measurement adequate to document nonrandom association between some characteristics of an individual and an outcome of interest. Further, they point out that with large enough combined sample sizes, many factors can be demonstrated to be associated with a particular outcome. Regarding the meta-analyses for sex offender recidivism, it is known that the identified risk factors are more than correlates since they precede the measured outcome in temporal terms. However, per Kraemer et al., it remains unknown if a static risk factor is a "fixed marker" (e.g., year of birth) or if a static risk factor can change (e.g., deviant sexual interest or antisocial orientation). If it can change, then it can be viewed as a "variable risk factor" (a potential dynamic risk factor). Yet that "variable risk factor" can be considered a *causal* risk factor only if the "variable risk factor" can actually be manipulated or modified in such a way that such *change* is demonstrated to be associated with a change in outcome.

At this point in time, it remains unclear which, if any of the static risk factors, can be changed either as a result of situation (e.g., incarceration), the passage of time, or directed intervention (e.g., treatment). There is little existing evidence that indicates that either deviant sexual preferences or antisocial dimensions of personality—the two primary groups of static risk factors—can be modified per se. In addition, with regard to directed intervention, Hanson et al. (2009) noted, "Many of the factors targeted in contemporary treatment programs do not [target risk factors empirically associated with recidivism]. Offence responsibility, social skills training, and victim empathy are targets in more than 80 % of sexual offender treatment programs… yet none of these have been found to predict sexual recidivism." Thus, to date, there is little scientific basis for concluding that any of the static risk factors are "variable risk factors," let alone "causal" risk factors. Per Kraemer et al. "We suggest that labeling a factor with the generic term risk factor with no further effort to delineate its roles as fixed marker, variable marker, or causal risk factor is a limited finding…" (p. 342). Nonetheless, they pointed to the relative value of targeting interventions toward fixed or static risk factors, while scientific study continues to investigate the possibility of identifying those or other conditions as true causal risk factors.

Risk Factor Combinations

As noted earlier, none of the specific risk factors listed above was considered of such magnitude that it could be used in isolation to reliably predict sexual recidivism in that such factors by themselves account for a small amount of variance in sexual offense recidivism. Consequently, it is important to examine the contribution of combinations of variables or risk factors in identifying risk for sexual offense recidivism. Although the meta-analytic studies identified which variables (as studied to date) are most related to sexual recidivism, which is a substantial improvement over previous unguided clinical judgment, the studies did not identify which combination of variables (and what their relative weight) best predict who is most likely to reoffend. Consequently, researchers began looking at ways to best combine the known risk factor variables into assessment instruments that could be scored and interpreted. As a group, these assessment tools are known as "actuarial" instruments because they define which specific variables will be rated and how to weight them (according to their relative importance to prediction) in advance. Optimally combining risk factors, then, is essentially the goal of an actuarial instrument, and there are currently a number of scales to choose from. Hanson and Morton-Bourgon (2009) published a meta-analytic study that focused on the accuracy of these actuarial risk assessment instrument (ARAI) and other multifactorial methods for sexual offense recidivism. The mean *d* for the most commonly used instruments in North America (McGrath, Cumming, Burchard, Zeoli, & Ellerby, 2010) and the Risk Matrix 2000 (Thornton et al., 2003), which is a widely used instrument in the United Kingdom, are listed in Table 11.

Relative to these ARAI, it's noted the number of studies on the Static-99 far exceeds the number of studies conducted on the other instruments. Further, each of the scales listed above was a moderate predictor of sexual offense recidivism,

Table 11 Accuracy of actuarial risk assessment instruments

Actuarial risk assessment instrument	Hanson and Morton-Bourgon (2009) *d*	*k*	*n*
Static-99	.67[a]	63	20,100
RRASOR	.60[a]	34	11,031
MnSOST-R	.76[a]	12	4,672
SORAG	.62	12	3,058
Risk Matrix 2000, sexual	.67	10	2,755
SVR-20 (numerically summing the items)	.68[a]	10	1,699
Static-2002	.70	8	3,330

K number of studies
[a]Denotes significant *Q* statistic (high variability)

but none of the scales clearly outperformed the others and could be seen as the superior choice of instruments. Hanson and Morton-Bourgon (2009) cautioned, however, that equivalency should not be presumed based upon this meta-analytic study alone. Instead, it was recommended the best way to determine which scale is best would be to test each ARAI on the same sample. Thus far, no single scale has consistently outperformed the others in different samples (Harris & Rice, 2003; Knight & Thornton, 2007; Langton et al., 2007).

Further, in a small study, Seto (2005) used four actuarial risk scales (Static-99, RRASOR, SORAG, VRAG) on a sample of 215 adult male sex offenders to determine how effective the four scales could be used in combination. Although he concluded that no combination method provided a statistically significant or consistent advantage over the predictive accuracy of the single best actuarial scale, studies with larger samples have contradicted those findings. For example, Babchishin, Hanson, and Helmus (2012) tested the Static-99R, Static-2002R, and RRASOR on a much larger combined sample of more than 7,000 offenders. In that study, both the Static-99R and Static-2002R outperformed the RRASOR in predicting any form of recidivism (e.g., sexual, nonsexual violent, and any). No differences in the predictive accuracy between the Static-99R and Static-2002R were found, which was different from a prior study comparing the Static-99 and Static 2002 by Hanson, Helmus, and Thornton (2010) on the same samples. It was opined the modification to the age item on both instruments resulted in the updated finding. More importantly, it was noted that both the Static-99R and Static-2002R showed incremental predictive accuracy to each other even though they measured seemingly similar constructs. Specifically, when the findings of the individual instruments were discordant, the observed recidivism rate was intermediate between the findings suggested by the individual scale. As a result of this finding, one suggestion was that an averaging approach may be an optimal method of combining the findings of multiple scales (at least when using the Static-99R and Static-2002R).

Further, the use of multiple actuarial measures has been endorsed by multiple individuals (e.g., Hanson and Morton-Bourgon, 2009; Barbaree et al., 2006) based on several considerations. Scientifically, there is no "best" instrument, and they possess equivalent degrees of predictive accuracy from a measurement perspective. In addition, since the different actuarial instruments contain unique as well as overlapping variables, they each measure recidivism using different sets of risk factors. The relative ranking of risk by the different actuarial instruments may be different for different individuals. Issues in scoring of the different measures will make less of a difference when multiple measures are utilized; multiple actuarial instruments lead to increased reliability in identifying the relative risk of a particular offender. Finally, to the degree that a "set" of (multiple) actuarial measures converge in identifying that an offender is at higher risk, then there can be increased confidence in concluding that sex offender is at higher risk for sexual reoffending.

In an effort to improve actuarial risk prediction and to develop a strategy to produce a scale that outperforms those listed above, a number of factor analytic studies have been done on several of these instruments [Roberts, Doren, & Thornton, 2002 (reporting on two samples); Barbaree, Langton, & Peacock, 2006; Knight & Thornton, 2007]. Results from each study found consistent support for factors of sexual deviance and general antisociality. Three of the four studies also identified a factor related to being young and single. Two of the larger studies also found support for a factor related to having a stranger victim and another factor related to having a male victim (see Doren, 2010 for a review). More recently, it was reported that further analysis of the Static-2002 supported prior research documenting three primary factors that contribute to the prediction of sexual recidivism (Thornton & Phenix, 2010). These were listed as "sexually criminal behavior," "generally criminal behavior," and age (with younger offenders being at higher risk for reoffending than older offenders).

Further, Knight and Thornton (2007) performed a taxometric analysis of 503 adult sexual offenders. Using three independent methods, they concluded that sexual violence risk is dimensional and not taxonic or categorically different. Stated more clearly, they wrote, "sexual violence risk in persons referred for evaluation at a sex offender clinic is a quantitative rather than a qualitative distinction or a difference of degree rather than a difference in kind." Thus, at present, sexual offense recidivism appears to be a function of different accumulations of varied risk factors. It was noted this finding was similar to recent studies about psychopathy, asserting the construct is dimensional rather than categorical. These results supporting the dimensionality of sexual offense recidivism are important because it suggests that cut scores on actuarial instruments can be chosen pragmatically, depending upon the reason for the assessment (i.e., choosing who to refer to treatment, supervision intensity, or restrictive detention).

In summary, a number of actuarial instruments composed of a variety of static risk factors have been developed. The instruments most commonly used all have moderate predictive accuracy, and no single instrument has consistently been found to be superior to the others. Further, research suggests the various risk factors from these instruments are primarily related to sexual deviance, general criminality, and age. This is important because it can help refine risk assessment development by optimizing the variables that measure these underlying constructs. Finally, at least one study has shown sexual violence risk is dimensional rather than categorical, which means cut scores on risk assessment instruments can be chosen in a manner that is responsive to the referral ques-

tion. Put more simply, higher scores are associated with higher risk for sexual recidivism. So, if the referral question is related to whether an individual is a good candidate for probation, then the lower end of the scale would be most relevant. On the other hand, if the referral question is related to whether the person meets criteria for civil commitment, then the higher end of the scale would have more import.

Recent Developments and Future Directions

As noted, actuarial risk assessment instruments are developed by combining select risk factors. As a result, these measures contain only a limited number of identified risk factors and exclude other variables. Often, particular risk factors are included simply because they are easy to measure or the information is more commonly available in the types of records kept on offenders. Consequently, there will always be variables not included in an ARAI (e.g., external to the ARAI). This raises several related issues. First, does the consideration of a limited number of static risk factors in one or more ARAIs place a "ceiling" on the estimate of sex offender recidivism provided by those measures? Second, a related question exists as to whether the results of an ARAI, or conclusions drawn from those results, should be "adjusted" based on the presence or absence of risk factors that were not included in the particular ARAI or ARAIs. Quinsey et al. (2006) have typically advocated a "pure actuarial approach," arguing that adjustments will only degrade the results and conclusions derived from the actuarial instrument. In contrast, Hanson and colleagues (e.g., 2009) have typically acknowledged the need to consider factors external to an ARAI but recommended caution and making adjustments judiciously.

Recently, the need to consider external factors to ARAIs has come to the forefront. Specifically, as part of an attempt to re-norm the risk estimates associated with the various cut scores on the Static-99, Helmus (2009) discovered significant variability in those estimates when 29 studies including 9,261 offenders were combined. After testing several variables that could potentially account for this finding, she determined the variance related to the different cut scores was accounted for by age and sample preselection effects (i.e., effects due to factors inherent or characteristic in samples, such as whether it was a relatively lower-risk "routine" prison sample or whether it was a relatively "high-risk" sample where the subjects had been referred to some judicial or quasi-judicial process (e.g., to determine if they met the criteria to be a "sexually dangerous person"). As mentioned earlier, the age item on the Static-99 (and the Static-2002) was subsequently modified, and, after doing so, age was no longer a significant predictor within that large data set. Relative to the other source of variance (preselection effects), stratification of the score-wise risk estimate by sample type substantially reduced the variability for the 5-year estimates and was no more than would be expected by chance for the 10-year estimates for each sample type (Helmus, 2009, Table 23). The difference in sexual offense recidivism risk estimates for different Static-99R scores by sample type is illustrated in Table 12. It should be pointed out that the 5-year estimates are listed because 10-year sexual recidivism rates are not currently available for the "routine" correctional samples. Indeed, as noted in the beginning of this chapter, sexual recidivism continues to increase with time at risk in the community as documented by Prentky et al. (1997) and Harris and Hanson (2004); consequently, sexual offense recidivism rates would be greater for longer follow-up periods.

Table 12 Static-99R 5-year risk estimates according to sample type

Score[a]	Routine correctional	Preselected for treatment	Preselected for risk/need
0	2.8	4.1	7.2
1	3.8	5.5	9.4
2	5.0	7.2	12.2
3	6.6	9.5	15.8
4	8.7	12.3	20.1
5	11.4	15.9	25.2
6	14.7	20.2	31.2
7	18.8	25.4	37.9
8	23.7	31.4	45.0
9	29.5	38.1	52.4

[a]Most, but not all, cut scores are illustrated

In applied risk assessment, the variation in these risk estimates can clearly impact whether an offender is deemed to meet threshold criteria for civil commitment when a statue requires a finding that a person is "more likely than not" to reoffend. Until recently, methods to determine which sample type is most appropriate to apply to a specific case have not been clearly articulated. Initially, it was recommended evaluators take into consideration the extent to which an individual had been preselected in a manner that was consistent with the sample types illustrated above. Then, Thornton, Hanson, and Helmus (2010) illustrated how the integration of "dynamic" risk factors or what might be referred to as criminogenic needs into an assessment essentially replicated the differences between sample types. This is illustrated in Table 13, where it is shown that depending upon one's rating on the Stable 2007 (an instrument that rates potentially changeable or "dynamic" factors; Hanson, Harris, Scott, & Helmus, 2007), the resulting recidivism rate is proportional to the difference in recidivism rates for two different sample types (it should be noted the Stable 2007 study only provided 3-year estimates, so the follow-up times are not equal with the previous table).

Table 13 Static-99R risk estimates with either low or high external risk factors in two samples

Static-99R Score	Three-Year Recidivism		Five-Year Recidivism	
	Stable = 5	Stable = 14	Routine	Selected for Risk/Need
2	3 %	7 %	5 %	12 %
5	7 %	18 %	11 %	25 %
7	14 %	32 %	19 %	38 %

More recently, Thornton (2010) has introduced a modified version of the Structured Risk Assessment (SRA, Thornton, 2002), which rates dynamic risk factors or criminogenic needs on four domains (sexual interests, attitudes, relationship style, and self-management). This modified instrument, called the SRA-Forensic Version (SRA-FV), uses three of the four domains (the attitudes domain was not included due to the difficulty in accurately measuring attitudes in forensic settings). As illustrated in Fig. 1, the cross-validation of the SRA-FV produced a similar, if not more robust, effect as the Stable 2007. That is, persons with higher ARAI scores in combination of higher degrees of criminogenic needs demonstrate higher rates of sexual offense recidivism.

The recent findings of significant incremental validity to the Static-99R when combined with instruments designed to assess "dynamic" risk variables is mentioned because this directly addresses the earlier debate about adjusting estimates derived from ARAIs. Clearly this is an emerging area of refinement in sexual offender recidivism research and suggests that improvements in risk assessment methods are not only possible, but potentially convergent and robust.

Adding structured assessment of "dynamic" risk factors [which Mann et al. (2010) proposed would be more aptly conceptualized as "psychological meaningful risk factors"] not only has the potential to improve the predictive validity of existing instruments. Such findings are also important because they provide the basis to improve treatment targets and management of sexual offenders under community supervision. These "dynamic" risk factor scales also have the potential to guide treatment in a more meaningful way. Put differently, one of the drawbacks to using static risk factors alone is that they typically only tell us about a person's risk for recidivism based on likely unchangeable characteristics (e.g., sexual offending history). Evaluation of "dynamic" risk factors, on the other hand, potentially provides treatment targets (e.g., relational style and self-management strategies can be directly addressed) that, if addressed in treatment and/or modified, may reduce a person's risk for sexual recidivism. Hopefully, the emerging research on the incremental predictive validity of the SRA-FV, Stable 2007, and Violence Risk Scale: Sexual Offender Version (VRS:SO; Olver, Wong, Nicholaichuk, & Gordon, 2007) may not only improve prediction; these instruments may also help guide interventions. Whether or not changes to "dynamic" risk factors targeted in treatment will be found to reliably reduce sexual offender recidivism, however, remains an empirical question (c.f., Rice & Harris, 2015).

A final area in need of refinement is related to optimizing combinations of variables to the type of sexual risk posed by a particular individual. To date, ARAIs have not been shown to work differently for child molesters and rapists; thus, the risk estimates are typically combined for offender types. On the other hand, Knight and Thornton (2007) noted a trend for the predictability (from ARAIs) between rapists and child molesters to be somewhat different. Though the sexual recidivism rates between the two groups were similar, it was noted that the predictability of rapist sexual recidivism decreased with time (e.g., best at 3 years, lower at 10 years, and maintained same level at 15 years), while the predictability of child molester recidivism improved from 3 years to 10 years and did not change at 15 years. Therefore, there was a trend for the predictability of sexual recidivism for rapists to decrease with time and for the predictability of child molester recidivism to improve over time. This suggests it may be possible to improve risk assessment by further researching how ARAIs work differently for the two groups of sexual offenders.

On a related note, very little recidivism research has systematically evaluated "mixed offenders" as a separate offender type. These individuals, who have a history of perpetrating sexual crimes against both children and adults, were recently shown to have a relatively higher recidivism rate than either rapists or child molesters (Harris, Knight, Smallbone, & Dennison, 2010). Indeed, past research looking at the differences in recidivism between child molesters and rapists often excludes the "mixed" offender group during such analyses in order to compare the other two groups. The recent study by Harris et al. concluded by asserting that more attention should be paid to this mixed offender subgroup in the interests of public safety. Specifically, it was reported that while the sexual recidivism rate for rapists was 21.4 % and for child molesters was 28.4 %, mixed offenders sexually reoffended at a rate of 43.8 % during the same time frame. Mixed sexual offenders represent another area in need of further research. Given the very large samples being combined for study, such investigations may be more readily attempted in the near future.

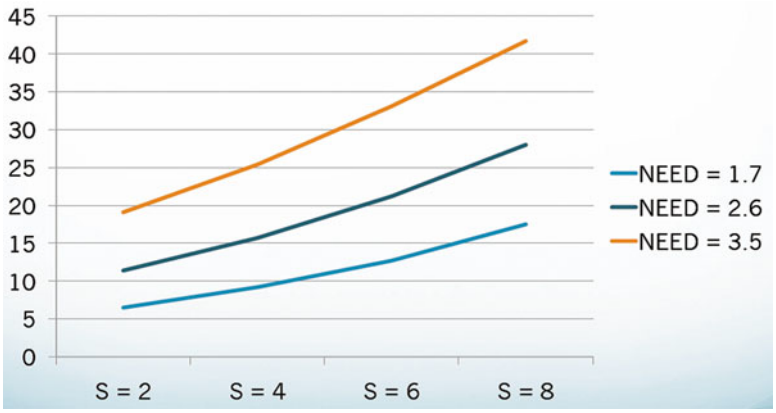

Fig. 1 Illustrates the difference in recidivism rates for the same Static-99R scores when the SRA-FV need levels are considered

Summary/Conclusions

Studying risk factors for sexual offense recidivism is an especially challenging area of research because many sexual crimes are never reported and, even when they are, the offenders are not always arrested and prosecuted. Therefore, finding relationships between predictors and sexual reoffense is often minimized or obfuscated. Although many risk factor studies were conducted prior to the meta-analysis by Hanson and Bussière in 1996, the reliability and magnitude of relationships between predictor variables and sexual recidivism were never really clear because the possibility existed that findings could be unique to a given sample or a relationship may have been too weak to be detected. Meta-analytic research in this area has helped to overcome these limitations. Though there are clearly limitations associated with this technique (i.e., more complex relationships related to moderating variables may be missed), these studies have made a significant contribution to the development of actuarial risk scales and sexual offender risk assessment in general. Future improvements can be made by combining static and dynamic factors in structured ways, optimizing combinations (and weights) of these variables, and focusing on the unique attributes of sexual offender subtypes. As noted in the beginning of this chapter, sexual offender evaluations have enormous consequences for the various stakeholders, and it is critical that such evaluations be as precise and reliable as possible.

The views expressed are those of the authors and not necessarily those of the California Department of State Hospitals, Forensic Services Division.

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Overview of the Development, Reliability, Validity, Scoring, and Uses of the Static-99, Static-99R, Static-2002, and Static-2002R

Amy Phenix and Douglas L. Epperson

This chapter will provide a high-level overview of the Static-99, Static-99R, Static-2002, and Static-2002R. Each of these instruments is an empirically derived, actuarial, risk assessment tool for use with sexual offenders. As actuarial tools, they provide increased accuracy in assessing risk of sexual re-offense relative to clinical judgment and structured clinical judgment (Hanson & Morton-Bourgon, 2009). The increased accuracy of this class of risk assessment tools is necessary to implement programs that enhance management of sexual offenders and promote greater community safety.

These risk assessment tools, which are designed to provide measures of relative and absolute risk of sexual re-offense (Hanson & Thornton, 2000), are commonly incorporated into risk assessment evaluations of sexual offenders that are used to inform a wide range of processes and decisions. Examples include civil commitment hearings (Jackson & Hess, 2007), level and intensity of supervision for offenders on probation and parole (Interstate Commission for Adult Offender Supervision, 2007), sentencing hearings, determination of community notification levels, and treatment (Jackson & Hess, 2007).

The Static-99 has, for many years, been the most commonly used actuarial risk assessment tool for sexual offenders in Canada and the United States (Interstate Commission for Adult Offender Supervision, 2007; Jackson & Hess, 2007; McGrath, Burchard, Zeoli, & Ellerby, 2010) and Australia (Doyle, Ogloff, & Thomas, 2011). Thus, this chapter appropriately begins with a discussion of the Static-99, followed by a discussion of the Static-99R, which is markedly similar in structure and scoring but has separate norms. Next, the Static-2002 and the Static-2002R sexual offender risk assessment tools are presented in tandem. Although these two tools are conceptually distinct from the Static-99 and Static-99R, they are very similar to each other. In addition, the revision of the Static-2002 to produce the Static-2002R used parallel processes for the Static-99 revision. The chapter concludes with a discussion of training requirements and potential uses for the Static tools, along with some observations regarding the use of multiple risk assessment tools.

Static-99

The original Static-99 was developed by Karl Hanson, Ph.D. and David Thornton, Ph.D. (2000) to assess risk of sexual and violent recidivism with sexual offenders. The Static-99 is the combination of static, historical risk factors that were initially included in two earlier tools, the Rapid Risk Assessment for Sex Offender Recidivism (RRASOR) and the Structured Anchored Clinical Judgment (SACJ-Min).

The RRASOR was developed by Karl Hanson as an outgrowth of seminal research that empirically identified the most robust static risk factors for sexual re-offense (Hanson & Bussiere, 1998). Four of the strongest predictors of sexual re-offense, identified through stepwise regression, comprise the items of the RRASOR. The four items are number of prior sexual offenses, any unrelated victims in sexual offenses, any male victims in sexual offenses, and age less than 25 years at time of release (Hanson, 1997). The last three items were scored 1 if the characteristic was present and 0 if it was absent. The scoring for number of prior sexual offenses ranged from 0 to 3. Thus, the total score on RRASOR could range from 0 to 6 risk points. The RRASOR was widely used in the United States and Canada prior to the release of Static-99 (Jackson & Hess, 2007).

The SACJ, developed by David Thornton, contained items related to sexual deviance and criminality (Grubin,

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1998; Hanson & Thornton, 2000). It was scored in a stepwise approach, initially considering any current sexual offenses, any prior sex offenses, any current nonsexual violent offenses, any prior nonsexual violent offenses, and four or more prior sentencing occasions. The total score on the first group of items determined the risk level. The second step considered the following eight items: any stranger victims, any male victims, never married, convictions for noncontact sex offenses, substance abuse, placement in residential care as a child, deviant sexual arousal, and psychopathy. The presence of two or more risk factors in the second step would raise the risk level by one category. The third stage of the SACJ-Min included consideration of variables related to current behavior and treatment completion. Only the items in the first two steps that were subject to cross-validation were included in the development of Static-99. The items in these first two steps are the minimum necessary items to assess risk. Hereafter, they are collectively referred to as SACJ-Min. A detailed description of the development of the RRASOR and the SACJ-Min is referenced in Hanson and Thornton (2000).

Static-99 Items and Scoring

Based on preliminary analyses, Hanson and Thornton (2000) recognized that the two tools assessed related, but not identical, constructs and appeared to have incremental validity. Therefore, they recognized the possibility that a single tool that included the combined, nonredundant items of the two tools might have superior accuracy. This produced the 10-item Static-99 with the following variables: number of prior sexual offenses, four or more prior sentencing occasions, any conviction for a noncontact sexual offense, any nonsexual violent conviction in conjunctions with the index sexual offense, any prior conviction for a nonsexual violent offense, any male victim in a sexual offense, any unrelated victim in a sexual offense, any stranger victim in a sexual offense, young age at release (under 25), and never lived with an intimate partner for at least 2 years. As indicated in Table 1, the scoring for the number of prior sexual offenses ranged from 0 to 3, and the scoring of the other nine, dichotomous items was scored 1 if the characteristic was present and 0 if it was absent.

An advantage of the Static-99 items is that they generally are easy to score from correctional and forensic records, and scoring does not require an interview. In addition, the Static-99 can be scored by law enforcement, mental health workers, and essentially anyone sufficiently trained in coding the instrument (Harris, Phenix, Hanson, & Thornton, 2003a, 2003b).

The total score on the Static-99 is the simple sum of the 10 item scores, with a resulting possible range of 0 to 12. The score can be converted into a measure of relative risk (e.g., nominal risk categories and percentiles). Nominal risk categories and percentiles from Hanson, Lloyd, Helmus, and Thornton (2012) are provided in Table 2.

Table 1 Static-99 items and scoring

Item #	Item description	Scoring categories		Score
1	Young age at release	Age 25 or older		0
		Age 18–24.99		1
2	Ever lived with lover for at least 2 years?	Yes		0
		No		1
3	Any conviction for index nonsexual violence?	No		0
		Yes		1
4	Any convictions for prior nonsexual violence?	No		0
		Yes		1
5	Number of prior sexual offenses (score whichever is higher for charges or convictions)	*Charges*	*Convictions*	
		None	None	0
		1–2	1	1
		3–5	2–3	2
		6+	4+	3
6	Number of prior sentencing occasions	3 or less		0
		4 or more		1
7	Any convictions for noncontact sexual offenses?	No		0
		Yes		1
8	Any unrelated victims in sexual offenses?	No		0
		Yes		1
9	Any stranger victims in sexual offenses?	No		0
		Yes		1
10	Any male victims?	No		0
		Yes		1
		Total score (simple sum)		0–12

The scoring of Static-99 (along with the Static-99R and the Static-2002R—both discussed later in this chapter) is contained in a comprehensive coding manual available on www.static99.org. This website is dedicated to providing resources for the instrument, including training, research, and other documents related to the use of various Static tools. The static99.org website also allows for submitting questions on the coding of the Static-99 and receiving responses from the website manager.

The Static-99 measures the risk of sexual or violent reconviction. Because many offenses go undetected, particularly sexual offenses, the resulting risk estimates should be considered an underestimate of the true risk of recidivism (Bonta & Hanson, 1994).

Static-99 Development Sample and Results

The assumptions leading to the construction of the Static-99 were assessed in the Static-99 development sample, which

Table 2 Static-99 indices of relative risk

Suggested nominal risk categories		
Category	Score	
Low	0–1	
Moderate-low	2–3	
Moderate–high	4–5	
High	6 or higher	
Percentiles		
Score	***Percentile***	***95 % CI***
0	6.3	0.3–12.6
1	21.9	12.8–31.3
2	42.3	31.5–53.1
3	63.3	53.3–73.3
4	78.7	73.1–84.2
5	87.5	83.6–91.3
6	93.7	90.7–96.5
7	97.3	96.0–98.6
8	98.9	98.0–99.6
9	99.7	99.3–100
10	99.99	99.8–100

Source Hanson et al. (2012)
Note Percentiles are midpoint averages based on an adjusted, reweighted average of 4 Canadian samples (n = 2,011) (Helmus, Thornton et al., 2012b)

consisted of four subsamples, three from Canada and one from England. The three Canadian samples largely formed the basis for the earlier construction of the RRASOR. One sample was drawn from the Institut Philippe-Pinel, a maximum security psychiatric facility located in Montreal that included 344 offenders treated between 1978 and 1993 (Proulx, Pellerin, McKibben, Aubut, & Quimet, 1997). A second sample, drawn from the Millbrook maximum security correctional institute in Ontario, consisted of 191 child molesters released between 1958 and 1974 (Hanson, Steffy, & Gauthier, 1992, 1993a, 1993b; Hanson, Scott, & Steffy, 1995). The third sample was drawn from the Oak Ridge Division of the Penetanguishene Mental Health Centre in Ontario and consisted of 142 sexual offenders referred for treatment and/or assessment between 1978 and 1993 (Rice & Harris, 1996, 1997 ; see also Quinsey, Rice, & Harris, 1995).The English sample (Thornton, 1997) included 563 sexual offenders released from Her Majesty's Prison Service in 1979. This latter sample was not used in the construction of RRASOR or the SACJ-Min.

Because the recidivism rates for all four samples were so similar, Hanson and Thornton (2000) combined them into a single sample (n = 1,208) for further analyses. Area under the Receiver Operator Curve (AUC) was used to test the predictive accuracy of each of the tools. The Static-99 (AUC=0.71), RRASOR (AUC=0.69), and SACJ-Min (AUC=0.67) each predicted sexual recidivism significantly better than chance levels (Hanson & Thornton, 2000). Generally, these levels of accuracy would be considered to be in the moderate to large range.

Additional analyses (Hanson & Thornton, 2000) demonstrated that the predictive accuracy of the Static-99 was greater than either the RRASOR ($Z = 2.38$, $p < 0.05$) or the SACJ-Min ($Z = 2.84$, $p < 0.01$). Consequently, further analyses focused exclusively on the Static-99. Those analyses demonstrated the increasing spread of recidivism rates over time as a function of relative risk level. For example, at 5 years after release, about 6 % of low-risk offenders had sexually recidivated compared to about 39 % of high-risk offenders, a 24-point difference. By year 15, about 9 % of low-risk offenders had sexually recidivated compared to 52 % of the high-risk offenders, a 43-point difference. These analyses also identified the absolute risk estimates (probabilities) for both sexual and violent recidivism associated with each score. However, since these absolute risk estimates are outdated and have been replaced with new norms for the Static-99R, they are not reported here.

Static-99 Reliability

Typically, studies have shown excellent levels of reliability for Static-99 scores in both research and applied settings (Hanson & Morton-Bourgon, 2009). Across 11 studies reporting inter-rater reliability, Helmus (2009) found consistently high reliability, with correlations ranging from 0.86 to 0.92 and intra-class correlations (*ICC*s) coefficients ranging from 0.84 to 0.95.

A number of inter-rater reliability studies have been conducted in the field for sexually violent predator (SVP) evaluators. An early unpublished study by Hanson (2001) examined 55 cases from SVP evaluations in California and found an *ICC* of 0.87. Levenson (2004) conducted a larger field reliability study in Florida and also found strong rater agreement in Static-99 total scores for 281 offenders evaluated for SVP commitment in Florida (*ICC* = 0.85).

Murrie et al. (2009) examined inter-rater agreement for Texas SVP evaluators with a relatively smaller sample. Reliability of Static-99 scores was high when comparing scores of experts on the same side of a case (*ICC* = 0.84 for petitioners' experts and *ICC* = 0.95 for respondents' experts). However, when comparing scores of petitioners' experts with respondents' experts, the *ICC*s dropped into the 0.60 range, suggesting the possibility of adversarial allegiance effects.

Field studies on inter-rater reliability have also been conducted in community supervision and treatment settings. In a Canadian study, the Dynamic Supervision Project, Static-99 scores across 88 cases produced an *ICC* = 0.91 (Hanson, Harris, Scott, & Helmus, 2007). Storey, Watt, Jackson, and Hart (2012) compared the ratings of clinicians in the field to those of researchers for 100 adult males who completed an outpatient sexual offender treatment program. Clinicians and

researchers showed excellent agreement for total scores on Static-99 (*ICC* = 0.92) and for most of the individual items.

Quesada, Calkins, and Jeglic (2014) examined the consistency of clinicians' item and total scores with those from researchers using a sample of 1,973 case files. Total scores showed a high degree of consistency, as reflected by an *ICC* = 0.924 for the combined sample of researchers and clinicians. There was exact agreement in total scores on 1,255 (63.6 %) of the cases, though a small number of cases (*n* = 90) achieved the same score despite some disagreements at the item level. An additional 557 (28.2 %) cases yielded total scores that were within 1 point of each other. Overall, then, total scores from clinicians and researchers were identical or within one point of each other in 1,812 (91.8 %) of the cases. Item-level agreement was also strong. Two of ten items produced outstanding agreement (*K* = 0.81 to 1.00 range), and the remaining eight items yielded substantial agreement (*K* = 0.61 to 0.80).

In a large study of field reliability with the Static-99, Boccaccini et al. (2012) reviewed the Static-99 scores for 600 sexual offenders in Texas and 135 sexual offenders in New Jersey. The Static-99 scores were generated by correctional officers in Texas and by doctoral-level evaluators in New Jersey. Texas evaluators produced an *ICC* = 0.79 and New Jersey evaluators produced an *ICC* = 0.88. In both state samples, about 55 % of cases had identical scores from raters, and an additional 33 % had scores within 1 point of each other. So, 88 % of the time scores were the same or within one point of each other, consistent with many studies of inter-rater agreement on Static-99 scores.

Cross-Validations of Static-99

The Static-99 has been validated on large and diverse samples from all over the world. There were 63 validations on Static-99 in Hanson and Morton-Bourgon's (2009) meta-analysis, substantially more than any other actuarial instrument that measures risk for sexual recidivism, and a number that continues to grow. Collectively, approximately 20,000 sexual offenders have been sampled in these studies. As noted by Hanson and Morton-Bourgon, the weighted average AUC across those studies was 0.67 (*95 % CI* of 0.62–0.72) and the median AUC was 0.74.

AUC values indicating moderate to strong predictive accuracy for sexual recidivism with the Static-99 have been very robust across nations, settings, and populations. Overall, the Static-99 shows moderate to strong predictive accuracy in Canada, the United States, the United Kingdom, Europe, Australia, and New Zealand, with the largest effect sizes in the United Kingdom, Australia, New Zealand, and California (Helmus, Hanson, & Morton-Bourgon, 2011; Hanson, Lunetta, Phenix, Neely, & Epperson, 2014)

Similarly, the Static-99 has shown moderate to large effect sizes for sexual offenders released from prisons (Beggs & Grace, 2010; Brown, 2003; Craig, Beech, & Browne, 2006, Epperson, 2003; Friendship, Mann, & Beech, 2003; Hood, Shute, Feilzer, & Wilcox, 2002; McGrath, Hoke, Livingston, & Cumming, 2001; Levenson, 2004; Ternowski, 2004; Thornton, 2002; Hood et al., 2002; Skelton, Riley, Wales, & Vess, 2006; Hanson et al., 2014) and for sexual offenders in community samples (Craissati, Webb, & Keen, 2005; Epperson, 2003; Hanson et al., 2007; Beech, Friendship, Erikson, & Hanson, 2002; Endrass, Urbaniok, Held, Vetter, & Rossegger, 2009; Stalans, Seng, & Yarnold, 2002).

Moderate predictive accuracy has been demonstrated for sexual offenders from forensic hospitals (de Vogel, de Ruiter, van Beek, & Mead, 2004; Ducro & Pham, 2006; Harris, Phenix et al., 2003a, 2003b; Nunes, Wexler, Firestone, & Bradford, 2003; Bengtson & Långström, 2007; Harris et al., 2003). Varying levels of predictive accuracy, from small to large, have been documented in validations with more specialized groups of sexual offenders, such as developmentally delayed sexual offenders (Tough, 2001; Hanson, Sheahan, & VanZuylen, 2013), juvenile offenders (Beech, 2005; Poole, Liedecke, & Marbibi, 2000; Ralston & Epperson, 2013), subtypes of sexual offenders (rape, child molest) (Bartosh, Garby, Lewis, & Gray, 2003; Brouillette-Alarie & Proulx, 2013; Ducro & Pham, 2006), treated offenders (Allan, Grace, Rutherford, & Hudson, 2007; Friendship et al., 2003; McGrath, Lasher, & Cumming, 2012; Seager, Jellicoe, & Dhaliwal, 2004; Thornton, 2002), and offenders who committed sexually motivated homicides (Hill, Habermann, Klusmann, Berner, & Briken, 2008).

A recent meta-analysis involving 43 studies and 31,426 sexual offenders from 11 countries examined the predictive accuracy of 15 risk assessment tools for sexual offenders. The total sample for analyses of the Static-99 was comprised of 20,727 sexual offenders from 30 studies. All of the reviewed tools produced at least a moderate effect size in predicting sexual re-offense, including Static-99 (*AUC* = 0.69) (Tully, Chou, & Browne, 2013).

There are mixed results of replications of Static-99 in the field versus research settings. An actuarial instrument may work well in a research setting, where there is quality control over fidelity to scoring rules, but not in an applied context where there is more opportunity for "coder drift." The field validity of Static-99 was tested for 1,928 sexual offenders screened for possible civil commitment as sexually violent predators in Texas. Sexual offenders in this study were either subject to discharge, mandatory supervision, or civil commitment (outpatient intensive supervision in Texas). The results demonstrated modest predictive accuracy (*AUC* = 0.55 for sexually violent predators and *AUC* = 0.57 for sex offenders who were not determined to be sexually violent

predators) (Boccaccini, Murrie, Caperton, & Hawes, 2009). Potential problems with this study included a very low sexual recidivism base rate, relatively short follow-up time, lower inter-rater reliability, and the level of supervision received by higher scoring sexual offenders, with each of these contributing to decreased variance in the outcome measure. This was likely most true for higher scoring offenders given the increased supervision that they received.

In contrast, very positive results emerged in a recent field study in California (Hanson et al., 2014). This study examined the predictive accuracy of Static-99 and Static-99R in a prospective study of 475 randomly selected adult males released in 2006 and 2007 and followed for 5 years. The California study revealed strong predictive accuracy for Static-99 (*AUC* = 0.82). This study demonstrated that the higher levels of predictive accuracy obtained in research setting can also be achieved in the field. While the reasons for the relatively higher AUCs are not fully understood, it is likely that California's comprehensive and structured training program for scoring Static-99R for probation and parole officers in California was a contributing factor. This program requires certification and recertification of scorers every 2 years, resulting in scoring that demonstrated very broad-based reliability *and* consistency with scoring rules.

Although the majority of Static-99 validation studies were conducted with retrospective samples, the study just described used a prospective design. In addition to the study just described, there have been other prospective validation studies. The Dynamic Supervision Project (Hanson et al., 2007) followed over 997 Canadian probationers for 3 years, and the Static-99 showed high predictive accuracy in this sample (*AUC* = 0.74) in this large contemporary sample (Hanson et al., 2007). An Austrian prospective study was conducted on 1,142 sexual offenders released from Austrian prisons and yielded statistically significant indices of predictive accuracy for the total sample (*AUC* = 0.73) and separately for child abusers (*AUC* = 0.77) and rapists (*AUC* = 0.69) (Eher, Schilling, Haubner-MacLean, Jahn, & Rettenberger, 2012).

Until 2004, little was known about the predictive accuracy of Static-99 for particular ethnic or racial groups. Subsequent research has demonstrated that predictive accuracy may vary depending on ethnicity. Långström (2004) examined the predictive accuracy of the Static-99 for Nordic (*AUC* = 0.76) and non-Nordic European (*AUC* = 0.79) sexual offenders in Sweden. The predictive accuracy for these two groups was similar to or higher than what was reported in other studies, but the Static-99 did not predict sexual recidivism for the smaller subsamples of African and Asian sexual offenders in Sweden (*AUC* = 0.50).

More recently Babchishin, Blais, and Helmus (2012a) found that both the Static-99 and Static-99R predicted equally well for Canadian and Aboriginal sexual offenders. Across five samples of Canadian Aboriginal sexual offenders, the AUC ranged from 0.60 to 0.81. This compared to a range from 0.61 to 0.78 for the five comparable samples of Canadian non-Aboriginal sexual offenders. The AUC values were statistically significant in four of the five non-Aboriginal samples and in three of the five much smaller Aboriginal samples.

In a study of Australian indigenous or nonindigenous sexual offenders (Smallbone & Rallings, 2013), Static-99 scores predicted sexual recidivism well with both indigenous (*AUC* = 0.76) and nonindigenous (0.82) sexual offenders. In a large sample from Texas (Varela, Boccaccini, Murrie, Caperton, & Gonzalez, 2013), the predictive accuracy of the Static-99 was assessed. Within this context, in which the Static-99 did not do well with any group, the relative predictive accuracy of the tool for sexual recidivism, the outcome of greatest interest, was comparable for White (*AUC* = 0.62), Black (*AUC* = 0.63), and Latino (*AUC* = 0.58). None of these values were statistically significant.

Overall, a clear pattern based on ethnicity does not emerge. This variability of results should be a consideration in applied risk assessments with sexual offenders identified with an ethnic minority.

Static-99R

The Static-99 Revised (Static-99R) was released for clinical use in 2009 (Hanson, Phenix, & Helmus, 2009; Helmus, Thornton, Hanson, & Babchishin, 2012b). The reasons for revising Static-99 were twofold. First, it was discovered that Static-99 did not adequately account for reductions in recidivism with advancing age at release (Hanson, 2002; Helmus, Thornton et al., 2012b). Second, more contemporary samples showed substantial reductions in sexual recidivism base rates relative to those in the Static-99 development samples. Although the reason for the reduction in base rates of sexual recidivism is not fully understood, Helmus (2009) reported a roughly 60 % decrease in sexual recidivism rates samples across 29 more contemporary samples relative to the original Static-99 normative samples. In addition, considerable variability in sexual recidivism base rates across samples was documented (Helmus, 2009; Helmus, Hanson, Thornton, Babchishin, & Harris, 2012a).

Static-99R Development and Validation Samples

Of the 29 samples used to document the lower sexual recidivism rates in more contemporary samples, 23 contained information on age. The Static-99R (Helmus, Thornton et al., 2012b) was developed and validated with these 23

samples, which were drawn from eight different countries. Eleven samples were from Canada, six were from the United States, two were from the United Kingdom, and one each was drawn from Austria, Denmark, Germany, Sweden, and New Zealand. A total of 8,390 sexual offenders were included in the 23 samples.

The majority of samples were drawn from correctional settings. All but one had an average follow-up period of at least 5 years, and 13 samples had average follow-up periods of at least 10 years. Most offenders (81 %) were released in 1990 or later, and the mean age at release was about 40. The criterion for sexual recidivism was a new sexual offense charge in nine of the studies and convictions in the other studies. Across all samples, the observed sexual recidivism base rate was 12.4 %.

For analyses to recode age at release, the sample was divided into construction and validation subsamples. All offenders with a follow-up period less than 10 years were included in the construction sample (n = 5,714) and all offenders with a longer follow-up period were included in the validation sample (n = 2,392). The entire sample was used to re-norm the Static-99R and to address the issue of variability of sexual recidivism base rates across the samples. More details on the samples are available in Helmus et al. (2012b).

Age at Release Item

Examining the Need for Recoding In Static-99, age at release (following the last sexual offense) was classified and scored using two categories, under age 25 (1 risk point) or age 25 and older (0 risk points). Analyses on the full sample were performed to determine if recoding of the age item was required. Analyses demonstrated that age at release was negatively correlated with Static-99 scores and negatively associated with sexual recidivism. Cox regression analyses documented significant incremental validity for age at release after controlling for Static-99 scores. Finally, additional analyses indicated that the association of between age at release and sexual recidivism was nonlinear (Helmus, Thornton et al., 2012b). These results confirmed the desirability of recoding the age at release item.

Recoding the Age at Release Item Additional analyses by those authors, using only the *construction* subsample, indicated that the optimal scoring for the age item required four age categories and associated scores as follows: 18 to 34.9 (1 point), 35 to 39.9 (0 points), 40 to 59.9 (−1 point), and 60 and older (−3 points) (Helmus, Thornton et al., 2012b). This new scoring reflects increased risk for younger offenders and decreased risk with advancing age. All other Static-99R scoring is identical to that of the Static-99, as listed in Table 1.

It is important to note that the age item must be scored based on age at release for the last *sexual* offense because that is how it was scored in all the study samples. It is possible that an offender had a sexual offense early in his life and subsequent incarcerations were for nonsexual crimes. In this case, age at release would be the offender's age when he was released from his sexual offense many years ago. His aging post-release from the index sex offense would not be captured by the Static-99R age item, so risk reductions associated with aging would have to be considered outside the instrument in such instances.

Validity of the Static-99R

Relative Risk Static-99R total scores, with the new scoring of the age at release item, were expected to produce only modest improvements in predictions of relative risk from Static-99R total scores, as reflected in slightly higher AUC values. This was tested with the *validation* subsample using a 10-year follow-up period. Although the difference was not statistically significant, the Static-99R (AUC = 0.720) was nominally more accurate than the Static-99 (AUC = 0.713). In addition, Cox regression analyses indicated the age at release failed to add incremental validity to predictions of sexual recidivism after controlling for Static-99R scores. Finally, additional analyses indicated that the Static-99R worked equally well with rapists and child molesters.

Although total scores, and not individual items, are used as the index of risk for sexual recidivism, Helmus and Thornton (2014) examined whether the individual items themselves significantly predicted sexual recidivism. Combining data on 8,053 offenders from the 22 samples described earlier, they determined that only one item (nonsexual violence as part of the index offense) was not significantly associated with sexual recidivism. All other items were significant predictors for Static-99R, and each added incremental validity (either with statistical significance or approaching significance). Static-99R indices of relative risk are presented in Table 3.

Absolute Risk Predicted probabilities of sexual recidivism based on Static-99 and Static-99R scores were compared to each other and to observed rates of sexual recidivism by age group (Helmus, Hanson et al. 2012a; Helmus, Thornton et al. 2012b). As expected, the probabilities of sexual recidivism predicted by Static-99R scores were significantly different than those of the Static-99. The Static-99 predicted probabilities also were significantly different from the observed rates of sexual recidivism. Although there was

Table 3 Static-99R indices of relative risk

Suggested nominal risk categories	
Category	Static-99R score
Low	−3 to 1
Moderate–low	2 to 3
Moderate–high	4 to 5
High	6 or higher

Percentiles and relative risk ratios

Score	Percentile	95 % CI	Relative risk ratio
−3	1.3	0–2.9	0.19
−2	4.2	2.4–6.1	0.26
−1	9.7	5.7–13.9	0.37
0	18.7	13.4–24.1	0.52
1	31.7	23.8–39.7	0.72
2	48.3	39.5–57.1	1.00
3	65.7	57.0–74.3	1.39
4	79.6	74.0–85.1	1.94
5	88.7	84.6–92.5	2.70
6	94.2	91.9–96.2	3.77
7	97.2	95.6–98.6	5.25
8	99.1	98.2–99.8	7.32[a]
9	99.9	99.5–100	
10 and higher	99.99	99.8–100	

Source Phenix et al. (2012)

Note Percentiles are midpoint averages based on an adjusted, reweighted average of 4 Canadian samples (n = 2,011) (Hanson et al., 2012). Risk ratios were calculated from hazard ratios based on Cox regression coefficients derived from entering the continuous (i.e., unclumped) Static-99R scores (β = 0.322; SE = 0.022), with sample as strata (k = 8, n = 4,037) (Hanson, Babchishin, Helmus, & Thornton, 2013)

[a]Due to small sample size, risk ratios are not presented for Static-99R scores greater than 8 (the risk ratio given is for 8 and higher). The analyses were based on routine (i.e., relatively unselected) correctional samples

good congruence at younger ages, the Static-99 overpredicted risk for older sexual offenders. In contrast, Static-99R predicted probabilities were congruent with observed rates of sexual recidivism across the full range of ages, demonstrating good calibration overall with the new scoring of the age at release item.

Variable Base Rates: Multiple Norm Groups As noted earlier, sexual recidivism rates of more contemporary samples were approximately 60 % of the rate observed in the original Static-99 samples, with the greatest reductions occurring at higher scores (4 and higher) (Helmus, 2009). These findings pointed to a need for updated norms for absolute risk estimates (predicted probabilities of sexual recidivism) associated with each score and/or risk category.

A related finding in the new data was that sexual recidivism base rates varied significantly across samples, which contrasted with the homogeneity of sexual recidivism base rates in the Static-99 development samples. Helmus (2009) noted the problems of such variability in constructing norms for absolute risk (see also Helmus, Hanson et al. 2012a). Helmus examined a number of variables that might moderate the observed variability, including use of charges versus convictions to define sexual recidivism, number of recidivism sources searched, utilization of national criminal records, incorporation of "street time," adherence to Static-99 coding rules, and variation in jurisdiction, offender type, country, age at release, release year, race, treatment, and sample type. Of these potential moderator variables, only sample type warranted further consideration.

This finding, and further analyses, led to the adoption of new contemporary norms for four separate groups based on the level of preselection: routine correctional samples, preselected for treatment samples, preselected for high-risk/high-need samples, and other nonroutine correctional samples. The *routine norms* are based on correctional samples comprised of sexual offenders included in relatively random and unselected ways. This group has the lowest recidivism rates for each cutoff score.

The *preselected for treatment norms* are based on sexual offenders who, through formal or informal processes, were judged as requiring treatment. The *high-risk/high-need norms* are based on sexual offenders selected (on the basis of perceived risk) for relatively "rare or infrequent measures or interventions or sanctions, such as psychiatric commitments and being held past their release date" (Hanson et al., 2009; Phenix, Helmus, & Hanson, 2012). The nonroutine norms are based on sexual offenders who were not routine because of some degree of preselection, making the use of *routine norms* inappropriate. However, the degree and purpose of the preselection was not sufficiently clear to be classified into the previous two preselected groups. The risk estimates for this group are simply a weighted average of the samples in the other two preselected groups and other preselected samples that did not match either definition.

The classifications of Static-99R normative samples into these four groups, as well as a summary of the defining characteristics of each of the groups, were first presented by Hanson et al. (2009). More detailed descriptions of the defining characteristics of each normative group, as well as a listing of the risk estimates for each group, are provided in the *Evaluator's Handbook* (Phenix et al., 2012). This handbook can be accessed at the static99.org website.

However, just as this chapter was going to press, the authors of the Static-99R and their associates completed a study that included additional contemporary samples (Hanson, Thornton, Helmus, & Bachishin, 2015). This broader study supported the use of separate norms for two groups: *routine* and *high-risk/high-need* samples. Overall, the *preselected for treatment* samples did not significantly differ from the *routine* samples. As a result, the authors recommend using only two sets of norms. The *high-risk/high-need norms*

are appropriate for sexual offenders preselected on these dimensions, as discussed above, and the *routine norms* are recommended for other sexual offenders. Consistent with the author's recommendation, only the absolute risk estimates for these two groups are reported in Tables 4 and 5.

Table 4 Static-99R 5-year sexual recidivism risk estimates for routine samples

	Logistic regression estimates		
Score	Predicted recidivism rate	95 % CI	
−3	0.9	0.6	1.3
−2	1.3	1.0	1.8
−1	1.9	1.4	2.5
0	2.8	2.2	3.5
1	3.9	3.3	4.7
2	5.6	4.8	6.5
3	7.9	7.0	8.8
4	11.0	10.0	12.1
5	15.2	13.8	16.6
6	20.5	18.4	22.8
7	27.2	24.0	30.7
8	35.1	30.5	40.0
9	43.8	37.8	50.1
10	53.0	45.6	60.3
11	–	–	–

Source Phenix, Helmus, and Hanson 2015

Table 5 Static-99R 5-year and 10-year sexual recidivism risk estimates for samples preselected for high risk/high need

	Logistic regression estimates					
	5-year sexual recidivism			10-year sexual recidivism		
Score	Predicted recidivism rate	95 % CI		Predicted recidivism rate	95 % CI	
−3	–	–	–	–	–	–
−2	–	–	–	–	–	–
−1	5.6	3.5	9.1	10.6	5.8	18.4
0	7.2	4.7	10.7	13.0	7.9	20.5
1	9.0	6.4	12.5	15.8	10.7	22.8
2	11.3	8.6	14.6	19.1	14.1	25.4
3	14.0	11.3	17.2	22.9	18.2	28.5
4	17.3	14.5	20.5	27.3	22.5	32.6
5	21.2	18.0	24.8	32.1	26.7	37.9
6	25.7	21.5	30.3	37.3	30.5	44.7
7	30.7	25.1	37.0	42.8	33.9	52.3
8	36.3	28.8	44.5	48.5	37.1	60.1
9	42.2	32.6	52.5	–	–	–
10	48.4	36.6	60.5	–	–	–
11	–	–	–	–	–	–

Source Phenix et al. (2015)

Scoring the Static-99R and Using the Static-99R Norms

As noted earlier, the scoring of the Static-99 and Static-99R differ only on the age at release item, a variable that is easily scored from records. Thus, like the Static-99, the Static-99R is an instrument that is easy to score from correctional and forensic records. Scoring Static-99R does not require an interview and it can be scored by law enforcement, mental health workers, and essentially anyone sufficiently trained in coding the instrument (Harris, Phenix et al., 2003a, 2003b). Again, the new scoring for the age at release item on the Static-99R is as follows: 1 = age 18–34.9, 0 = age 35–39.9, −1 = age 40–59.9, and −3 = age 60 or older.

Relative Risk Norms The total score on Static-99R can be translated into measures of relative risk and absolute risk. Measures of relative risk reflect an offender's risk relative to a generally unbiased and representative group of sexual offenders given the offenders Static-99R score. The comparison of a single score to this group can be reflected by placement into one of the four nominal risk categories, for which the cutoffs remain unchanged, by specification of a percentile (based on four relatively unbiased Canadian samples), or by relative risk ratios (level of risk relative to the average offender in the *routine* sample). The methods and tables to translate relative risk from the total score on Static-99R are contained in the *Evaluator's Handbook* (Phenix et al., 2012) and presented here in Table 3.

Absolute Risk Norms Prior to Static-99R, only one set of norms was used to determine the absolute risk of sexual re-offense for 5, 10, and 15 years. Using a Static-99 score of 6, for example, the 5-year risk estimate was 39 %, the 10-year risk estimate was 45 %, and the 15-year risk estimate was 52 % (Harris, Phenix et al., 2003a, 2003b). However, because of the significant base rate variability of the 23 samples used to develop and validate Static-99R, it became necessary to use one of two sets of norms to determine absolute risk estimates for Static-99R (see Tables 4 and 5 and the Evaluator's Workbook for the sets of norms).

Choosing Static-99R Absolute Risk Norms for an Individual Case Because there is no longer a single probability of re-offense associated with any cutoff score on Static-99R, evaluators are tasked with the job of determining which absolute risk norms (predicted probability of sexual recidivism) are most appropriate for the offender they are evaluating. In theory, this could be done by comparing the degree of preselection for high-risk/high-need interventions; however, this involved a degree of subjectivity and sometimes proved problematic in court.

More recent research has helped resolve these issues. Increasingly, research evidence confirms that the variability in sexual recidivism base rates in the Static-99R samples is due to differences in the presence of unmeasured risk factors external to Static-99R (Hanson & Thornton, 2012). These external risk factors are often referred to as psychological needs or dynamic risk factors. Many such enduring psychological/dynamic needs or long-term vulnerabilities were identified meta-analytically by Mann, Hanson, and Thornton (2010).

For example, Looman and Abracen (2012) examined 348 high-risk sexual offenders who were divided into two groups based on the level of preselection (detained and not detained past release date). The detained (preselected) group evidenced greater levels of hostility, cognitive distortions supportive of offending, sexual obsessions, and sexually deviant behaviors. They also showed less assertiveness and greater psychiatric histories. These results supported the findings by Hanson and Thornton (2012) that preselection is associated with greater levels of dynamic needs.

Importantly, these dynamic needs add incremental validity to Static-99R (Hanson & Thornton, 2012). Offenders with low dynamic needs are most similar to offenders in the routine norms, offenders with moderate dynamic needs have re-offense rates most similar to the preselected for treatment norms, and offenders with high dynamic needs are most similar to offenders in the high-risk/high-need norms. Similarly, sexual offenders with identical scores on the Static-99R have different rates of sexual recidivism based on the density of psychological/dynamic needs, with higher-need sexual offenders exhibiting higher rates of sexual recidivism than lower-need sexual offenders with the same score (Hanson & Thornton, 2012; Thornton & Knight, 2013).

Concurrent with research documenting the additional explanatory power of psychological/dynamic needs external to the Static-99, empirically derived and validated tools measuring the density of such needs emerged. Examples of such tools include the Stable-2007 (Fernandez, Harris, Hanson, & Sparks, 2012; Helmus, Hanson et al., 2012a; Hanson et al., 2007), Structured Risk Assessment-Forensic Version (SRA-FV) (Thornton, 2012; Thornton & Knight, 2013), the Violence Risk Scale-Sex Offender Version (VRS-SO) (Olver, Wong, Nicholaichuk, & Gordon, 2007), and the Sex Offender Treatment Intervention and Progress Scale (SOTIPS) (McGrath et al., 2012). These tools provide methods for reliably quantifying the density of psychological/dynamic needs and informing the selection of an appropriate Static-99R norm group. For example, the SRA-FV manual contains a Level of Need Inventory (LONI) that gives specific cutoff scores to select the appropriate Static-99R norm group. Similarly, the Stable-2007 provides recidivism rates depending on the score on Static-99R and Stable-2007 combined.

As additional research accumulates, it is possible that the Static-99R group may further modify absolute risk norms. Any such changes would be published on the static-99 website at the appropriate time.

Reliability of the Static-99R

Given that the scoring for the Static-99R differs from the Static-99 on only one of ten items, it can draw from the vast research confirming the ability to reliably score the Static-99. Still, it is technically a different tool, so it was important to independently document the reliability of scores using the Static-99R. McGrath et al. (2012) reported very high reliability for the Static-99R (*ICC* = 0.89).

Noting the importance of assessing reliability of scores produced by fieldworkers, Hanson et al. (2014) assessed the reliability of Static-99R scores from 55 corrections and probation officers in California scoring a common set of 14 cases. Overall rater reliability was acceptable (*ICC* = 0.78). There was a substantial difference in the reliability of scores from experienced scorers (*ICC* = 0.85) and less experienced scorers (*ICC* = 0.71), pointing to the importance of recent practice. Experienced scorers were those who had scored 26 or more sexual offenders on the Static-99R in the previous 12 months.

Cross-Validations of the Static-99R

Validity of the Static-99R was well established through the use of separate construction and validation samples. As noted earlier, the AUC = 0.720 in the validation sample (n = 2,392) was statistically significant and nominally higher than that for the Static-99 (AUC = 0.713) (Helmus, Thornton et al., 2012b). Because the Static-99 and Static-99R are identical except for the age item, Static-99 cross-validations can be informative about the predictive accuracy for both Static-99 and Static-99R.

In a separate cross-validation of the Static-99R in California, Hanson et al. (2014) reported high relative risk validity (discrimination) and good absolute risk validity (calibration). This was a prospective, field study of 475 randomly selected, adult males released from California prisons in 2006–2007 and followed for 5 years. The resulting *AUC* = 0.817 (95 % CI 0.716, 0.919) demonstrated strong relative predictive accuracy.

The level of calibration was calculated through *E/O* ratios, using norms from other routine samples (Hanson et al., 2012). Analyses demonstrated overall fit between expected and observed rates of sexual recidivism across nominal risk categories as well as across scores. Relative to the normative

routine samples and consistent with the high AUC in this study, this sample produced a significantly lower adjusted base rate ($\beta 0_2 = -3.778$ vs. -2.941) and significantly higher discrimination index (change in relative risk per score increase) ($\beta 1 = 0.548$ vs. 0.331). As a result, the range of predicted probabilities for sexual recidivism in this sample ranged from approximately 0 for a score of −3 to just slightly over 0.50 for a score of 9. This contrasted to a range of predicted probabilities in the normative samples from approximately 0.01 to just less than 0.30 for the same range of scores.

Hanson et al. (2014) also looked at the predictive accuracy of the Static-99R for 5-year sexual recidivism separately for Black (*AUC* = 0.765), Hispanic (*AUC* = 0.734), and White (*AUC* = 0.850) sexual offenders. The levels of predictive accuracy were statistically significant ($p < 0.05$) for Blacks and Whites, but not for Hispanics. That latter nonsignificant finding resulted from a very wide 95 % confidence interval, which was at least in part due to the small sample size of Hispanic sexual recidivists ($n = 5$). Logistic regression equations for Black, Hispanic, and White sexual offenders revealed no significant differences in the adjusted base rate (predicted value for a Static-99R score of 2) or in the rate of change in relative risk for a one-unit increase in Static-99R score. In other words, discrimination and calibration were not different based on ethnicity.

Performance of the Static-99R with Black, Latino, and White sexual offenders was also examined in the large Texas study described earlier (Varela et al., 2013). The Static-99R did not perform well overall in this study, but its sexual recidivism predictive accuracy for relative risk was roughly equivalent with Blacks (*AUC* = 0.65), Latinos (*AUC* = 0.57), and Whites (*AUC* = 0.59). Only the AUC for Blacks was statistically significant.

In a sample of 319 Canadian Aboriginals and 1,269 Canadian non-Aboriginals across five independent samples, Babchishin, Blais, and Helmus (2012a) found similar, statistically significant levels of predictive accuracy for the Static-99R with both groups, *AUC* = 0.698 and *AUC* = 0.726, respectively. Predictive accuracy at the item level was also similar for the two groups of sexual offenders. In contrast, with a smaller sample of Australian Aboriginals ($n = 67$) and non-Aboriginals ($n = 399$) with a relatively short follow-up period ($M = 29$ months), Smallbone and Rallings (2013) reported statistically significant sexual recidivism predictive accuracy for the Static-99R with Australian non-Aboriginal sexual offenders (*AUC* = 0.79) but not for Australian Aboriginal sexual offenders (*AUC* = 0.61).

As with the Static-99, a clear pattern based on race/ethnicity does not emerge. This variability of results should be a consideration in applied risk assessments with sexual offenders identified with a racial/ethnic minority

Static-2002 and Static-2002R

Development and Initial Validation

Static-2002 The Static-2002 was developed by Hanson and Thornton (2003) with the intent of creating a risk assessment tool with improved reliability and predictive accuracy, as well as increased conceptual clarity and coherence. Like Static-99, the Static-2002 was designed to be a brief actuarial measure of relative and absolute risk for sexual recidivism that could be scored from commonly available information in correctional files.

Potential items were identified through a review of existing research literature at the time, as well as a review of items in some other validated actuarial tools. This review produced 22 variables that were considered for inclusion on the Static-2002. Items were selected, weighted, and combined in some cases based on meta-analyses of 10 samples, including three of the four samples to develop the Static-99 (Institut Philippe-Pinel, Millbrook, and Her Majesty's Prison Service in the UK) (Hanson & Thornton, 2003). Two federal Canadian samples were also utilized, and other Canadian samples were from Edmonton, British Columbia, and Manitoba. Two samples were included from the United States, one from California and one from Washington. In all, 4,596 sexual offenders were included in the development sample with an average follow-up period of 7 years.

Of the 22 variables, 17 had statistically significant associations with sexual recidivism. Using 6 of the 10 samples that included information on all 17 variables, the 17 variables were combined into 14 items and weighted based on empirical relationships and observing the principle of simplicity when considering options that were essentially equivalent from an empirical perspective.

The resulting14 items on Static-2002 are organized into five meaningful subscales of risk: age, persistence of sexual offending, deviant sexual interests, relationship to victims, and general criminality. Age at release consisted of a single item and the other four categories consisted of two to five items (see Table 6). For the age, deviant sexual interests, and relationship to victim(s) category, the category score is simply the sum of the item scores within the category. For the persistence of sexual offending category and the general criminality category, the raw total score summed across items within a single category is converted to a category score, as summarized in Table 6. The converted score is used for these two categories so that unit increases in risk are similar in each of the five categories.

Organization of the 14 items into 5 subcategories was intended to provide greater conceptual clarity and potentially enable treatment providers to identify specific areas of risk to

Table 6 Static-2002 items and scoring

Item #	Item description	Item scoring categories		Item score	Category score
Age at release risk group (item 1)					***0–3***
1	Young age at release	Age 50 or older		0	
		Age 35 to 49.99		1	
		Age 25 to 34.99		2	
		Age 18 to 24.99		3	
Persistence of sexual offending group (items 2–4)					***0–3***
Raw score total		*Risk factor score*			
0		*0*			
1		*1*			
2 or 3		*2*			
4 or 5		*3*			
2	Number of prior sexual offenses (score whichever is higher for charges or convictions)	*Charges*	*Convictions*		
		None	None	0	
		1–2	1	1	
		3–5	2–3	2	
		6+	4+	3	
3	Any juvenile arrest for a sexual offense and convicted as an adult for a separate sexual offense?	No		0	
		Yes		1	
4	More than one sexual offense sentencing occasion every 15 years?	No		0	
		Yes		1	
Deviant sexual interests group (items 5–7)					***0–3***
5	Any sentencing occasions for noncontact sexual offenses?	No		0	
		Yes		1	
6	Any male victims?	No		0	
		Yes		1	
7	Has two or more victims under age 12, with at least on victim being unrelated?	No		0	
		Yes		1	
Relationship to victims group (items 8–9)					***0–2***
8	Any unrelated victims in sexual offenses?	No		0	
		Yes		1	
9	Any stranger victims in sexual offenses?	No		0	
		Yes		1	
General criminality group (items 10–14)					***0–3***
Raw score total		*Risk factor score*			
0		*0*			
1 or 2		*1*			
3 or 4		*2*			
5 or 6		*3*			
10	Any prior involvement with the criminal justice system?	No		0	
		Yes		1	
11	Number of prior sentencing occasions for anything	0 to 2		0	
		3 to 13		1	
		14 or more		2	
12	Any community supervision violations?	No		0	
		Yes		1	
13	Free more than 36 months prior to the index sexual offense date AND more than 48 months prior to index sexual offense conviction?	Yes for both conditions		0	
		No for at least one		1	
14	Any prior nonsexual offense sentencing occasion?				
		Total score (sum of GROUP scores)			***0–14***

Table 7 Static-2002 indices of relative risk

Suggested nominal risk categories		
Category	Score	
Low	0 to 2	
Moderate-low	3 to 4	
Moderate	5 to 6	
Moderate–high	7 to 8	
High	9 or higher	
Percentiles		
Score	***Percentile***	***95 % CI***
0	2.3	0.1–4.8
1	10.0	4.7–15.6
2	23.0	15.5–30.6
3	39.1	20.5 -47.8
4	56.5	47.6–65.3
5	72.6	65.1–79.9
6	84.4	79.6–89.0
7	91.2	88.4–93.7
8	95.1	93.0–96.9
9	97.7	96.3–98.8
10	99.3	98.4–99.9
11	99.9	99.7–100
12+	99.99	99.8–100

Source Phenix et al. (2015)
Note Percentiles are midpoint averages based on an adjusted, reweighted average of 4 Canadian samples (n = 2,011) (Hanson et al., 2012)

better develop treatment plans and interventions. Using the scoring just described, the range of category scores is 0–3 for each category except relationship to victims, which has a range of 0–2. The Static-2002 total score is the sum of the category scores rather than the sum of the item scores, so the range of total scores is 0–14. Indices of relative risk for the Static-2002 are presented in Table 7.

To estimate the predictive accuracy, Hanson and Thornton (2003) compared the performance of the Static-2002 to the Static-99 and the RRASOR using eight of the ten samples. However, because of extensive missing data when trying to compare the three instruments, these were truly only estimates even though none of the tools appears to have been disadvantaged by the common rules for how to handle missing data. The performance of the three tools in predicting sexual recidivism across the eight samples was comparable, as reflected in unweighted average *AUCs* of 0.678 for the RRASOR, 0.688 for the Static-99, and 0.716 for the Static-2002. There was also little difference in the performance of the three tools separately for child molesters (respective *AUCs* of 0.671, 0.700, 0.687) and rapists (respective *AUCs* of 0.693, 0.671, 0.734). One advantage of the Static-2002 is that it had less variability across samples. Although absolute risk estimates were generated for the Static-2002, they are not reported here because they have been deemed outdated by the developers and replaced with new absolute risk estimates in conjunction with the development of the Static-2002R.

Static-2002R The Static-2002 Revised (Static-2002R) was developed for the same reasons as the Static-99R, to better reflect decreasing risk with advancing age and to adjust for decreasing base rates of sexual recidivism and variability in those base rates in generating absolute risk estimates. The analyses and results were parallel to those described earlier for the Static-99R, and both sets of analyses are provided by Helmus et al. (2012a) and Helmus, Thornton et al. (2012b), so only the differences between the Static-99R and Static-2002R analyses and results are described here.

One important difference is that there were only 7 Static-2002 samples (n = 2,609) available. Analyses to determine the need for new scoring of the age at release item utilized the samples from these studies. Overall, analyses revealed a pattern of decreasing sexual recidivism across increasing age bands, similar to that for the Static-99. After controlling for Static-2002 scores in Cox regression analyses, the quadratic effect for age significantly added to the prediction of sexual recidivism, though the linear and cubic effects did not. The same weights as those used to recode the age at release item on the Static-99R were used to recode the age at release item on the Static-2002R. The one difference was that a constant of 1 was added to the weights to maintain consistency with the previously established risk categories.

The age at release item on the original Static-2002 is scored as 3 for age 18 to 24.9, 2 for age 25 to 34.9, 1 for age 35 to 49.9, and 0 for age 50 and older, as reflected in Table 6. Based on the procedures just described, the Static-2002R age at release item is scored: 2 for age 18–34.9, 1 for age 35–39.9, 0 for age 40–59.9, and −2 for age 60 and older. With the new scoring, age at release produced no incremental validity after controlling for Static-2002R scores, and absolute risk estimates by age group were better calibrated with observed rates of sexual recidivism.

With these seven samples, the relative predictive validity for 5-year sexual recidivism was nominally higher on Static-2002R (*AUC* = 0.713) than the Static-2002 (*AUC* = 0.709). As with other actuarial tools, relative risk can be reported as nominal risk categories, percentiles, or relative risk ratios. Static-2002R nominal risk categories, percentiles (based on four relatively unbiased Canadian samples), and relative risk ratios (relative to the average offender in the *routine* correctional samples) are available at the static99.org website and presented in Table 8.

Absolute risk estimates have changed substantially for the Static-2002R relative to the Static-2002. Because of the significant variability in sexual recidivism base rates across the seven samples used to develop and initially validate Static-2002R (Helmus, 2009; Helmus, Hanson et al., 2012a), it was necessary to generate three sets of norms for Static-2002R absolute risk estimates.

Table 8 Static-2002R indices of relative risk

Suggested nominal risk categories			
Category	Static-2002R score		
Low	−2 to 2		
Moderate-low	3–4		
Moderate	5–6		
Moderate–high	7–8		
High	9 or higher		
Percentiles and relative risk ratios			
Score	**Percentile**	**95 % CI**	**Relative risk ratio**
−2	1.4	0–3.0	0.20
−1	4.2	2.6–6.1	0.28
0	9.0	5.5–12.8	0.38
1	17.3	12.3–22.5	0.52
2	30.1	22.2–38.3	0.72
3	47.1	38.1–56.1	1.00
4	63.7	55.9–71.4	1.38
5	78.0	71.1–84.7	1.90
6	88.3	84.3–92.1	2.63
7	93.3	91.3–95.1	3.62
8	95.9	94.2–97.4	5.00
9	98.3	96.9–99.5	6.90[a]
10	99.7	99.3–100	
11	99.97	99.8–100	
12 and higher	99.99	99.8–100	

Source Phenix et al. (2015)

Note. Percentiles are midpoint averages based on an adjusted, reweighted average of 4 Canadian samples (n = 2,011) (Hanson et al., 2012). Risk ratios were calculated from hazard ratios based on Cox regression coefficients derived from entering the continuous (i.e., unclumped) Static-99R scores (β = 0.322; SE = 0.022), with sample as strata (k = 8, n = 4,037) (Hanson, Babchishin et al., 2013)

[a]Due to small sample size, risk ratios are not presented for Static-99R scores greater than 9 (the risk ratio given is for 9 and higher). The analyses were based on routine (i.e., relatively unselected) correctional samples

These norm groups, first presented by Hanson et al. (2009), reflect level of preselection, similar to the Static-99R norm groups. The Static-2002R norm groups are *routine norms* (based on routine and representative correctional samples), *high-risk/high-need norms* (based on samples of sexual offenders selected based on perceived risk for significant but relatively infrequent interventions or sanctions, such as psychiatric commitments and being held past their release date), and *nonroutine norms* (based on samples of sexual offenders that are not routine or representative of sexual offenders broadly because of some degree of preselection, but the preselection is not clearly for high risk/high need). There is not a "preselected for treatment" group for the Static-2002R because of a lack of sufficient samples in this category.

Hanson et al. (2015) investigated support for the three sets of norms using a broader sample that included additional contemporary samples. As with the Static-99R, they found broad support for the use of only two sets of norms, *routine* and *high risk/high need*. As a result, the authors recommend using only these two sets of norms. The *high-risk/high-need norms* are appropriate for sexual offenders preselected on these dimensions, as discussed earlier, and the *routine norms* are recommended for other sexual offenders. Consistent with the author's recommendation, only the absolute risk estimates for these two groups are reported in Tables 9 and 10.

Table 9 Static-2002R 5-year sexual recidivism risk estimates for routine samples

	Logistic regression estimates		
Score	Risk estimate (predicted recidivism rate)	95 % CI	
−2	1.0	0.6	1.7
−1	1.5	0.9	2.3
0	2.2	1.5	3.2
1	3.2	2.3	4.4
2	4.6	3.6	6.0
3	6.8	5.5	8.2
4	9.7	8.3	11.3
5	13.8	12.2	15.6
6	19.2	16.9	21.6
7	26.0	22.6	29.8
8	34.3	29.1	40.0
9	43.7	36.5	51.2
10	53.5	44.4	62.4
11	–	–	–
12	–	–	–
13	–	–	–

Source Phenix et al. (2015)

Reliability

Five studies reporting inter-rater reliability for the Static-2002 scores were identified, and all reported high indices of reliability. In a comparative study of risk assessment tools, Langton et al. (2007) reported high reliability (*ICC* = 0.91) for the Static-2002. Similarly, Knight and Thornton (2007) reported an inter-rater r = 0.89, and Haag (2005) reported an inter-rater r = 0.92. Finally, Bengtson (2008) found very high reliability (*ICC* = 0.96), as did Helmus and Hanson (2007) (*ICC* = 0.98). The latter authors explicitly acknowledged that their process was not typical of the coding complexities that occur in the field because of the simplified nature of the records used in the study. The other reliability indices reported should also be considered as estimates of reliability achieved in a research setting. Given that research and field reliability were comparable for the Static-99/R tools, strong reliability in the field for the Static-2002/R tools would be expected, but a robust assessment of field reliability would be beneficial.

Table 10 Static-2002R 5-year sexual recidivism risk estimates for high-risk/high-need samples

	Logistic regression estimates		
Score	Risk estimate (predicted recidivism rate)	95 % CI	
−2	–	–	–
−1	–	–	–
0	7.4	4.2	12.6
1	9.0	5.6	14.1
2	11.0	7.5	15.7
3	13.3	9.8	17.7
4	16.0	12.6	20.0
5	19.1	15.8	23.0
6	22.7	18.9	27.0
7	26.8	21.9	32.3
8	31.2	24.6	38.7
9	36.1	27.3	45.9
10	41.2	30.0	53.4
11	–	–	–
12	–	–	–
13	–	–	–

Source Phenix et al. (2015)

Table 11 Static-2002R 5-year sexual recidivism risk estimates for samples preselected for high risk/high need

Logistic regression estimates			
	5-year sexual recidivism		
Score	Predicted recidivism rate	95 % CI	
−2	–	–	–
−1	–	–	–
0	5.9	4.6	7.5
1	7.6	6.2	9.2
2	9.7	8.1	11.5
3	12.3	10.3	14.7
4	15.5	12.7	18.9
5	19.4	15.3	24.3
6	24.0	18.3	30.9
7	29.3	21.6	38.4
8	35.2	25.2	46.7
9	41.6	29.1	55.2
10	48.3	33.4	63.4
11	55.0	37.9	71.0
12	–	–	–
13	–	–	–

Source Phenix et al. (2015)

Published reports of reliability for the Static-2002R could not be found. However, the latter tool differs from the Static-2002 only in the scoring of one item. Given that there were no meaningful differences in the reliability achieved with the Static-99R versus the Static-99, one would not expect reliability with the Static-2002R to differ from that of the Static-2002. This should be confirmed through appropriate lab and field assessments.

Cross-Validations

Hanson, Helmus, and Thornton (2010) reviewed and performed meta-analyses on samples from eight studies (n = 3,034), published and unpublished, to assess the predictive accuracy of the Static-2002 on independent samples in comparison to the Static-99. Across the eight studies, the *AUCs* for sexual recidivism ranged from 0.64 to 0.79, and all 95 % CIs excluded 0.50, reflecting statistically significant predictive accuracy in each of the studies. A similar pattern was also evident for violent recidivism (*AUCs* ranged from 0.64 to 0.77 and all were statistically significant).

Across all eight studies, the weighted average predictive accuracy for sexual recidivism was slightly higher for the Static-2002 (*AUC* = 0.685) and the Static-99 (*AUC* = 0.665). Predictive accuracy for violent recidivism exhibited a similar pattern, with the Static-2002 (*AUC* = 0.702) being slightly higher than the Static-99 (*AUC* = 0.662). The differences between the two instruments were statistically significant in both cases, with the predictive accuracy of the Static-2002 superior to that of the Static-99. Although there was significant variability in AUC's across studies, the difference between the Static-2002 and the Static-99 was stable.

Babchishin, Hanson, and Helmus (2012b) compared the predictive accuracy of the Rapid Risk Assessment of Sex Offender Recidivism (RRASOR), Static-99R, and Static-2002R for 7,491 (20 samples from the Static-99R re-norming project) offenders primarily from Canada and the United States, but also offenders from Austria, Denmark, Germany, New Zealand, Sweden, and the United Kingdom. Total scores of Static-2002R (*AUC* = 0.686) predicted sexual recidivism. This level of predictive accuracy was similar to that for the Static-99R (*AUC* = 0.684) in these analyses.

Another recent meta-analysis (Tully, Chou, & Browne, 2013) of 43 studies and 31,426 sexual offenders from 11 countries examined the predictive accuracy of 15 risk assessment tools for sexual offenders (the number of studies and sexual offenders varied for each instrument). All of the reviewed tools produced at least a moderate effect size in predicting sexual re-offense including the Static-2002 (*AUC* = 0.70). The Static-99 performed similarly (*AUC* = 0.69).

Babchishin, Blais, and Helmus (2012a) examined the predictive accuracy of the Static-2002 and the Static-2002R with three samples of Canadian Aboriginals (n = 209) and non-Aboriginals (n = 955). Predictive accuracy for sexual recidivism was statistically significant in the total sample for the Static-2002 (*AUC* = 0.740) and the Static-2002R (*AUC* = 0.733) and in the non-Aboriginal sample for the Static-2002 (*AUC* = 0.763) and the Static-2002R (*AUC* = 0.759). In contrast to the Static-99 and Static-99R, there was a substantial drop in predictive accuracy in the Aboriginal sample for both the Static-2002 (*AUC* = 0.617) and the Static-2002R (*AUC* = 0.608), though the accuracy for the Static-2002 remained statistically significant.

Uses and Training Requirements for the Static Tools

Over the last 20 years or so, lawmakers have passed a number of statutes intended to produce more restrictive policies and procedures with sexual offenders. Examples include the Jacob Wetterling Act in 1994, Megan's Law in 1996, and the Adam Walsh Child Protection and Safety Act in 2006. Additional statutes have been passed in a number of states that impose even more restrictions on sexual offenders and how they are managed.

Earlier statutes largely left defining and assessing risk to leaders in relevant state divisions and departments. In response, a number of states developed tiered risk-management systems, generally based on relative risk estimates. Over time, jurisdictions increasingly turned to actuarial instruments for establishing risk and implementing policies and systems for the management of sexual offenders in the community (Zgoba, Miner, Knight, Letourneau, Levenson, & Thornton, 2012). Through this empirical approach to risk management, scores on actuarial instruments are used to inform many aspects of risk management, including level of supervision, intensity of treatments, level of community notification, use of Global Positioning Systems (GPS), sentencing decisions, and civil commitment referrals.

Because of the extensive research confirming the predictive validity of the Static-99, Static-99R, Static-2002, and Static-2002R, these are increasingly the instruments of choice by administrators responsible for risk-management policy implementation. The development team for these two tools recommends that the Static-99R, rather than the Static-99, and the Static-2002R, rather than the Static-2002, be used to inform the implementation of such policies (Helmus, Thornton et al., 2012b). The reasons are that the revised tools better incorporate the association of advancing age with reduced risk for sexual recidivism and use absolute risk norms (predicted probabilities) that provide better calibration with observed rates of sexual recidivism for the respective norm groups.

The Adam Walsh Child Protection and Safety Act was significant because it created more stringent registration requirements and established a standardized, offense-based classification system. In other words, legislators defined risk levels themselves largely based on history of prior offenses. Zgoba et al. (2012) investigated whether the classification system outlined by the Adam Walsh Act accurately represented the risk of sexual recidivism, which is necessary to create more effective sex offender management. Specifically, they compared the Adam Walsh classification system tiers to the use of the actuarial risk instruments to identify high-risk sexual offenders and recidivists. The Static-99R, Static-2002R, and existing state tier systems (often based on actuarial tools) were superior to the Adam Walsh Act tiers. In fact, the Adam Walsh Act tiers were unrelated or inversely related to sexual recidivism across the four states in the sample (Zgoba et al., 2012).

The validity of the Static tools is well established, particularly the Static-99/R tool, with the Static-99R and Static-2002R now being the risk assessment tools recommended by the developers. To have the full weight of this research bear on particular cases, people scoring the Static-99R or Static-2002R must be appropriately knowledgeable about and faithful to the scoring guidelines. Accordingly, the developers of these tools recommend that professionals complete training, ideally from a certified trainer, before using the tools. It is also desirable for certified scorers to periodically code the same case and compare scores to help prevent "coder drift" over time. With this goal in mind, the state of California requires scorers to be recertified every 2 years.

Certified trainers are listed on static99.org website and are generally available in multiple jurisdictions in the United States, Canada, and other countries. The criteria to become a certified trainer, also outlined on the static99.org website, include completing a workshop with a certified trainer, regular use of the instrument, being observed by a certified trainer while giving a training, and passing a test of knowledge on Static-99R and/or Static-2002R.

Online training is available for Static-99R at http://www.jibc.ca/course/soap105. This 21-h online course is designed to be completed part-time over 5 weeks. All materials and resources are provided electronically. Evaluative components for this training include completion of case studies, participation in online discussions, and a final graded exam. The domestic (Canadian) fee for this course is $504.59 and the international fee is $605.51. Online training is not available for the Static-2002R. Training workshops by certified trainers are occasionally available at conferences (e.g., the Association for the Treatment of Sexual Abusers).

The Evaluator Workbook for the Static-99R and Static-2002R (Phenix et al., 2012, 2015) is available at the static99.org website. Finally, scoring questions may also be submitted to the static99.org website.

The Use of Multiple Actuarial Instruments

Evaluators in the field have to determine which actuarial instruments they will use to evaluate a sexual offender's risk to sexually reoffend. Evaluators should consider aspects of the development of the instrument, predictive accuracy, reliability, and replications of the instrument, among other things, in choosing an actuarial instrument. Incremental validity of risk instruments is a helpful gauge in deciding what combination of instruments to use. Incremental validity is the extent to which new information improves the accuracy

of a prediction above and beyond that of the previous instrument(s) used.

Seto (2005) examined the incremental validity of several routinely used scales (i.e., RRASOR, Static-99, SORAG, and VRAG) and found the scales did not add incrementally to each other in the prediction of sexual recidivism. Seto advised evaluators to choose the "best" instrument, which was identified as the RRASOR in his sample. However, this study was limited by a small sample size, and subsequent studies did not support the RRASOR as having superior predictive accuracy relative to other instruments. However, as a result of this study, many evaluators followed Seto's advice and used only one scale.

The use of multiple actuarial instruments was revisited more recently by Babchishin, Hanson, and Helmus (2012b). This study examined potential incremental validity of the RRASOR, Static-99R, and Static-2002R in a large cohort of 7,491 sex offenders from 20 samples in the re-norming project. Contrary to Seto's (2005) prior findings, all three scales provided incremental validity to the prediction of sexual recidivism in the Babchishin, Hanson, and Helmus (2012b) study. This robust finding confirmed clear potential improvements by considering multiple scales. Even though the Static-99R and Static-2002R are highly correlated scales, the incremental validity of each indicates that there is better coverage of relevant static risk factors by using both. This finding may generalize to other scales when samples are large enough to have sufficient statistical power.

Decision rules for combining static, actuarial risk instruments for sexual offenders in the overall evaluation of risk were examined by Lehmann et al. (2013). In this study, the RRASOR, Static-99R, and Static-2002R all predicted sexual recidivism (*AUCs* of 0.69–0.71) and provided incremental validity to each other. In regard to using multiple risk instruments, the authors examined whether choosing the highest, the lowest, or averaging absolute risk estimates (probabilities) optimized accuracy. Their findings supported averaging the probabilities obtained on Static-99R and Static-2002R for the follow-up period of interest (5 or 10 years).

McGrath et al. (2012) developed SOTIPS, a new rating scale to assess dynamic risk among adult male sex offenders. SOTIPS predicted sexual, violent, and any criminal recidivism, as well as returns to prison, across time. However, combined SOTIPS and Static-99R scores predicted all recidivism types better than either instrument alone. These results bolster previous sexual offender studies documenting the incremental validity of layering assessments of dynamic risk factors onto assessments of static risk factors (Beggs & Grace, 2010; Hanson et al., 2007; Knight & Thornton, 2007; Olver et al., 2007; Thornton & Knight, 2013). These findings collectively confirm that a comprehensive risk assessment should include multiple actuarial instruments, including measures of both static and dynamic risk factors. As discussed earlier, this practice can also make the selection of Static-99R and Static-2002R norms more empirically based.

Summary and Conclusions

By empirically generating a suite of actuarial static risk assessment tools, Karl Hanson, David Thornton, and their associates have provided tremendous benefit to professionals responsible for risk assessment and the implementation of a host of sexual offender policies. Through the consistent use of research best practices, they have established a high standard for the discipline and an excellent model for other developers of risk assessment tools.

The research establishing the reliability and validity of the Static-99 and Static-99R is voluminous and overwhelmingly positive. As newer instruments, the Static-2002 and Static-2002R have not generated a comparable quantity of research. However, that research is promising and supports the use of these tools in a variety of settings.

The developers strongly recommend use of the revised tools, Static-99R and Static-2002R, over their respective predecessors because of their better incorporation of age as a risk factor and their more contemporary and accurate norms for absolute risk estimates. The Static-99R offers a greater research base and the Static-2002R provides greater organizational coherence and potentially greater relevance to sexual offender treatment. In light of recent research on the use of multiple instruments, it is not necessary to choose between them, unless time or resources limit options to one or the other, because risk estimates may be more accurate if they are averaged across the two tools.

Regardless of which tool(s) is used, a number of best practices have emerged from the work of Hanson, Thornton, and their associates. The first is that relative risk should always be reported because relative risk has been far more stable over time, as reflected in various temporal cohorts in samples. Relative risk should be presented in multiples ways, including nominal relative risk categories, percentiles, and relative risk ratios. The static99.org website and the Evaluator's Workbook provide relative risk indices based on large samples available to the developers. If local norms are available, those should be reported as well.

If absolute risk estimates are needed, they should be based on contemporary local norms, if available, and/or the appropriate contemporary norm group estimates provided on the static99.org website and in the Evaluator's Workbook. Historically, some degree of clinical judgment was required in determining which norm group is most appropriate for an individual offender based on the degree of preselection for treatment and/or high-risk/high-need interventions. More recent research has begun to provide cutoffs on measures of dynamic risk factors/needs (e.g., SRA-FV, Stable-2007) to

inform the selection of norm group. In cases where the appropriate norm group is undetermined or when a narrow risk estimate is not required, evaluators should provide the range in risk estimates from the routine norms (low estimate) to the high-risk/high-need norms (high estimate) for the sexual offender's specific score. Finally, template language is provided on the static99.org website and in the Evaluator's Workbook for reporting relative and absolute risk estimates. The purpose of the language is to increase the clarity and accuracy of evaluator's communication of risk.

Research on the Static-99R and Static-2002R is ongoing, so normative information and recommendations may change. Thus, people using these tools should periodically check the static99.org website to ensure that current normative information and language are being used and that they are using the most appropriate methods for selecting absolute risk norm groups.

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Base Rates of Sexual Recidivism After Controlling for Static-99/R

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One of the most frequently asked questions about sex offenders is how often they reoffend. Given the adverse consequences to victims of sexual offences (Paolucci, Genuis, & Violato, 2001; Resick, 1993), politicians, clinicians, researchers, and the general public have an understandable interest in reducing sexual recidivism. The rate of sexual recidivism among sex offenders is referred to as a *base rate* and can be discussed generally (e.g., the recidivism rate for all convicted sex offenders), or for a specific subgroup (e.g., the recidivism rate for incest offenders), which are sometimes called base rates "adjusted" for a factor. We will use the term "base rate" to refer to recidivism rates for an entire sample of sex offenders and will specify when we make subgroup distinctions (e.g., the base rate for rapists). Recidivism rates for a particular score on an actuarial scale will be referred to as scorewise base rates.

Base rate information is essential for understanding and contextualizing risk. For example, interpreting the phrase "moderate risk sex offender" requires knowledge of the risk posed by all sex offenders. If the base rate for sexual recidivism is 70 %, then the release of a "moderate" risk sex offender invokes concern. If the base rate is 5 %, however, then the release of a "moderate" risk sex offender invokes much less concern.

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Many non-forensic contexts involving the prediction of an event also rely heavily on base rate information. Insurance is the most common example, where base rate statistics (e.g., frequency of car accidents among young males, average life expectancy) are commonly used to determine insurance premiums. Weather forecasts are another example of predictions that rely on base rates (e.g., 40 % chance of rain). If asked whether it would snow in Toronto on Canada Day (July 1st), the forecaster can confidently say "no" (it has never snowed in Toronto in July). If asked, in June, whether it would snow on Christmas Eve, the best response would be a probabilistic estimate based on historical frequencies and current global conditions. Largely due to the extensive statistical base rate data informing these predictions and the availability of rapid and objectively measured feedback, weather predictions have achieved remarkable accuracy (National Research Council, 1989).

Actuarial Risk Assessment and Base Rates

In the context of predicting criminal behavior, risk assessment is a method of combining multiple factors into an overall assessment of the likelihood of recidivism (Hanson & Morton-Bourgon, 2009). Actuarial methods of risk assessment involve explicit rules to combine prespecified items (risk factors) into total scores, which are then linked to empirically derived estimates of recidivism probability (Hanson & Morton-Bourgon, 2009). Actuarial methods of risk assessment are generally more accurate than other methods, such as structured or unstructured clinical judgement (Bonta, Law, & Hanson, 1998; Hanson & Morton-Bourgon, 2009; Mossman, 1994; for a review, see Quinsey, Harris, Rice, & Cormier, 2006). There are over a dozen actuarial risk scales designed for sex offenders, such as Static-99 (Hanson & Thornton, 2000), the Sex Offender Risk Appraisal Guide (SORAG; Quinsey et al., 2006), and the Risk Matrix 2000 (Thornton et al., 2003), and these actuarial scales show comparable levels of predictive accuracy (Hanson & Morton-Bourgon, 2009).

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Actuarial risk scales assess two properties of risk: relative and absolute. Relative risk provides information about a particular offender's level of risk compared to other offenders and can be reported in numerous ways, including percentiles (e.g., "95 % of offenders score higher than this individual") or relative risk ratios (e.g., "the risk of recidivism for this offender is about ½ the risk of a typical sex offender"). The accuracy of a risk assessment scale in predicting relative risk can be reported using correlation coefficients, areas under the receiver operating characteristic curve (AUC for ROC), standardized mean differences (Cohen's *d*), or regression coefficients (B_1), and the pros and cons of these statistics have been described elsewhere (Hanson, 2008; Quinsey et al., 2006; Rice & Harris, 2005). Although relative risk provides no information about base rates, this property is useful because it remains fairly consistent across samples (Hanson, Helmus, & Thornton, 2010).

Absolute risk, however, refers to the expected rate of recidivism (i.e., scorewise base rates). Although relative risk information is sufficient for most decisions involving the allocation of scarce resources (i.e., treatment and supervision decisions), absolute risk information is required in certain high-stakes evaluations, notably sex offender civil commitment statutes in the USA. Some of these laws require a determination of whether the offender is more likely than not to reoffend, which has been operationalized as a recidivism estimate of 51 % or higher (Doren, 2002).

Effective risk communication should incorporate both absolute and relative risk information (Babchishin & Hanson, 2009). Nominal risk categories (e.g., low/moderate/high) are interpreted inconsistently (Hilton, Carter, Harris, & Sharpe, 2008; Monahan & Silver, 2003) and with more errors than numerical information (Karelitz & Budescu, 2004). A common error in risk interpretation is base rate neglect, which occurs when base rate information is overlooked or not fully considered, leading to inaccurate interpretation of relative risk information (Elmore & Gigerenzer, 2005). For example, "high risk" is often interpreted to mean that recidivism is nearly certain, although the base rate for high-risk offenders may be relatively low (e.g., 20 %). Generally, people tend to overestimate improbable risk and underestimate more common risks (St. Evans, Handley, Perham, Over, & Thompson, 2000; Moore, Derry, McQuay, & Paling, 2008). According to the representativeness heuristic, base rate neglect can also occur based on the similarity between the individual being assessed and the referent group (Tversky & Kahneman, 1974). In risk assessment, for example, if an offender appears similar to offenders from which the recidivism estimates were derived, those estimates are interpreted as plausible. If an offender appears different from the referent group, base rate information (even for high-risk offenders) may be overlooked and can result in substantial overestimation of risk. Optimal risk assessments should therefore communicate relative risk in the context of absolute risk (i.e., base rates).

Although base rates are a central part of risk assessment and are routinely reported, relatively little research has examined the stability of base rates for actuarial risk tools for sex offenders (see Doren, 2004, for an exception). Conventions have yet to be developed concerning the best ways to report this information. This chapter will discuss sexual recidivism base rates and identify possible factors that may affect them. We will also briefly summarize our recent research on this topic. The findings will be discussed in terms of their implications for actuarial risk evaluations.

What Is the Base Rate of Sexual Recidivism?

Sexual recidivism base rates for sex offenders have been difficult to establish due to considerable variability across studies. One of the earliest reviews (Furby, Weinrott, & Blackshaw, 1989) concluded that there was too much variability across studies (in description of sample selection, in recidivism definition, and in follow-up) to adequately aggregate the results into an overall base rate estimate.

More recent meta-analyses and multisite studies have found base rates of roughly 10–15 % after about 5 years of follow-up. Hanson and Bussière (1998) found a sexual recidivism rate of 13 % among 23,393 offenders ($k=61$), with an average follow-up period between 4 and 5 years. Combining 10 samples ($n=4{,}724$), Harris and Hanson (2004) found sexual recidivism rates of 14, 20, and 24 % at 5, 10, and 15 years, respectively. Additionally, Hanson and Morton-Bourgon (2005) found a sexual recidivism rate of 14 % among 19,267 offenders after an average follow-up of 5–6 years ($k=73$).

Despite the similarity in these aggregate findings, the variability across individual studies is substantial. Figure 1 displays sexual recidivism rates from 52 studies in the Hanson and Bussière (1998) meta-analysis, as well as a random sample of 20 newer studies drawn from Hanson and Morton-Bourgon (2009). The recidivism rates are plotted as a function of the follow-up length for the study, with larger bubbles representing larger studies ($N=35{,}522$). As expected, the recidivism rates appear a bit higher in samples with a longer follow-up, but this pattern is fairly weak, indicating considerable variability across studies with similar lengths of follow-up.

Interpreting the variability across studies in Fig. 1 is difficult because the samples come from different time periods and settings and may contain a mix of offenders in terms of their individual risk for recidivism. Base rates tend to be lowest in large, contemporary samples of sex offenders. For example, examining 9,691 sex offenders released from 15 US states in 1994, Langan, Schmitt, and Durose (2003)

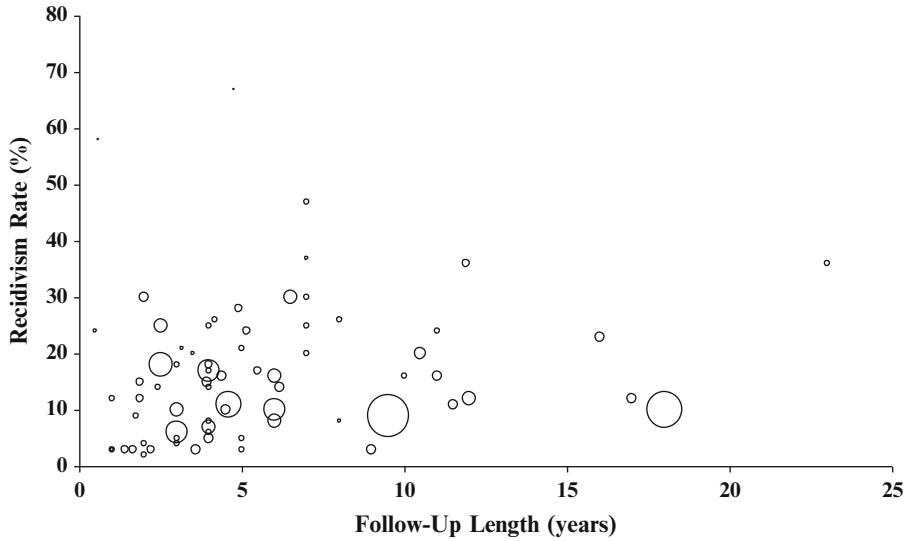

Fig. 1 Sexual recidivism rates ($k = 72$; $N = 35{,}522$)

found an overall sexual rearrest rate of 5.3 % after 3 years. In another US study, Boccaccini, Murrie, Caperton, and Hawes (2009) found a 3.2 % sexual recidivism rate for 1,983 sex offenders in Texas followed up for an average of nearly 5 years. These US findings are similar to some large European studies. For example, a cohort of all sex offenders released from Swedish prisons between 1993 and 1997 ($n = 1{,}303$) had a 5.8 % sexual recidivism rate after an average follow-up of 5.7 years (Långström, 2004). Recent UK studies have found similarly low sexual reconviction rates, such as 5.4 % after 3 years ($n = 3{,}402$ sex offenders who completed community treatment; Barnett, Wakeling, Mandeville-Norden, & Rakestrow, 2010) and 3.6 % after an average of 4.2 years ($n = 3{,}773$ sex offenders who participated in prison treatment; Wakeling, Beech, & Freemantle, 2010).

In contrast to these recent large studies, base rates have been considerably higher for smaller samples preselected for rare sanctions or measures, such as civil commitment. For example, Milloy (2007) found a 23 % sexual recidivism rate after an average follow-up of 6 years for 135 offenders referred for civil commitment between 1996 and 1999 but who were not subsequently committed. A frequently cited long-term recidivism study of 265 civilly committed offenders released between 1959 and 1985 found that 25-year sexual recidivism rates (defined as new charges) estimated from survival analysis were as high as 39 % for rapists and 52 % for child molesters (Prentky, Lee, Knight, & Cerce, 1997).

In his review of long-term recidivism studies, Doren (1998) concluded that the findings of Prentky et al. (1997) were reasonable estimates of recidivism base rates, but he relied heavily on outdated studies (offenders released prior to 1980) and did not take into account that sex offenders civilly committed (or nearly committed) appear to be an unusually small and high-risk subset of sex offenders. Their base rates are, therefore, unlikely to generalize to most sex offender samples. For example, between 1999 and 2004, only 43 offenders were civilly committed in Texas, which represented a small subset (2.2 %) of an original pool of sex offenders in prison who were screened as possible repeat offenders (Boccaccini et al., 2009). Factoring in sex offenders not screened as possible repeaters, as well as those serving community sentences, civilly committed offenders may represent even less than 2 % of all sex offenders. In California, 199 offenders were civilly committed between 2001 and 2005 (California Department of Mental Health, personal communication, June 20, 2011), which represents only 0.5 % of the 38,363 adults arrested for sex offences in that same time period (California Department of Justice, n.d.).

The studies reviewed above highlight that groups of sex offenders vary widely in their risk for recidivism. Although it is possible to identify some subgroups with high recidivism rates, most large samples suggest recidivism rates are fairly low. Nonetheless, the variability in base rates raises questions about which subgroups are higher risk. This requires examining individual risk factors for recidivism. For example, Harris and Hanson (2004) found that incest offenders have the lowest recidivism rates after 10 years (9 %), with the highest rates found among child molesters with male victims (28 %), and intermediate rates for rapists (21 %) and child molesters with female victims (13 %). Considerable research has explored other factors related to sexual recidivism, with a particular focus on static (historical) factors. For example, Harris and Hanson (2004) also found large differences in base rates for offenders with a previous conviction for sex offences (32 %) compared to offenders without (15 %) after 10 years. Similarly, 10-year

recidivism rates were approximately doubled for offenders less than 50 years old (21 %) compared to offenders over 50 (11 %). Other known risk factors for sex offenders include deviant sexual interests, antisocial orientation, sexual preoccupations, intimacy deficits, and emotional congruence with children (Hanson & Morton-Bourgon, 2005; Mann, Hanson, & Thornton, 2010).

Many of these risk factors are incorporated into actuarial scales. Differences in actuarial risk scores should, therefore, explain some of the base rate variability across samples. Variability that persists after controlling for actuarial risk would suggest that there are additional factors not already considered in the actuarial scale that influence the base rates. To the extent that variability persists after controlling for actuarial scores, this variability should be noted when reporting estimated scorewise recidivism rates. In other words, the recidivism base rates reported with actuarial scores can be viewed as a function of the factors included in the actuarial scale, as well as factors not measured by the scale (as well as random error). In the next section, we will discuss some of the external factors that may moderate the relationship between actuarial risk and recidivism rates. Our discussion of potential moderator variables is divided into three categories:

1. Methodological factors—These factors are part of the design of a study and are typically controlled by the researcher (e.g., how recidivism is measured)
2. Individual-level factors—These factors refer to individual characteristics of the offender. They may or may not be under the control of the offender (e.g., age is a risk factor, but not one that the offender can control)
3. Systems-level factors—These are features of the sample and are typically not under control of either the researcher or the offender (e.g., the country from which the sample is obtained)

Methodological Factors

Methodological factors are design features of a study, which are typically under the control of the researcher. Broadly, they relate to the nature of the outcome measure (recidivism) and the quality of the actuarial assessment. The outcome should ideally be measured with a fixed and lengthy follow-up period using street time to assess an inclusive definition of recidivism gleaned from at least one (but preferably more) reliable recidivism source.

Length of Follow-up

Longer follow-up periods increase base rates because recidivists accumulate over time. This increase, however, is nonlinear. Most recidivism occurs within the first few years after release and the longer an offender remains offence-free in the community, the lower their individual probability of recidivism becomes (Harris & Hanson, 2004; Harris, Phenix, Hanson, & Thornton, 2003). Survival curves in Figs. 2 and 3 depict the cumulative and nonlinear increase in sexual recidivism rates over time (these curves display overall survival rates, as well as survival rates broken down by Static-99 risk category). Survival curves depict recidivism rates as a function of time, with offenders starting out with a 100 % survival rate at the moment they are released (no one has reoffended yet), which gradually descends as recidivism accumulates. Given the relatively low base rate of sexual recidivism, optimal follow-up should be at least 5 years (Collaborative Outcome Data Committee, 2007b).

Fixed Versus Variable Follow-up

Given that the relationship between recidivism and length of follow-up is nonlinear (see above), this complicates analysis of

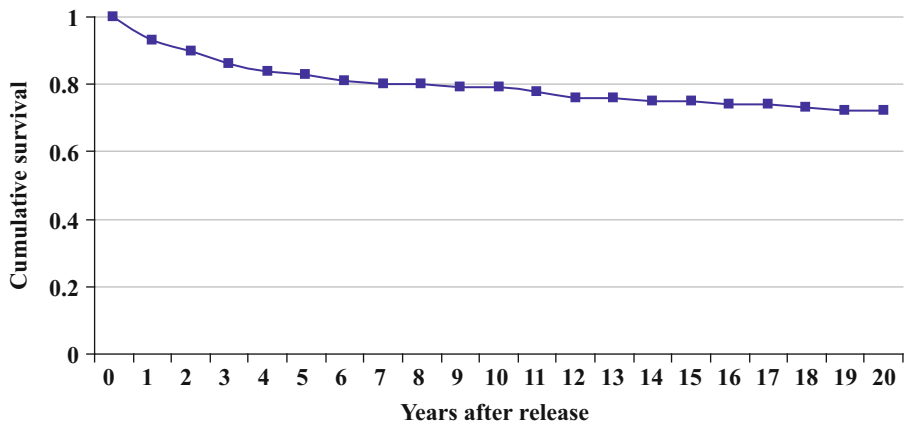

Fig. 2 Survival curve for sexual recidivism ($n = 1{,}086$) [*Note* Data are from the development samples of Static-99 (Hanson & Thornton, 2000)]

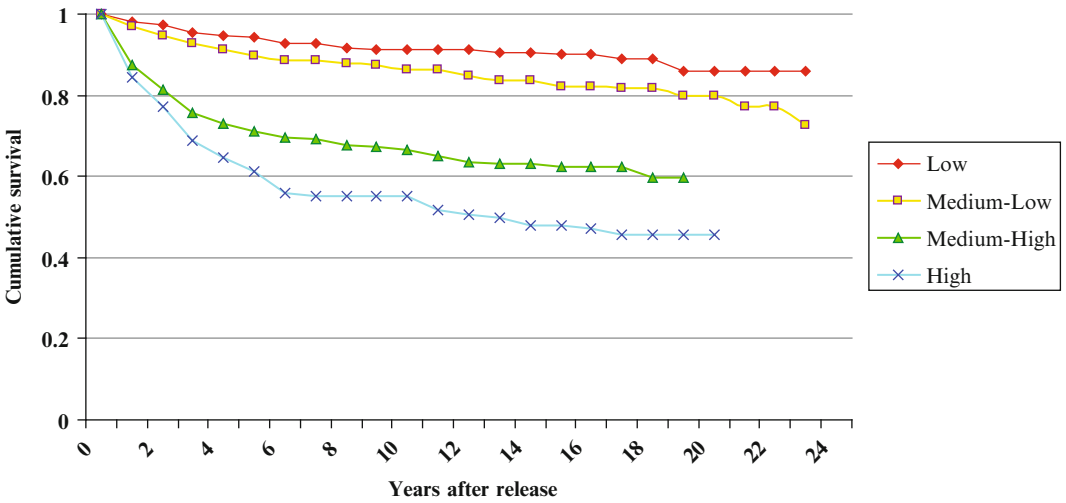

Fig. 3 Survival curve for sexual recidivism by Static-99 risk level ($n = 1{,}086$) [*Note* Data are from the development samples of Static-99 (Hanson & Thornton, 2000)]

data where the offenders have been followed for varying lengths of time. It is common to present a recidivism rate for an "average" follow-up length. When the relationship is nonlinear, however, averaging different time points to estimate recidivism at some midpoint will produce different results than examining that specific time point. The difference increases as the variability in follow-up increases. For example, if all offenders have been followed up between 9 and 11 years, then to assume the overall recidivism rate applies to 10 years is reasonable. However, if the follow-up period ranges from 1 to 15 years, with an average of 8 years, then the overall recidivism rate may not be a good estimate of 8-year recidivism rates.

Ideally, all offenders should have the same length of follow-up. This is rarely achieved. As an alternative, life table survival analysis (Soothill & Gibbens, 1978) provides a reliable method of correcting for variations in follow-up by examining recidivism patterns over time and estimating the expected recidivism rate of the sample for any specified time period. In other words, for a specific follow-up period, it estimates what the recidivism rate for the sample would be if everyone had been followed up to that point. Estimates from survival analysis are generally reliable provided that there are a sufficient number of cases with follow-up data for the time period being estimated. When predicting scorewise base rates for an actuarial risk scale, however, logistic regression provides some advantages over survival analysis (Hanson et al., 2010), but it does require using data with a fixed follow-up.

Street Time

Additionally, using real time or street time in the follow-up calculation can also affect base rates. Real time refers to the actual calendar time that passes between the offender's release from the index offence and when the recidivism information is collected. In contrast, street time deducts time that the offender does not spend in the community. For example, consider a high-risk sex offender who is released from their index sex offence and for whom recidivism information is collected 10 years later. One year into the follow-up period, the offender is arrested for impaired driving causing death and serves 8 years in prison. In real time, the sexual recidivism follow-up period is 10 years, whereas in street time, the follow-up period is 2 years. The use of street time therefore gives a more realistic picture of reoffending because it takes into consideration opportunity to reoffend.

Inclusiveness of Recidivism Definition

More inclusive definitions of sexual recidivism will also logically increase base rates. Examples include using charges as opposed to convictions or counting any sexually motivated offence (e.g., first-degree murder with a sexual component) as opposed to counting only offences with a sexual component in the title (e.g., sexual assault; Harris & Rice, 2007). Although Harris and Hanson (2004) did not find higher sexual recidivism rates in samples using charges compared to samples using convictions, studies directly comparing the rate of charges versus convictions within a single sample do find differences (Epperson, 2003; Johansen, 2007; Langan et al., 2003; Minnesota Department of Corrections, 2007). For example, of 9,691 sex offenders from 15 U.S. states, 5.3 % were charged with a new sex offence within 3 years, whereas only 3.5 % were convicted, suggesting a small but nonetheless meaningful difference (Langan et al., 2003). A similar difference was found in a smaller study ($n = 280$) with a longer follow-up (average of 7 years), where 6.8 % of

offenders were rearrested and only 3.9 % were reconvicted (Johansen, 2007). In short, definition of sexual recidivism seems to account for some variability in base rates.

Number of Recidivism Sources

Using multiple sources of recidivism information would result in more accurate data and could also raise the base rate of reoffending. Previous research on two centralized criminal record sources in the United Kingdom (Offenders Index and the Police National Computer) indicated that both sources contributed unique data on recidivism (Friendship, Thornton, Erikson, & Beech, 2001). Another example comes from the Dynamic Supervision Project (raw data from Hanson, Harris, Scott, & Helmus, 2007), where two recidivism sources (probation/parole officer reports and official national criminal records) revealed a sexual recidivism rate of 6.2 %. Additional information obtained from selected provincial criminal records (British Columbia, Manitoba, and Ontario), informal police contacts, and semi-regular perusal of newspapers increased the known recidivism rate to 7.4 %.

Quality of the Assessment

Methodological factors relating to the quality of the risk assessment can also affect base rates for actuarial scores. Better quality assessments should result in less measurement error, which can affect base rates (in either direction) and reduce the variability in findings. For example, an evaluator who codes an actuarial scale incorrectly or without access to complete information may provide predicted base rates for a given score that contains offenders whose "true" score should be higher or lower.

Greater confidence in the assessment is expected when scales are scored correctly by conscientious properly trained evaluators and who have access to complete data. To the extent that any of these elements are missing, base rates may be affected and the relative predictive accuracy may also decrease. For example, Hanson and colleagues (2007) found that conscientious officers (defined as officers who submitted all the data that were requested of them) showed greater predictive accuracy in their Static-99 and STABLE-2007 scores (ROCs of 0.81 and 0.77, respectively) compared to the complete sample of all officers (ROCs of 0.74 and 0.67, respectively). There is also some evidence that studies with greater interrater reliability show significantly larger effect sizes (Hanson & Morton-Bourgon, 2009). Additionally, training by certified trainers increases the validity of risk assessments (Flores, Lowenkamp, Holsinger, & Latessa, 2006) and ongoing training and support are critical for appropriate scoring of actuarial scales (Bonta, Bogue, Crowley, & Motiuk, 2001).

Individual-Level Factors

The second category of factors that may affect scorewise base rates are individual-level factors not already included in the actuarial scale. It is worth noting that not all external risk factors will add incremental predictive accuracy to an actuarial scale because they may be correlated with other factors already included in the scale.

Dynamic Risk Factors

Many of the commonly used actuarial risk assessment instruments for sex offenders focus on static risk factors (i.e., historical and unchanging factors). Dynamic risk factors are features related to recidivism which can change, and when changed, should alter the likelihood of recidivism (Andrews & Bonta, 2006). Some potential dynamic risk factors for sex offenders identified through meta-analysis include deviant sexual interests, sexual preoccupations, antisocial personality, general self-regulation problems, employment instability, hostility (Hanson & Morton-Bourgon, 2005), intimacy deficits, and emotional congruence with children (Mann et al., 2010). Such risk factors have been found to add incremental predictive validity to static risk factors (Allan, Grace, Rutherford, & Hudson, 2007; Beech, Friendship, Erikson, & Hanson, 2002; Dempster & Hart, 2002; Hanson et al., 2007; Olver, Wong, Nicholaichuk, & Gordon, 2007; Thornton, 2002), and more recent risk assessment scales have incorporated these factors. Some of the more well-known dynamic risk assessment scales include the Violence Risk Scale—Sex Offender version (VRS-SO; Olver et al., 2007), the STABLE-2007 (Hanson et al., 2007), and the Structured Risk Assessment (SRA; Thornton, 2002), all of which have been found to add incremental predictive validity to static actuarial scales.

Treatment

Participation in sex offender treatment may also contribute to base rates. Several meta-analytic reviews have concluded that sex offender treatment is effective in reducing recidivism (Gallagher, Wilson, Hirschfield, Coggeshall, & MacKenzie, 1999; Hall, 1995; Hanson et al., 2002; Hanson, Bourgon, Helmus, & Hodgson, 2009; Lösel & Schmucker, 2005), although some have argued that there is insufficient evidence to establish treatment effectiveness (Furby et al., 1989; Harris, Rice, & Quinsey, 1998; Kenworthy, Adams, Brooks-Gordon, & Fenton, 2004; Rice & Harris, 2003). One of the largest reviews (Lösel & Schmucker, 2005; Schmucker & Lösel, 2008) examined 69 studies ($n = 22{,}181$) and found that the recidivism rate of treated sex offenders was, on

average, 6.4 percentage points lower than untreated sex offenders. More recently, we conducted a meta-analysis (Hanson et al., 2009) using only studies identified as acceptable study quality according to the Collaborative Outcome Data Committee guidelines for evaluating study quality (CODC, 2007a, 2007b). Among 22 studies, the unweighted average sexual recidivism rate for treated sex offenders was 10.9 %, compared to 19.2 % for the comparison group.

Although the more recent meta-analytic reviews suggest significant base rate differences among treated versus untreated offenders, an important limitation of current treatment outcome research is that most studies have poor methodological study quality. Of 127 eligible treatment studies in the Hanson et al. (2009) meta-analysis, only 23 met minimal standards for study quality. Of these, most were rated as "weak" ($k = 18$), with only 5 rated as "good." No studies were considered "strong." Another limitation is that the current research does not answer the question of whether treatment information adds incremental predictive validity to actuarial scores. Evidence for the incremental predictive validity of treatment performance over static actuarial scores has been found in some studies (Beggs & Grace, 2011; Marques, Wiederanders, Day, Nelson, & van Ommeren, 2005; Olver et al., 2007), although further research is needed in this area.

Age at Release

Age is already considered to some extent in many actuarial scales (e.g., SORAG, Static-99), but age at release has been found to add incremental predictive validity above Static-99, with older offenders showing less sexual recidivism (Hanson, 2006). Additionally, Barbaree, Langton, and Blanchard (2007) found that SORAG scores were correlated with age at release, and once the shared variance was removed, age added significantly to the prediction of recidivism.

Systems-Level Factors

Systems-level factors are features which may affect recidivism base rates but are typically not under the control of either the offender or the researcher. The most obvious examples of systems-level factors are the jurisdiction and setting of a sample.

Country

International variability in official crime rates has been routinely documented (Krohn, 2001; Maffei & Merzagora Betsos, 2007; Rushton, 1995; United Nations, 2007), including differences in the official rates of sexual offences (Kutchinsky, 1991; United Nations, 2007). Crime rates are higher in countries with greater urbanization and industrialization (Krohn, 2001). Some of this variation could be due to differences in laws as well as prosecution practices; crime rates could be higher when the number of activities defined as illegal increases and when there are more resources (e.g., financial, political) to prosecute certain offences. For example, in the early 1980s in Canada, drastic broadening of the legislation defining sexual offences was accompanied by large increases in officially reported sexual crimes (Brennan & Taylor-Butts, 2008).

Religiosity may also play a part in the variability of international crime rates. Data from 13 industrial nations found an inverse relationship between overall criminality and religiosity, but a reverse trend was found for sexual offences, with higher rates in countries reporting greater levels of religiosity (Ellis & Peterson, 1996). One possible mediator of this relationship could be the emphasis on the subservience of women common in traditional cultures (Raj, Silverman, Wingood, & Diclemente, 1999).

Jurisdictional base rate differences could also reflect differences in the quality of criminal record-keeping (Marenin, 1997), with poor or unreliable record-keeping resulting in artificially lower base rates. Both Canada and the UK contain centralized national criminal records. In Canada, these records are maintained by the Royal Canadian Mounted Police in the Canadian Police Information Center (CPIC). CPIC records have certain disadvantages, however, because charges not resulting in convictions are inconsistently recorded, and information is submitted only after a disposition is made (e.g., conviction, dismissal, acquittal, stay of proceedings), which can result in substantial delays between the commission of an offence and its appearance on the CPIC. Additionally, records are purged over time due to pardons and inactivity, further reducing their reliability (Hanson & Nicholaichuk, 2000). The UK has two centralized criminal record sources: the Offenders Index (OI) and the Police National Computer (PNC). The disadvantage of these sources is that they exclude Scotland and Northern Ireland, and the OI includes only standard list offences, which tend to be the more serious types of offences (Friendship et al., 2001).

Although criminal records in Canada and the UK are far from perfect, they are nonetheless centralized and relatively comprehensive, whereas the US lacks a comprehensive and centralized criminal record database. Each state maintains its own criminal records and the FBI maintains a separate database, but both sources are sometimes known to have incomplete, inaccurate, and ambiguous data (Laudon, 1986).

Setting

In addition to differences across countries, there may be differences across settings and sample types. Most studies of sex offenders do not use a complete (i.e., random) sample of

offenders. Instead, samples are often preselected based on certain characteristics. For example, some studies are from a particular treatment setting, or a setting where offenders are referred for assessment or other services (e.g., psychiatric assessment), or from a particular institution (e.g., a maximum security prison). In other studies, the sample is defined by certain conditions the offender meets (e.g., their sentence type or other special measures they are subject to). An important empirical question involves the extent to which offenders preselected under some of these conditions would be expected to vary in their risk for recidivism from truly random, unselected samples of offenders.

It is likely that some of the selection processes described above would select offenders on the basis of factors already included, at least to some extent, in the actuarial scales (e.g., prior sex offences). It is also likely that factors external to actuarial scales would affect these preselection processes. Some of these external factors would presumably be related to risk for reoffending (e.g., treatment need, institutional behavior, treatment performance), while others may not be (e.g., offence severity, treatment availability, publicity surrounding a case). Normative data have found that general offenders from institutional samples have consistently higher actuarial risk scores than offenders serving community sentences (Andrews, Bonta, & Wormith, 2004), showing that even crude forms of preselection (sentence type) do seem to distinguish offenders with different risk profiles.

It is plausible that studies of sex offenders over-sample from settings where offenders are preselected to be higher risk. This could be an issue of convenience; good research requires comprehensive information, which is more readily available for offenders serving long sentences or subject to special measures (e.g., high intensity treatment, civil commitment). For example, in Canada, specialized psychological assessments are more common for offenders being considered for a Dangerous Offender or Long-Term Offender designation. Examining different ways offenders are preselected and the extent to which this preselection contributes to recidivism rates may increase our understanding of the extent to which some variables external to actuarials are influencing base rates.

Time Period

Cohort effects can also contribute to base rate variability across samples. Crime rates peaked in the early 1990s and have been generally declining since then. This trend has been found for both violent and property offences in Canada (Mishra & Lalumière, 2009b; Public Safety Canada, 2008) and the USA (Federal Bureau of Investigation, 2007; Mishra & Lalumière, 2009b), using both official crime data as well as victimization surveys (Bureau of Justice Statistics, 2006). Sexual offences appear to be no exception (for a review, see Mishra & Lalumière, 2009a). Declines have been observed in the rates of forcible rape in the USA (Federal Bureau of Investigation, 2007), sexual assault in Canada (Mishra & Lalumière, 2009a), clergy sexual abuse (Terry, 2008), and child sexual abuse measured both by substantiated cases as well as victimization surveys (for a summary, see Finkelhor & Jones, 2006; Jones & Finkelhor, 2003). Recent data from Minnesota ($n = 1{,}782$; Minnesota Department of Corrections, 2007) show a dramatic decline in 3-year rates of sexual rearrest, reconviction, and reincarceration. More broadly, surveys also tend to show that between 2003 and 2011, children's exposure (as victims and as perpetrators) to violence, crime, and abuse have decreased (Finkelhor, Shattuck, Turner, & Hamby, 2014). In addition, risky behaviors typically correlated with criminal behavior (e.g., accidents, suicide, risky sexual behavior such as unprotected sex, dropping out of school), have also shown similar declines (Mishra & Lalumière, 2009b). Given these overall trends and their apparent universality in both Canada and the USA, it is expected that recidivism base rates will show similar changes over time.

Detection Rates

Recidivism rates can also be affected by detection rates because reporting an offence is a necessary precondition for counting an offender as a recidivist. Sexual offences typically have the highest levels of non-reporting (Besserer & Trainor, 2000), with estimated rates between 78 and 84 % (Besserer & Trainor, 2000; Kilpatrick, Edwards, & Seymour, 1992). These startlingly high levels of underreporting, however, do not necessarily mean that the majority of sexual recidivists are not caught. If an offender reoffends with multiple victims (which is not uncommon), it is sufficient for one victim to report the offence for the offender to be counted as a recidivist. It is also possible that offenders previously charged with sexual offences are more likely to be caught in the future, as more supervision may be in place (e.g., monitoring by police or probation officers) and potential victims may be more inclined to report a new offence. Underreporting will, therefore, have some effect on recidivism base rates, but the exact relationship is difficult to estimate.

Correctional Philosophy and Policies

Another factor that could affect recidivism base rates includes features inherent in the correctional system from which the sample is obtained. Considerable research among

general offenders has demonstrated that treatment adhering to the principles of effective correctional practice (matching treatment intensity to risk, targeting criminogenic factors, and delivering treatment appropriate to the abilities and learning style of offenders) produces significant reductions in recidivism (Andrews & Bonta, 2006). Similar results have also been obtained with sex offender treatment studies (Hanson et al., 2009). Additionally, considerable research has found that punitive approaches (e.g., longer sentences) and poor quality treatment do not reduce reoffending and may be associated with slight increases in reoffending (Andrews & Bonta, 2006; Smith, Goggin, & Gendreau, 2002). Given this body of research, we expect that jurisdictions with more punitive correctional systems (e.g., longer and harsher sentences, less treatment) would show higher base rates than systems with more rehabilitative approaches.

Recidivism rates may also be affected by sentencing policies. Specifically, the rise of civil commitment and longer sentences for sex offenders in the USA could remove the highest risk offenders from recidivism studies (because they are not released), thereby lowering the observed base rates in current studies. This is unlikely to have more than a trivial impact on base rates given that civilly committed offenders represent a very small portion of sex offender samples (e.g., 0.5 % to 2 %) and that distributions of risk scores are largely similar across samples from countries with profound differences in sentencing policies (Hanson, Lloyd, Helmus, & Thornton, 2012).

Community Supervision

The existence and restrictiveness of community supervision is another feature of correctional systems that may have some impact on base rates. Previous meta-analytic research on community supervision found a significant reduction in general recidivism, although the magnitude of this difference was trivial (Bonta, Rugge, Scott, Bourgon, & Yessine, 2008). Further analyses of these studies, however, revealed that community supervision that was delivered in adherence to the principles of effective correctional treatment showed meaningful reductions in recidivism (Bourgon, 2011).

Although community supervision delivered with appropriate treatment may reduce reoffending, highly restrictive supervision may have the opposite effect. There is some evidence that more intensive supervision with home visits results in higher detection rates for new offences (Stalans, Seng, Yarnold, Lavery, & Swartz, 2001). Additionally, intensive supervision programs with high revocation rates for technical breaches may artificially suppress recidivism in the short term by reducing the opportunity to commit new offences. This effect can be mitigated somewhat by analyses using street time as opposed to real time.

Summary

Table 1 presents a summary of the factors discussed above. Though not an exhaustive list, it highlights the number and diversity of factors that could affect recidivism base rates, although assessing their impact is likely to be complicated by their intercorrelations. For example, cohort differences may be caused by a variety of other factors, including an aging population, as well as changes in correctional environments over time (e.g., providing better quality treatment). Another example is that differences across countries could be related to differing correctional philosophies as well as the quality of criminal records.

Given the large number of factors external to actuarial scales for which direct or indirect evidence suggests they might affect base rates, it may be naïve to expect consistency across samples in the recidivism rates estimated for each actuarial score. Our increasing knowledge of some of these factors led us to question whether the recidivism norms for one commonly used actuarial risk assessment scale, Static-99 (described below), remain stable across time and samples. Our research has focused on Static-99 because it has considerably more validation studies than any other actuarial scale used for sex offenders (Hanson & Morton-Bourgon, 2009), thereby providing a rich source of data for cross-sample comparisons.

In the next section, we will briefly summarize our recent research assessing the variability in recidivism base rates across samples (after controlling for Static-99R scores) and exploring factors external to the scale which may influence the recidivism rates.

Table 1 Summary of factors that may affect recidivism base rates per actuarial score

Methodological factors	Individual-level factors	Systems-level factors
Length of follow-up	Dynamic risk factors	Country
Fixed vs. variable follow-up	Treatment	Setting
Street time	Age at release	Time period
Inclusiveness of recidivism definition		Detection rates
Number of recidivism sources		Correctional philosophy
Quality of the risk assessment		Community supervision

Recent Research Results

Age: Developing Static-99/R

In a recent study, we (Helmus, Thornton, Hanson, & Babchishin, 2012) examined age at release, sexual recidivism, and Static-99 scores in 23 samples (N=8,106). Even though Static-99 already contained a dichotomous item for age at release, age still added incremental accuracy for the prediction of sexual recidivism after controlling for Static-99 scores. This indicated that age was not sufficiently addressed in the scale.

To develop new age weights, the overall sample was divided into a development sample (5,714 offenders from 23 samples) and a validation sample (2,392 cases from 15 samples). The new age item was scored on a 4-point scale, where offenders less than 35 received 1 point, offenders 35 to 39.9 received 0 points, offenders 40 to 59.9 received −1 point, and offenders age 60 and above received −3 points. With the new age weights, the resulting scale was called Static-99R.

After creating Static-99R, analyses in the validation sample indicated that age no longer added incrementally to the prediction of sexual recidivism, meaning that age does not need to be considered further after using Static-99R. The new age weights did not meaningfully improve the relative predictive accuracy of the scale, but it did improve the absolute predictive accuracy. Specifically, observed recidivism rates were not significantly different from predicted recidivism rates for offenders in various age groups (for comparison, Static-99 significantly overestimated recidivism for offenders age 50 and above). Development of the revised age item, therefore, improved the absolute recidivism estimates of the scale, and analyses suggested that age no longer contributed to variability in scorewise base rates. In other words, after scoring Static-99R, age at release does not need to be considered further.

Variability in Absolute Recidivism Rates for Static-99R

Although the creation of Static-99R improved the recidivism estimates by better incorporating age at release information, significant variability in Static-99R recidivism estimates persists. Examining 8,106 offenders from 23 samples, we (Helmus, Hanson, Thornton, Babchishin, & Harris, 2012) found that relative predictive accuracy for Static-99R was fairly consistent across samples, but absolute predictive accuracy was not. Predicted recidivism rates were examined for three scores on the Static-99R (scores of 0, 2, and 5). The expected 5-year recidivism rate for offenders with the median score on Static-99R (a score of 2) was 7 %. However, meta-analysis indicated that the predicted rates for the same risk scores were significantly different across studies, demonstrating moderate to large amounts of variability. For example, the predicted 10-year sexual recidivism rate for a Static-99R score of 2 was as low as 3 % in some samples and as high as 20 % in other samples. A visual representation of this variability is presented in Fig. 4. This finding of scorewise base rate variability has also been found for Static-2002R (Helmus, Hanson et al., 2012) and the MATS-1 risk scale (Helmus & Thornton, 2014).

Possible Moderators of the Base Rate Variability

Attempts to understand which factors are contributing to the variability in recidivism rates for Static-99R are ongoing. Preliminary analyses indicated that relatively small amounts (if any) of the base rate variability are convincingly explained by factors such as the recidivism definition (charges versus convictions), the number of recidivism sources, use of street time (versus calendar time), offender race, offender type (rapist versus child molester), and year of release (see Helmus, 2009, for review). Although analyses did find a significant and meaningful effect for the country of the sample, with higher scorewise recidivism estimates generally found in the United States, this effect became nonsignificant after controlling for the amount of preselection in the sample (Helmus, 2009). Sample preselection generally had the most substantial influence on the recidivism estimates, explaining over half of the variability across samples. The lowest recidivism rates were found among routine (i.e., relatively unselected) correctional samples, and the highest rates were found among samples of offenders selected for some kind of sanction, measure, or intervention that was generally reserved only for the highest risk cases (Helmus, 2009).

Further analyses of the preselection effect have demonstrated that it is likely related to the density of external risk factors in the samples (e.g., dynamic risk factors; Hanson & Thornton, 2012). Consequently, recidivism estimates for the Static-99R are currently presented for different normative groups (see www.static99.org)

Conclusion

Previous meta-analyses have suggested that the base rate of sexual recidivism is close to 15 % after about 5 years (Hanson & Bussière, 1998; Hanson & Morton-Bourgon, 2005; A. J. R. Harris & Hanson, 2004), but there is substantial variability in base rates across studies. That variability is partially due to differences in follow-up and because most studies do not take into account actuarial risk. In a recent study, we found that most sex offenders would be expected to have

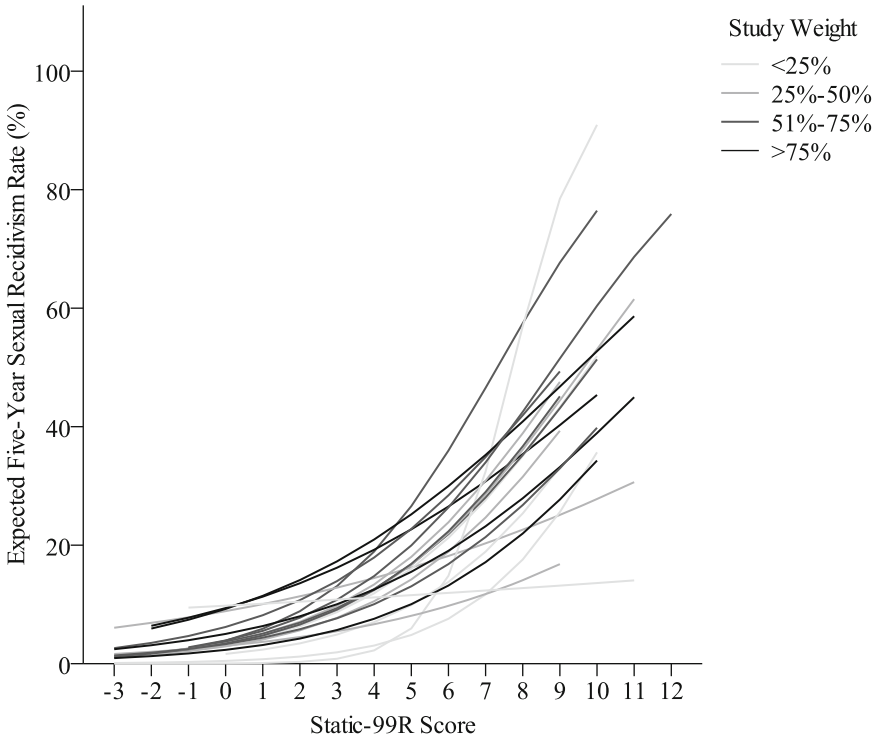

Fig. 4 Predicted recidivism rates (from logistic regression) per Static-99R score across diverse samples [*Note* This is reproduced from Helmus, Hanson et al. (2012). Sample weight was computed using the inverse of the variance of the slope coefficient from logistic regression and divided into four categories: (1) studies with lowest weight (*bottom* 25 %), (2) studies with low average weights (25–50 %), (3) studies with higher weight (51–75 %), and (4) studies with the largest amount of weight (*top* 75 %)]

recidivism rates of 7 % or less (Helmus, Hanson et al., 2012), which is meaningfully lower than the estimates from previous meta-analyses (Hanson & Bussière, 1998; Hanson & Morton-Bourgon, 2005; A. J. R. Harris & Hanson, 2004) and is also much lower than the public generally believes (Levenson, Brannon, Fortney, & Baker, 2007).

A plausible explanation for the higher estimates in previous meta-analyses is that research oversamples from higher risk settings. This could be an issue of convenience; good research requires comprehensive information, which is more readily available for offenders serving long sentences or subject to special measures (e.g., high intensity treatment, civil commitment).

Although recidivism rates for most offenders are lower than previous research suggests, there is also significant variability in scorewise recidivism estimates across samples. Many factors that were discussed may have an impact on scorewise recidivism estimates, but our research suggests that the most meaningful influence on the recidivism rates may be the density of risk factors external to Static-99R, which is likely indicated by the amount of preselection in the sample (Hanson & Thornton, 2012; Helmus, 2009).

Where does this leave evaluators? Well, it leaves them in a challenging position. These findings indicate that predicting scorewise base rates is not as simple as we once thought it was. When reporting recidivism norms for a given actuarial scale, evaluators must acknowledge that there is notable variability in recidivism rates across samples, and that the source of that variability is not fully understood.

How to best account for this variability in applied risk assessments is not clear. Current recommendations have focused on sample preselection (Phenix, Helmus, & Hanson, 2012). Other options could be to develop local norms based on large samples. It is possible that future research will be able to provide estimates that better account for the variability across studies and settings. Until the variability is fully understood, however, evaluators will need to use their judgement to determine the applicability of recidivism estimates to the offender they are evaluating.

Given the variability in absolute risk, evaluators should also explore options for reporting relative risk (e.g., percentiles, risk ratios), which has been found to be more stable across samples and settings (Helmus, Hanson et al., 2012). For Static-99R and Static-2002R, we have developed both percentiles (Hanson et al., 2012) and risk ratios (Babchishin, Hanson, & Helmus, 2012; Hanson, Babchishin, Helmus, & Thornton, 2013). Other recommendations for reporting absolute and relative risk can be found in Babchishin and Hanson (2009). For many decisions involving allocation of limited resources (e.g., determining how often an offender must report to a probation officer), relative risk is a highly stable and useful property of actuarial risk scales.

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The Sex Offender Risk Appraisal Guide

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Background

In this chapter, we describe the development, validation, replication, and recommended forensic application of the actuarial *Sex Offender Risk Appraisal Guide* (SORAG). We specifically address its application in the United States which is the main focus of this volume. Among psychologists, the fundamental rationale for actuarial violence risk assessment owes its origin more than a half century ago to the recognition that actuarial techniques are more accurate than clinical judgment, experience, and intuition (Meehl, 1954; see also Ægisdóttir et al., 2006; Grove & Meehl, 1996). This is especially true for violence risk (Hanson & Morton-Bourgon, 2009; Hilton, Harris, & Rice, 2006; Campbell, French, & Gendreau, 2009). The general empirical superiority of comprehensive forensic actuarial tools over unaided clinical judgment is now beyond responsible debate (see also Monahan, 2006; Skeem & Monahan, 2011). The SORAG is actuarial inasmuch as the items were selected based on their measured relationships with outcomes in specific development samples, and scores are accompanied by tables of measured recidivism rates (experience tables) and percentiles also based on large samples. In this context, the meaning of "actuarial" excludes certain other mechanical or formulaic ways of yielding numerical scores that are not based on measured relationships in development samples and that do not provide experience/outcome tables and percentile norms. Before we discuss the system specifically, we address one forensic issue that arises when an actuarial tool such as the SORAG is used in the United States.

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The Appropriate Outcome for Sex Offenders

What is the outcome relevant to legislation and policy? In several US states, various statutes pertaining to the preventive detention of sexually violent persons (SVP) specify a concern about subsequent sexually motivated violent crime. We understand "violence" in this context to involve at least some specific risk of physical harm (as in attempting to commit a rape by threatening a victim with a firearm) or physical contact between perpetrator and victim. In general, such statutes do not specify the time frame of concern. Some SVP statutes refer to "predatory" sexual violence, but this term is also not defined. Preventive detention statutes exist in other countries, but we are not aware of any that limit application to sex offenders' sexual recidivism specifically. In Canada, for example, legislation permits the prosecution to apply for designation as a "dangerous offender" at the time of sentencing. The Canadian statute refers to the risk of "causing death or injury to other persons, or inflicting severe psychological damage," and permits indefinite incarceration. By far the majority of those designated as dangerous offenders are sex offenders, but the outcome of legislative concern is clearly subsequent violent crime in general.

Outside the execution of SVP preventive detention statutes in the United States and elsewhere, criminal justice officials and forensic clinicians everywhere make decisions about sentencing, probation, and parole of sex offenders. Indeed, even in the United States, non-SVP-related decisions about sex offenders occur much more often than SVP-related decisions. Professionals also make decisions about treatment, conditions of release, and the intensity of community supervision. When making these decisions about known sex offenders, what outcome is (and should be) of primary concern to such clinicians and officials? What outcome is of concern to the public? We accept that there might be some division of opinion here, but we believe that violent crime in general is the principal concern for the public and for most criminal justice applications. That is, just as a rape by a released sex offender constitutes failure, no sentencing

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judge, parole board, probation officer, forensic psychologist, or taxpayer regards it as success when a discretionarily released sex offender kills a store clerk during a robbery.

What is the outcome for which assessments are designed? In addition to the SORAG and VRAG, there are several other actuarial systems intended for use in evaluating sex offenders' risk of recidivism, and these rank sex offenders differently than do the VRAG and SORAG (Barbaree, Langton, & Peacock, 2006). The most commonly researched are the various versions of the Static-99/Static-99R, the MnSOST/MnSOST-R, and the various forms of the Risk Matrix 2000 (Hanson & Morton-Bourgon, 2009). Generally, these latter assessments were constructed using *sexual recidivism*. But what is sexual recidivism in this context? Sexual recidivism has been operationalized as the subsequent appearance of a crime labeled as sexual on releasees' criminal justice system records. Sexual crimes include those called rape, sexual assault or battery, indecent assault, and so on. It is often unclear whether such crimes as sodomy, incest, gross indecency, sexual interference, and so on would have been counted as sexual recidivism. Another complication is that criminal codes use different terms to refer to the same criminal act (e.g., "rape" is called "sexual assault" in the Canadian code) and the same terms to refer to different acts (e.g., "sexual assault" almost always involves physical contact in the application of the Canadian code, while in some US jurisdictions "sexual assault" would rarely involve physical contact). The best research method to clarify such things would, of course, entail examining detailed offense descriptions, but this is very rarely done. Typically, developers of actuarial systems for "sexual" recidivism use only the evident sexual content of the offenses named in the records, and many procedural details pertaining to how ambiguities are addressed have simply been omitted from the published reports (e.g., Hanson & Morton-Bourgon, 2009). Where it is specified, it is often the case that both contact and noncontact offenses are included in the definition of sexual recidivism (e.g., Kingston, Seto, Firestone, & Bradford, 2010; Ducro & Pham, 2006). Moreover, in the relatively rare cases where "sexual recidivism" has been divided into "violent" sexual recidivism (usually defined as involving physical contact of a sexual nature), versus "nonviolent" sexual offenses, nonviolent sexual offenses are found to be nearly as frequent, or even more frequent, than violent sexual offenses, suggesting that "sexual recidivism" as usually operationalized in research on the development and validation of actuarial systems for its prediction captures a considerable number of noncontact offenses. For example, Rettenberger, Matthes, Boer, and Eher (2010) reported a sexual recidivism rate of 4.3 % compared to a sexually violent (i.e., hands-on) recidivism rate of 1.8 %. Ducro and Pham (2006) reported a violent (including hands-on sexual) recidivism rate of 17 %, whereas the sexual recidivism rate was 25 % in the same time period. We (Rice, Harris, Lang, & Cormier, 2006) observed that of 195 offenses labeled as sexual on criminal rapsheets, 21 % were nonviolent according to the label, and 63 % of those were actually nonviolent upon reading more detailed information. Thus, counting all rapsheet sexual offenses as sexual recidivism increases the base rate of sexual offenses to a proportion closer to the probably true rate, but does so at the expense of including a sizeable proportion of hands-off (i.e., nonviolent), sexually motivated offenses. In addition, it is likely that many crimes lacking any sexual connotation in their names (e.g., battery, assault, kidnapping, murder) are actually sexually motivated criminal acts when committed by sex offenders. Although most published reports about the development of actuarial systems for assessing the risk of sexual recidivism also lack satisfactory details about how these crimes / offenses are addressed, it is safe to conclude that most research in this area does not count such offenses as sexual, even when perpetrated by known sex offenders.

In sum, although there are several actuarial risk assessments for sex offenders, the outcome for which most were designed is not that of primary forensic concern in almost every jurisdiction—subsequent violent crime. Even in the minority case where the narrower outcome of sexually violent recidivism is the forensic issue (i.e., SVP statutes in the United States), the operationalization of "sexual" recidivism upon which these actuarials are based appears to be different than that legislatively mandated. Also, as discussed later, the experience tables for all actuarial tools are based entirely on officially detected recidivism, which is known to be a subset of the actual outcomes of forensic concern—subsequent criminality, detection by the criminal justice system notwithstanding.

In an attempt to address the issue pertaining to officially detected sexually motivated violence and classification from police records, we examined such records in conjunction with detailed offense descriptions (Rice et al., 2006). It was evident that research that measures sexual recidivism based only on police "rapsheets" misses sex offenders' most serious sexually violent reoffenses (homicide especially), and needlessly underestimates the base rate of officially detected sexually violent recidivism (by inappropriately assuming that all charges for assault, battery, kidnapping, abduction, and so on are nonsexual). In our study, research assistants read all information available about the referral and all past offenses of 177 men referred to our sex offender program. Then, research assistants used a definition of sexually motivated that was consistent with the U.S. legal understanding of the term in order to rate offenders' referral and past offenses as "clearly," "probably," "possibly," "probably not," or "clearly not" sexually motivated. Omitting the "possibly" sexually motivated offenses, we found that 31 % of the offenders had committed referral offenses that were probably or clearly sexually motivated and violent but for which

the rapsheets gave no indication the offense was sexual. For past offenses, 33 % of those labeled as violent but nonsexual on the rapsheet were rated as probably or clearly sexually motivated based on all information available. In addition, a small proportion of the offenses labeled as nonsexual and nonviolent on the offenders' criminal rapsheets were also rated probably or clearly sexually motivated and violent according to all information available. We concluded that one would have to multiply the number of rapsheet sexual offenses by between 1.4 and 1.7 in order to get a more accurate number of the actually sexually motivated violent offenses committed. We then used our results to develop a more fully informed measure of violent sexual recidivism that included homicides, kidnappings, forcible confinements, and a proportion of nonsexual assaults. Overall, the more fully informed measure of violent sexual recidivism was more closely related to rapsheet violent recidivism than to rapsheet sexual recidivism. Furthermore, rapsheet sexual recidivism was better predicted by apparently nonsexual past rapsheet violent offenses (including those that, given full information, were coded as violent sex offenses) than it was by past rapsheet sex offenses. That is, among sex offenders released from secure custody, officially detected violent recidivism was a better index of officially detected sexually motivated violence than sexual recidivism recorded on rapsheets (Rice et al., 2006). Thus, even when the public policy concern is only the risk of sexually motivated violent reoffending, actuarial assessment based on officially detected violent recidivism was a closer approximation to the outcome of most legislative and public policy concern than was sexual recidivism as usually operationalized.

The Development of the SORAG

The SORAG is a modification of the *Violence Risk Appraisal Guide* (VRAG), the first and most thoroughly researched actuarial assessment for the risk of violent criminal recidivism among men who have committed at least one violent offense (Harris, Rice, & Quinsey, 1993). Elsewhere, we have described the derivation of the VRAG in detail (Quinsey, Harris, Rice, & Cormier, 2006), but some introduction to the VRAG is required for understanding the provenance of the SORAG. Each possible VRAG score has been associated with 1 of 9 categories, each in turn bearing a known estimated rate of violent recidivism in 7 years, increasing linearly from 0 to 100 %. There are also tables for 10 years of opportunity, and each VRAG score is associated with a percentile whereby the risk represented by an individual may also be determined according to his standing relative to violent offenders in general.

Development of the VRAG was based on follow-up research where the outcome was any new criminal charge for a violent offense (coded blind to independent variables). Violence included homicide, attempted homicide, kidnapping, forcible confinement, wounding, assault, armed robbery, and rape. Although some sexual assaults rely on guile or abuse of trust rather than physical force, we counted all sexual assaults involving physical contact as violent. Such noncontact sex offenses as exhibitionism and voyeurism were not counted as violent recidivism. Criminal charges and convictions are imperfect measures of actual violent conduct. Wrongful arrest and conviction occur while some violent crimes go unreported to the authorities; some police investigations fail to identify a perpetrator; some identified perpetrators avoid apprehension and arrest; and some guilty perpetrators are not convicted. Our research has indicated, however, that charges entail less measurement error than do convictions. Although charges appear to be optimal, studies have shown that criminal convictions, institutional records of aggression, and self-reported violence are generally predicted by the same variables, especially VRAG scores (Harris et al., 2015). For the purposes of construction, the outcome was dichotomous such that the dependent variable in analyses was at least one occurrence of violent recidivism. Opportunity was operationalized as release to the community, minimum-security hospital, or a halfway house. The VRAG development sample had a mean of 81.5 ($SD = 60.6$) months of opportunity for recidivism and time institutionalized for nonviolent offenses (or other reasons) was subtracted in calculating opportunity.

Approximately 50 potential predictor variables were considered as possible VRAG items, including those related to psychiatric history, distress and diagnosis, expressions of remorse, volunteering for treatment, whether the offender was regarded by clinicians as having "insight," and so on. In developing the VRAG, the tested variables reflected childhood history (e.g., conduct disorder, school maladjustment, education), adult adjustment (e.g., criminal history, unemployment, marital status, socioeconomic status), index offense (e.g., number and sex of victims, victim injuries), and assessment results that could be obtained shortly after the index offense (e.g., IQ, MMPI, PCL-R score, phallometric assessment), all coded (blind to outcome) to a high standard of inter-rater reliability from records including thorough psychosocial histories.

The VRAG was constructed to be an actuarial instrument for serious offenders for whom the courts, clinicians, and criminal justice officials need to make predictive decisions—those who have already committed at least one serious antisocial act. Thus, offenders with only minor offenses and men without offenses were not included in our heterogeneous sample of serious offenders from two previous studies (Rice, Harris, Lang, & Bell, 1990; Rice, Harris, & Cormier, 1992). Of these 695 cases, 618 had an opportunity to recidivate and there were few differences between those who did or did not

have an opportunity. Potential items without a bivariate relationship with violent recidivism were not considered further. Additionally, from highly collinear pairs (e.g., prior criminal charges and prior convictions for violent offenses), the variable with the higher association with violent recidivism was retained. Multiple regression identified variables with independent and incremental contributions to predicting violent recidivism. Only variables selected by the regression analyses in subsidiary analyses were eligible in a final regression using the entire sample of cases, yielding the 12 VRAG items. Logistic regression and Cox proportional hazards regression were shown to have selected substantially the same items as would ordinal measures of recidivism—number, severity, and rapidity of violent reoffenses (Quinsey, Harris et al., 2006).

Unitary item weights would have performed well (Harris et al., 1993; see also Grove & Meehl, 1996), but the small improvement afforded by differential weights was potentially worthwhile. Thus, a method described by Nuffield (1982) was used where weights are computed actuarially using the item's base rate relationship with the outcome. This meant that a score of zero was recommended for missing items because that added the score for the base rate. Now, we recommend prorating (Harris et al., 2015, pp. 323–324; Quinsey, Harris et al., 2006, pp. 164). Elsewhere (Appendices of Quinsey, Harris et al., 2006), we provided an extensive manual for the VRAG including scoring instructions, norms, frequently asked questions, how to compile suitable psychosocial histories, practice material, and recommended report format. Whether intended for research or individual assessment, the appropriate basis for scoring the VRAG is a psychosocial history (see Quinsey, Harris et al., 2006) that addresses childhood conduct, family background, antisocial and criminal behavior, psychological problems, and details of all offenses. Adequate psychosocial histories rely on collateral information (i.e., from friends, family, schools, correctional facilities, police, and the courts). VRAG scoring is not a typical clinical task because it requires no contact between assessor and assessee. But compiling appropriate psychosocial histories clearly necessitates considerable clinical expertise.

The VRAG is properly used for men (prisoners or forensic patients) who have committed a serious offense (e.g., Harris, Rice, & Cormier, 2002; Pham, Ducro, Marghem, & Réveillère, 2005; Snowden, Gray, Taylor, & MacCulloch, 2007; Thomson, 2005; Urbaniok, Noll, Grunewald, Steinbach, & Endrass, 2006; Yessine & Bonta, 2006) including sex offenders (e.g., Dempster, 1998; Harris et al., 2003; Rettenberger & Eher, 2007) in that it has been reported to predict violent recidivism, and its severity and rapidity, all with large effect sizes (Harris, Rice, & Quinsey, 2010; Rice & Harris, 2005). It has also predicted violence (where criminal charges have not necessarily been laid) for male and female civil psychiatric patients (e.g., Doyle, Dolan, & McGovern, 2002; Gray, Fitzgerald, Taylor, MacCulloch, & Snowden, 2007; Harris, Rice, & Camilleri, 2004). In development and subsequent evaluations, VRAG scoring has yielded very high inter-rater reliability (Rice, Harris, & Hilton, 2010). The mean VRAG score for the development sample was 0.91 ($SD = 12.9$) and the standard error of measurement was 4.1, roughly half a VRAG category. The 95 % confidence intervals for categories increase slightly as scores increase (Harris et al., 1993), but the standard error of measurement and observed rates of violent recidivism are such that any "true" score is expected to differ from an obtained score by more than one category less than five percent of the time (Harris et al., 1993).

The VRAG has been shown to generalize across violent outcomes (number of violent reoffenses, institutional violence, very serious violence, self-reported violence, general recidivism, overall severity of violent recidivism, rapidity of violent failure); follow-up times (12 weeks to 20 years); countries (eight in North America and Europe); populations (mentally disordered offenders, sexual aggressors, violent felons, developmentally delayed sex offenders, emergency psychiatric patients, wife assaulters, and juvenile offenders), all extensively reviewed elsewhere (Harris et al., 2010; Quinsey, Harris et al., 2006; Harris et al., 2015). Replications generally report that obtained rates of violent recidivism match the predicted rates; if the average score of the sample is similar, the follow-up duration is approximately the same as for the norms, and the outcome is similar (Harris & Rice, 2007a; Harris et al., 2015).

Rationale for the SORAG

The foregoing notwithstanding, sex offenders' rates of violent recidivism were higher than expected based on VRAG scores (Harris & Rice, 2007a; Rice & Harris, 1997), suggesting different norms might be necessary for men institutionalized for sex offenses against minors and sexual assaults against women than for other offenders. Contrary to the claims of those who claim sex offenders are of lower risk than other offenders, every study we are aware of that has included VRAG scores for their sample of sex offenders (Dempster, 1998; Harris et al., 2003; Langton et al., 2007; Rice & Harris, 1997) has obtained a mean VRAG score for sex offenders that is considerably higher than that obtained in the development sample for the VRAG. Specifically, the weighted VRAG score in the three studies cited above was 5.03 vs. 0.90 in the development sample, further supporting the view that among offenders scored on actuarial instruments, sex offenders present a higher risk than other offenders. Variables associated with violent recidivism among such

sex offenders were slightly different from those shown to be related for violent offenders without histories of sexual offending (Quinsey, Rice, & Harris, 1995; Rice, Harris, & Quinsey, 1990; Rice, Quinsey, & Harris, 1991). For example, phallometric measurement of sexual deviance has only been reported to predict recidivism among sex offenders. An index offense of homicide is associated with lower-than-average risk only among non-sex offenders, and the relationships among recidivism and victims' age and sex differ for sex offenders compared to other violent offenders.

Consequently, the VRAG was modified to assess the risk of violent criminal recidivism among sex offenders by eliminating two items (female index victim and index victim injury, both inverse scored) that afforded no incremental value among sex offenders, and adding four that did (in decreasing order of weights: prior history of violent offending, prior sexual convictions, adult female or male child victims, and deviant sexual preferences assessed phallometrically). Norms were derived as in the VRAG based on a sample of 288 sex offenders (Rice, Harris, Lang et al., 1990, 1991) where the outcome was that used in developing the VRAG—at least one subsequent charge for a violent offense. Weights for all new items used the same Nuffield (1982) method as in the VRAG and the 10 VRAG items retained their VRAG weights. The result was the 14-item Sex Offender Risk Appraisal Guide (SORAG). The items, ranges of scores, and bivariate correlations with violent recidivism are shown in Table 1. As with the VRAG, SORAG scores are associated with one of nine categories, each with a measured rate of violent recidivism in 7 years, increasing linearly from 7 to 100 %. There are norms for both 7 and 10 years of opportunity, and each SORAG score is also associated with a percentile rank. The base rate of violent recidivism in the developmental sample was 42 % in 7 years, which increased to 58 % in 10 years (Rice & Harris, 1995). Elsewhere (Quinsey, Harris et al., 2006, Appendices), there is an extensive manual for the SORAG including detailed scoring instructions, norms for the standard SORAG categories, frequently asked questions, instructions for compiling a suitable psychosocial history, practice material, and recommended report format. As for the VRAG, up to four missing SORAG items may be prorated or substituted (see Quinsey, Harris et al., 2006 for details regarding acceptable substitutions).

The inter-rater reliability of the SORAG was 0.90 in construction (Quinsey, Harris et al., 2006) and similar high reliability coefficients have been reported in replication studies (see Table 2). In development, SORAG scores had a mean of 8.90 (SD = 11.33) and a standard error of measurement of 3.58, with a mean of 9.99 (SD = 10.8) and a standard error of measurement of 0.012 in a subsequent replication (Harris et al., 2003). That replication reported very close correspondence between observed rates of violent recidivism for SORAG categories and those expected on the basis of the norms. In the development sample, SORAG scores yielded an ROC area of 0.75 in predicting violent recidivism that was replicated (0.73) in the independent evaluation (Harris et al., 2003), which also reported that SORAG scores significantly predicted the severity and rapidity of violent recidivism. Of the 11 nonoverlapping samples of released sex offenders (see Table 2), 9 reported predictive accuracy for violence (including contact sexual recidivism), and SORAG scores have yielded a mean ROC area of 0.74 (see also "Replications

Table 1 Sex offender risk appraisal guide items, ranges indicating relative weights and correlations with violent recidivism in the construction sample (see Harris et al, 2015; Quinsey, Harris et al., 2006 for definitions, instructions, norms, and practice materials)

Item	Score range	r[a]
1. Lived with both parents to age 16	5	0.19
2. Elementary school maladjustment	6	0.18
3. Alcohol problems	3	0.07
4. Never married	3	0.18
5. Nonviolent criminal history	5	0.10
6. Violent criminal history	7	0.05
7. Convictions for prior sex offenses	6	0.17
8. History of sex offenses against girls only[b]	4	0.13
9. Failure on prior conditional release	3	0.13
10. Age at index offense[b]	7	0.18
11. DSM-III Personality Disorder	5	0.25
12. DSM-III Schizophrenia[b]	4	0.10
13. Phallometric test results	2	0.14
14. Psychopathy Checklist- Revised (Hare, 2003) score	17	0.26

[a]Point-biserial correlations
[b]Inversely scored item

Table 2 Replications of the SORAG[a]

Study	N	IRR	Mean (SD) years follow-up[b]	AUC			Mean year or decade released	Mean score (SD)	Recidivism rate		
				Violent[c]	Sexual[d]	Any			Violent[c]	Sexual[d]	Any
1. Rettenberger et al. (2010)	372	0.93 (ICC)	3 years (0.97)	0.72 (0.64–0.80)	0.69 (0.60–0.78)	0.75 (0.69–0.80)	2000s	6.05 (13.4)	12.2	4.3	25.9
(a) Eher et al. (in press)	263	0.93 (ICC)	6.4(0.9)	0.75	0.72	0.77	2000s	5.7 (13.4)	24.3	11.0	40.7
(b) Eher (2010)	127	–	6.38	0.75	0.81	0.76	2000s	–	12.0	13.0	29.0
(c) Rettenberger & Eher(2007)	275	–	3.6	0.75	0.71	0.77	2000s				
2. Kingston et al. (2010)	586	–	10.6(4.3)	0.74	0.71	0.75	1980s	3.35 (2.21)	27.5	16.7	37.4
(a) Bani-Yagboub et al. (2010)	526	–	12.0(3.9)	0.72	0.69	–	1980s	–	–	–	–
(b) Kingston, Yates, Firestone, Babchishin, and Bradford (2008)	192	–	11.4(4.4)	0.76 (0.69–0.83)	0.77 (0.69–0.85)	0.80 (0.73–0.86)	1980s	2.58 (1.68)	33.6	20.5	43.9
3. Langton et al. (2007)	468	0.90	5.9[e]	0.71 (0.66–0.77)	0.66 (0.58–0.74)	0.72 (0.67–0.77)	Late 1990s	7.77 (11.6)	25		
(a) Barbaree et al. (2001)	215	0.92	4.5(2.2)	0.73	0.70	0.76	1990s	6.18 (12.2)	24	9	38
4. Johansen (2007)	73[f]		≥7	0.76	0.77	0.76	Late 1990s	–	17.5	6.8	52.9
5. Knight and Thornton (2007)	537	0.88	15	–	0.64 (0.54–0.74)	–	≈1970s			≈25	
6. Looman (2006)	258	0.91	4.6	0.70	–	–	Late 1990s	16.6 (12.3)	34	–	–
7.Ducro and Pham (2006)	147	0.92	4.2	0.72 (0.62–0.82)	0.64 (0.53–0.75)	0.70 (0.60–0.79)	1990s	6.15 (9.49)	17.1	25.0	33.1
8. Bartosh, Garby, Lewis, and Gray (2003)	186	≥0.90	5.25	0.72	0.58	0.74	1996	5.68 (12.8)	18.2	11.8	55.3
9. Harris et al. (2003)	396	–	5.1(4.08)	0.73 (SE=0.03)	0.66 (SE=0.03)	–	1980s	9.99 (10.8)	48	26.3	–
(a) Rice and Harris (2002)	114		4.47(4.32)	0.76 (SE=0.04)	0.81 (SE=0.05)		1980s	3.61	36	14.4	
10. Hartwell (2001)	164	–	≈6	–	0.67	0.70	–	–	–	5	49
11. Dempster (1998)	95	–	5.07[g] (2.92)	0.88 (SE=0.03)	0.77 (SE=0.05)	–	1990	7.28 (15.3)	56	–	–

[a]Only independent studies are numbered with numerals. Studies with alphabetic designations are studies that used subsamples or mostly overlapping samples of the numbered study
[b]Or time at risk
[c]Primarily rapsheet violent (including contact sexual)
[d]Primarily rapsheet sexual only
[e]For violent recidivism, mean time at risk was 5.1 years
[f]These were 280 offenders, but SORAG were only available for 73
[g]Mean time at risk was 4.82 years

Table 3 Sample characteristics

Offender characteristics at time of index offense		
	Mean or %	SD
Age	28.2	9.9
Never married (%)	51.7	
DSM-III Diagnosis of Personality Disorder (%)	63.0	
DSM-III Diagnosis of Schizophrenia (%)	6.9	
PCL-R Score	17.8	8.6
Rapist[a] (%)	53.5	
Child molester[b] (%)	63.8	
Intrafamilial offender[c] (%)	40.9	

[a]Defined as being known or suspected of having had a late pubescent or postpubescent victim
[b]Defined as being known or suspected of having had a prepubescent or early pubescent victim
[c]% of child molesters with at least one intrafamilial (biological or step) victim

of the Violence Risk Appraisal Guide"). The SORAG has obtained mean ROC areas for the prediction of violent recidivism of 0.70 or greater among rapists (Bartosh et al., 2003; Ducro & Pham, 2006; Harris et al., 2003; Rettenberger & Eher, 2007), 0.75 among extrafamilial child molesters (e.g., Bartosh et al., 2003; Ducro & Pham, 2006; Rettenberger & Eher, 2007; Rice & Harris, 2002), and 0.75 or over among intrafamilial child molesters (e.g., Bartosh et al., 2003; Ducro & Pham, 2006; Rettenberger & Eher, 2007; Rice & Harris, 2002). As with the VRAG, accuracy is enhanced by neither dropping nor replacing SORAG items, and by ensuring high reliability and fixed duration of follow-up (Harris & Rice, 2003; Harris et al., 2003; Langton et al., 2007). The accuracy of SORAG scores for violent recidivism has been shown to be enhanced neither by adding other actuarials (Seto, 2005) nor by adding "structured" clinical intuition (Johansen, 2007; see also Hanson & Morton-Bourgon, 2009). Although (as we outlined earlier in this chapter) we believe that violent recidivism is the most appropriate outcome measure, we realize that there are many who want to know how well the SORAG predicts rapsheet sexual recidivism. As may be seen from Table 2, of the 10 nonoverlapping studies that reported sexual recidivism (measured mostly from rapsheets only), SORAG scores have yielded a mean ROC area of 0.68.

Data from a Long-term Follow-up of Sex Offenders

We have gathered new follow-up data on 750 sex offenders included in one or more of our earlier follow-up studies (Harris et al., 1993; Harris et al., 2003; Rice & Harris, 1995; Rice & Harris, 1997). These offenders included 464 men assessed while they were inpatients in our institution, 94 assessed as outpatients and referred from local probation, parole, and child welfare agencies, and 192 assessed while they were serving federal sentences in one of two Canadian penitentiaries. Detailed information about the childhoods and criminal and psychiatric backgrounds of these men can be found in the original studies. In Table 3, we report only a few characteristics of the sample that will be of most interest to those wanting to apply the SORAG to their clientele. All the men were subjects in earlier follow-up studies, but new follow-up data for as many men as possible were gathered in 2004 or 2007. In addition, we were able to determine that 52 of the men had died. Data were gathered about all criminal offenses committed following time first at risk, but only the first violent recidivism is reported here. Time at risk was calculated (as in our earlier studies) by subtracting time spent incarcerated for nonviolent offenses from time since first at risk.

All of the men had spent at least 6 months at risk before the end of the last follow-up or had committed a violent offense despite having had no time at risk (n = 19). The mean time at risk for successes was 18.4 years, $SD = 9.91$ years (with a range from 0.50 to 48.2), and the mean time at risk until first violent failure for those who failed was 4.37 years ($SD = 4.05$), with a range of 0 to 27.6. Considering only those 742 men who either failed violently or had at least 2 years at risk, the overall rate of violent failure was 59 % and the ROC area for the prediction of violent recidivism using the SORAG was 0.729 (95 % CI = 0.691–0.766).

We also examined the accuracy of the SORAG over various fixed values for time at risk varying from 6 months to 40 years. To conduct these analyses, we counted all those who failed after the fixed time at risk as successes for that period. We also counted each offender who died without committing a new violent offense as a success regardless of how long they were at risk. The results of these analyses are shown in Table 4. It may be seen that the ROC area appears to be highest for a follow-up of 6 months and lowest at 10 years. In fact, the accuracy at 6 months is significantly higher than at follow-ups at 10, 12, and 15 years (i.e., the confidence

Table 4 Time at risk and predictive accuracy of SORAG

Time at risk	ROC area	95 % CI	Base rate (%)	N
6 months	0.773	0.700–0.846	7.2	704
1 year	0.760	0.703–0.817	13	701
2 years	0.768	0.724–0.812	21	698
5 years	0.756	0.718–0.793	38	695
7 years	0.739	0.702–0.776	47	694
10 years	0.725	0.687–0.763	56	678
12 years	0.733	0.695–0.772	61	651
15 years	0.729	0.688–0.771	67	608
20 years	0.732	0.682–0.781	78	536
25 years	0.735	0.682–0.788	81	518
30 years	0.744	0.687–0.801	85	493
35 years	0.750	0.685–0.814	88	480
40 years	0.750	0.669–0.831	92	459

Table 5 10-year rates of violent recidivism (Pr) as a function of SORAG categories

SORAG category	SORAG score	Construction sample new follow-up			
		Pr	*(N)*	*Pr*	*(N)*
1	≤ −11	0.09	14	0.23	35
2	−10 to −5	0.12	23	0.26	58
3	−4 to +1	0.39	40	0.37	79
4	+2 to +7	0.59	58	0.475	99
5	+8 to +13	0.59	52	0.57	99
6	+14 to +19	0.76	46	0.62	87
7	+20 to +25	0.80	32	0.73	92
8	+26 to +31	0.89	18	0.69	68
9	≥ +32	1.00	5	0.93	61
Total Sample		0.58	288	0.56	678

interval of those follow-ups does not include the ROC area for the 6-month follow-up). It may be seen that the base rate of violent recidivism climbs from 7 % at 6 months to 92 % at 40 years. However, we caution that the base rates may be inflated at follow-ups beyond 12–15 years because after that time we lose track of significant numbers of men who we know did not fail up until the time we lost track. A Kaplan–Maier survival curve levels off at 37 % survival after 28 years at risk. The curve falls steeply until about 12 years and then falls only very slightly after that. Fewer than 5 % of failures occurred after more than 12 years at risk.

We also examined the rates of violent recidivism in each of the 9 categories of the SORAG for the 10-year fixed follow-up to compare to the norms presented in Quinsey, Harris et al. (2006) based on the development sample of 288 (all of whom were also subjects in the new follow-up) (Table 5). The base rates of violent recidivism were nearly identical in the two samples (58 % in the original sample and 56 % in the new follow-up). Table 5 shows that there was more recidivism in the lower risk categories in the new follow-up than in the construction sample, and less in the higher categories. This is, partly, what would be expected based on the lower overall predictive accuracy (ROC area of 0.73 versus 0.77 in the construction sample). However, the rates in categories 1 and 2 are higher, and the rates in categories 6 and 8 are lower than expected even when the reduced accuracy is taken into account. Based on our results, however, we can be quite confident that the 10-year expected recidivism rates as described in Quinsey, Harris et al. (2006) are not gross overestimates and that the 10-year recidivism rates in at least categories 6–9 are all greater than 50 %.

In order to examine whether recidivism rates have declined over time, we divided the men into three cohorts based upon their date first at risk. Those men whose date first at risk was on or after January 1, 1988, had a 10-year violent recidivism rate of 40 % compared to 54 % for those whose date first at risk was between January 1, 1981, and December 31, 1987, and 57 % for those whose date first at risk was before that. Thus, it appears that the violent recidivism rate of the most recent cohort is lower than that of earlier cohorts. This is contrary to results reported by Prentky, Lee, Knight, and Cerce (1997), who found no evidence of cohort effects

when they divided their sample into three cohorts based on year of release. However, it is important to note that the risk scores of our most recent cohort were also significantly lower than those of our earlier cohorts. The mean SORAG score for the most recent cohort was 8.58 (95 % C.I. 6.38–10.78) compared to 12.20 (95 % C.I. 10.28–14.12) for the middle cohort and 10.90 (95 % C.I. 9.2–12.60) for the earliest cohort. Therefore, we suspect that this trend in our own data reflects a change in referral patterns rather than a more general reduction in the risk represented by sex offenders overall.

Because we are often asked about the use of the SORAG with adolescent offenders, we examined adolescent offenders separately. There were 71 offenders who were under age 18 at the time of their index offense and for whom we had 10-year outcome data. Most were adults when they first had an opportunity to reoffend. Of the 71, 59 % failed violently within 10 years of opportunity. The ROC area for the 10-year outcome was 0.80. Thus, although the sample was quite small, the SORAG worked just as well with adolescent offenders as it did with adults.

Now, we turn to a few remaining issues regarding the use of actuarial risk assessment tools, especially the SORAG.

Dynamic Risk Assessment and Post-actuarial Adjustments for Sex Offenders

The SORAG does not include items labeled "dynamic." Unfortunately, this term lacks consensual meaning and experts in the field seem unlikely to arrive at one in the near future. For example, one-time measurements of identical constructs are called static in some assessments (e.g., sexual deviance in the SORAG) but dynamic in others (e.g., sexual deviance in the VRS-SO) (Olver, Stockdale, & Wormith, 2009). In our opinion, progress will be hampered until the general adoption of a definition which understands that a dynamic risk factor is one that can be shown to change and that alters risk when changed (Hanson & Harris, 2000; Quinsey, Coleman, Jones, & Altrows, 1997; Quinsey, Book, & Skilling, 2004; Rice, 2008; see also Douglas & Skeem, 2005's "causal" dynamic risk factor). Until then, however, we note that if the association between the change in the putative dynamic factor and the corresponding change in the risk of recidivism is entirely subsumed by a static variable, then the potentially dynamic factor is not *usefully* dynamic.

This fact first became apparent to us when we evaluated the effects of a treatment program for child molesters that targeted their deviant sexual preferences (Rice et al., 1991). Deviant preferences were found to yield the highest correlations with recidivism of all variables examined in meta-analyses of the predictors of sexual recidivism among sex offenders (Hanson & Bussière, 1998; see also Hanson & Morton-Bourgon, 2005) and thus are considered to be an important criminogenic need among sex offenders. In our study, we examined whether pre-post treatment changes in deviant sexual preferences measured using phallometry would be related to lower recidivism upon release. Although we were able to demonstrate significant changes in deviant preferences as a result of therapy, we found that the pretreatment preferences predicted subsequent sexual recidivism better than did posttreatment preferences. We concluded that there was no evidence that our behavioral program reduced risk of sexual recidivism, and we would now conclude that there is, as yet, no evidence that deviant sexual preferences are usefully dynamic.

Although various risk assessment schemes for "dynamic" assessment among sex offenders have been promulgated, evidence is lacking to support the conclusion that any usefully dynamic factors have been identified. Consider, for example, a study of the VRS:SO (Olver, Wong, Nicholaichuk, & Gordon, 2007; see also Olver, 2003), with which we disagree, and in which the authors concluded there was evidence for dynamic risk factors in their sample of sex offenders. Inspection of Table 3 in Olver et al. (2007, page 324) shows that for sexual recidivism, the AUC for just the static items of the VRS-SO was 0.74 (95 % CI = 0.68–0.80). The AUCs for the pre- and posttreatment dynamic scales were 0.66 (95 % CI = 0.59–0.73) and 0.67 (95 % CI = 0.60–0.74), respectively, and the AUCs for the pre- and posttreatment total (static plus dynamic) scores were 0.71 (95 % CI = 0.64–0.77) and 0.72 (95 % CI = 0.66–0.78), respectively. Thus, the highest predictive accuracy was obtained for the static scale alone. Changes on putative dynamic variables did not add to the predictive accuracy of static variables, nor did the posttreatment dynamic scale predict significantly better than their pretreatment dynamic scale. The same pattern of results was found for their other outcome measure: nonsexual violent recidivism. Similarly, Beggs and Grace (2010) discussed having demonstrated a role for "dynamic" factors in sex offender risk assessment. However, inspection of their Table 3 (pg. 244) reveals that the combination of static items and posttreatment scores on putatively dynamic items performed no better for the prediction of sexual recidivism (AUC = 0.80, 95 % CI = 0.71–0.89) than static items and pretreatment scores (AUC = 0.79, 95 % CI = 0.69–0.88) on the same items. The same was true for their other outcome measures (violent and general recidivism). Thus, there was in fact no demonstration that the evaluation of putatively clinically relevant change improved predictive accuracy. Hanson, Harris, Scott, and Helmus (2007) reported the results of the "Dynamic Supervision Project," which examined the contributions of two so-called "dynamic" risk scales, the Stable-2007 and the Acute-2007, in the prediction of sexual recidivism among 997 sex offenders across 16 North American jurisdictions. They found (as did Beggs & Grace,

2010) that the scales did add to the predictive accuracy of the Static-99. However, they also found that there was "little evidence that changes on these [dynamic] factors were related to recidivism risk. Offenders changed little on the stable factors during the 6-month retest period, and the change was unrelated to recidivism" (pg. 25). In fact, as of 2010 there have been no empirical demonstrations that prerelease changes in any risk factors are usefully dynamic.

Therapists' impressions of treatment progress are unrelated or positively (perversely) related to sex offenders' recidivism (Looman, Abracen, Serin, & Marquis, 2005; Quinsey, Khanna, & Malcolm, 1998; Seto & Barbaree, 1999). More generally, clinicians' application of putatively dynamic factors (Daffern et al., 2009; Desmarais, Nicholls, Read, & Brink, 2010; Philipse, Koeter, van der Staak, & van den Brink, 2006) shows negligible utility. Although dynamic aspects of sex offenders and their environments must be among the causes of recidivism, there is little evidence yet that these have been identified and incorporated into forensic clinical practice.

An especially important prerelease static variable (sometimes inaccurately called dynamic) is whether some form of treatment has been provided prior to release. Some studies have reported that this dichotomous variable is related to recidivism and this, in turn, has occasionally been interpreted as a treatment effect. Unfortunately, more comprehensive research shows that relatively high-risk sex offenders are less likely to begin treatment, and even less likely to complete it. This raises the possibility that sex offenders who receive treatment are systematically different from those who do not, and that this difference may be/is relevant to their risk of recidivism. Thus, it remains possible that what has appeared to be a specific effect of therapy can be more accurately understood as a selection effect (Rice & Harris, 2003, 2013b), and the field of sex offender treatment has been insufficiently rigorous to shed light on this. The best way to resolve this issue is through the use of strong inference evaluation designs (Seto et al., 2008).

We anticipate that effective treatments for sex offenders will eventually be clearly demonstrated. Presently, however, we suggest that the unpersuasive evidence in this regard is primarily due to current therapies being based on incorrect or very incomplete explanations of sexual aggression in combination with weak treatment evaluation research. In the meantime, we suggest that, from a practical perspective, worthwhile multivariate analyses would examine the incremental effect of a provision-of-treatment variable in predicting recidivism after statistical consideration of historical variables known before the beginning of treatment (i.e., criminal records, psychopathy, sexual deviance, substance abuse history, childhood aggression and antisociality, family background, etc.). If the provisiona of treatment (or response to it) is subsumed by such historical items, optimal risk assessment need not incorporate treatment items.

In contrast, within-subject changes in various states (e.g., attitudes, moods, intoxication) have been shown to indicate the imminence of violence, especially among those whose statically determined risk is already high (Mulvey et al., 2006; Quinsey et al., 1997; Quinsey, Harris et al., 2006; Skeem et al., 2006). Thus, there is some evidence that fluctuating variables aid in anticipating when a high-risk offender might recidivate, although work on incorporating these findings into formal assessment has not been completed. Actuarial systems incorporating fluctuating factors, when developed, will be useful for short-term, post-release community management aimed at forestalling violent recidivism, but cannot, as yet, improve long-term risk assessment decisions about who is likely to be violent.

As previously discussed, the SORAG relies on clinical skill to evaluate its items, but permits no modification of the score based on clinical judgment. Supplementary clinical discretion has been recommended by developers of some non-actuarial schemes to lower user resistance, incorporate idiosyncratic risk factors, permit application to new populations, adjust for offender age, give credit for perceived treatment progress, recalibrate for differences in base rates, accommodate anxiety about errors, and accede to the notion that inserting clinical judgment is a professional responsibility. No evidence supports claims that alteration of actuarial scores based on clinical judgment results in better accuracy than actuarial scores alone. In fact, there is good reason to believe such revision generally results in decreased accuracy, partly by lowering measurement reliability (see Gore, 2007; Grove & Meehl, 1996; Hanson & Morton-Bourgon, 2009; Harris & Rice, 2007a; Hilton & Simmons, 2001; Janus & Meehl, 1997; Quinsey, Harris et al., 2006).

The Base Rates of Recidivism

What is the actual base rate of violent reoffending (or sexually motivated violence) in the one of the most relevant offender populations: sex offenders released from secure custody? We also note here the obvious point that it is all subsequent criminal activity that is of legislative and public policy concern, not just crime detected by the police. Legislation and public policy are clearly aimed at minimizing or reducing crime per se, but it is well-established that crimes reported to the police represent only a subset of those actually committed, especially by sex offenders (Harris & Rice, 2007a), and that the police actually apprehend and arrest only a subset of the perpetrators of the crimes reported. Only a fraction of sexually violent offenses are reported to authorities (Bonta & Hanson, 1994; Gannon & Mihorean, 2004; Rennison, 2002), and only a fraction of these are attributed to any perpetrator via criminal charges or convictions (Du Mont, McGreggor, Myhr, & Miller, 2000;

Parkinson, Shrimpton, Swanston, O'Toole, & Oates, 2002). In addition, sex offenders admit to more offenses than those for which they have been apprehended (Abel et al., 1987; Baker, Tabacoff, Tornusciolo, & Eisenstadt, 2001; Groth, Longo, & McFadin, 1982; Weinrott & Saylor, 1991; Zolondek, Abel, Northey, & Jordan, 2001).

The best available data about the base rate of officially detected sexually violent recidivism come from long-term follow-up research on sex offenders released from secure custody. Studies with 20 years or more of follow-up (e.g., Hanson, Steffy, & Gauthier, 1993; Harris et al., 2003; Langevin et al., 2004; Prentky et al., 1997, discussed above) generally show that about 30 % of such sex offenders have subsequent offenses noted to be sexual on police rapsheets and over 40 % have subsequent violent offenses. Hanson (2002) reported a sexual recidivism rate of 22 % in a mean duration of 8 years based on 4,673 sex offenders released from secure facilities in three countries; the correlation between duration and recidivism was 0.81, such that, if all follow-ups were of more than 15 years, "sexual" recidivism would exceed 30 %. Follow-up studies reporting survival analyses (Broadhurst & Loh, 2003; Craig, Beech, & Browne, 2006; Greenberg, Bradford, Firestone, & Curry, 2000; Gretton, McBride, Hare, Shaughnessy, & Kumka, 2001; Hanson et al., 1993; Hanson & Thornton, 2000; Hildebrand, deRuiter, & deVogel, 2004; Langstrom, 2002; Looman et al., 2005; Marques, Day, Nelson, & West, 1994; Marques, Wiederanders, Day, Nelson, & van Ommeren, 2005; Nicholaichuk, Gordon, Gu, & Wong, 2000; Prentky et al., 1995, 1997; Rice & Harris, 1997; Worling & Curwen, 2000) report a mean longest duration of 14 years and a mean final rate of "sexual" recidivism of 31 % (with a correlation of 0.70 between duration and recidivism rate). If all sex offenders released from secure custody were followed for 15 years, the rate of recidivism recorded as sexual on rapsheets would exceed 30 %. The examination discussed in the previous section (Rice et al., 2006) indicated that a correction of approximately 1.4 ought to be applied to estimate the actual rate of officially detected sexually motivated violence by released sex offenders, suggesting that the appropriate overall base rate of such "sexually violent" recidivism is over 40 %.

Because the public policy concern is actual repeated crime, not just crime detected by the criminal justice system, it is scientifically uncontroversial to conclude that police rapsheets underestimate rates of sexually violent offending among sex offenders. Among unselected samples of sex offenders released from secure custody, rates of officially detected general violent recidivism exceed rates of "sexual" recidivism by, on average, at least double (e.g., Bartosh et al., 2003; Ducro & Pham, 2006; Harris et al., 2003; Kingston et al., 2008; Kingston et al., 2010; Langton et al., 2007; Looman, 2006; Rettenberger & Eher, 2007; Rettenberger et al., 2010). Thus, it is safe to conclude that the long-term rates of officially detected violent recidivism among mixed samples of sex offenders released from secure custody approach 60 %. This, of course, is the outcome the SORAG was designed to predict and is very near the 63 % final recidivism rate suggested by the survival analysis in Rice and Harris (2013a) discussed earlier. Inspection of the studies reported in Table 2 and Rice and Harris (2013a) support the conclusion that those offenders who have had at least one adult victim are at considerably higher risk for violent (including sexual) recidivism than are those offenders with exclusively child victims. In addition, the underreporting of violent crime is likely to be similar to that observed for the subset of violent crime that is sexually motivated, but the degree of this underestimation is not fully known; nevertheless, actuarial estimates associated with the SORAG norms are certainly underestimates of actual violent recidivism and may not be overestimates of actual sexually violent recidivism.

Other Formal Sex Offender Risk Assessments

Clearly, the research strategy underlying all actuarial tools for assessing sex offenders imperfectly captures the outcomes of legislative and public policy concern. Most tools were designed to assess the risk of sexual recidivism labeled as such on police rapsheets even though this is a minority concern. In addition, this research operationalization of sexual recidivism is a poor match to the sexually violent recidivism that is actually of forensic concern in relevant statutes. Even in the minority of decisions in the United States. that pertain only to the risk of subsequent predatory sexually motivated violence (those pertaining to SVP designation), the role of predatory offending is undefined. The rates of detected recidivism for various scores on actuarial systems for any operationalization of recidivism are based on average time frames of 5–15 years post-release. Whether these encompass the entire period of concern is unclear. The rates of detected recidivism over these time frames must be underestimates of the actual behavior of concern over the same time period, but the degree of underestimation is unclear. In our judgment, officially detected violent recidivism by sex offenders comes closest (among all available imperfect alternatives) to the outcome of primary concern in all jurisdictions, including those in which sexually violent recidivism is a legislatively mandated issue.

Because of this imperfect match between research methods and legislation and public policy concerns, one might be tempted to eschew actuarial methods in favor of some scheme to incorporate intuition to compensate for the mismatch. Thus, as discussed earlier, some non-actuarial schemes and, unfortunately, much advice for forensic clinicians encourages the use of unaided clinical judgment to

ascertain not only base rates in their own jurisdictions, but also the relevance and direction of additional risk factors (e.g., psychopathy, response to treatment, etc.), the advanced age of an assessee, and so on. These schemes and all this advice provide no procedure to accomplish these ends. While others disagree, based on all the available evidence, we regard it as scientifically and ethically unjustified to use unstructured clinical opinion for these purposes (Harris & Rice, 2007b), a matter we address further below.

Age and Sex Offender Recidivism

There is a well-established relationship between age and recidivism among offenders in general, and many investigators report a similar association among sex offenders in particular (Hanson, 2002), although this finding is far from universal (Craig, 2011; Doren, 2006; Thornton, 2006). Some commentators have concluded that, when observed, this association reflects "maturational" effects associated with decreasing testosterone (e.g., Barbaree, Blanchard, & Langton, 2003) such that the resultant decreased sex drive causes a lowering of recidivism among sex offenders, although it is unclear how lowered sex drive reduces non-sexually motivated reoffending among sex offenders (or any others). In addition, these correlations between age and recidivism come almost entirely from cross-sectional studies comparing the rates of recidivism for offenders of varying ages at release. Very few studies follow a cohort of offenders as they age and examine the rates of violence (or sexual violence) over time. This methodological problem carries the risk that offenders released at young ages are different in relevant ways (in addition to or instead of being younger) from offenders released at older ages (i.e., cohort differences). In fact, this often appears to be the case. For example, we (Harris & Rice, 2007a) and others (Barbaree, Langton, & Blanchard, 2007) have shown that sex offenders high in psychopathy were released younger than those scoring low in this trait, reflecting enduring antisociality.

Two hypothetical causal possibilities emerge about this association between enduring antisociality or psychopathy and age at release: either high psychopathy causes offenders to be released younger, or being released older causes a reduction in psychopathy. We believe the former is more likely in the sense that offenders high in psychopathy, by definition, begin their criminal careers at younger ages so that in any cohort of offenders, those high in psychopathy will have been incarcerated younger and are, therefore, younger at release. We regard it as unlikely for a sex offender's age at release (on average over 30) to have any effect on his level of psychopathy (a trait that emerges in childhood) measured beforehand. Some commentators assert that psychopathy, and its resultant risk of violent recidivism, does decrease as offenders get older (e.g., Barbaree et al., 2007, 2009), although, again, these findings are based on cross-sectional studies (e.g., Harpur & Hare, 1994) and not on remeasuring psychopathy and violence as offenders get older. With respect to violent crime, however, there is evidence that offenders with high PCL-R scores do not exhibit much age-related desistence even at advanced ages (Harris, Rice, & Cormier, 1991; Hare, Forth, & Strachan, 1992; Porter, Birt, & Boer, 2001) as long as differential opportunity is included in the analyses.

Hypotheses aside, the practical issue here is whether optimum risk assessment for sex offenders must incorporate age at release. Table 6 illustrates the situation in a sample of sex offenders (Harris et al., 2003). The table shows violent recidivism for each quartile of age at first offense, and then recidivism as a function of the subdivision of each of those quartiles into further quartiles based on age at release. The top of the table shows a strong, clear relationship between the four age-at-first-offense quartiles and outcome ($rho = -1.0$, $p < 0.05$). In the lower half, there is no clear, consistent relationship between the age-at-release quartiles and recidivism; the overall association is much smaller and not significant. Because the two age variables remain correlated, the apparent incremental predictive power of the age at release quartiles shown in Table 6 remains an overestimate. Nevertheless, the point is obvious: in this sample, once one knows age at first offense, little or no *additional* predictive information is afforded by knowing age at release (while the converse cannot be concluded).

More importantly, in the context of this chapter, studies by us (Harris & Rice, 2007b) and others (Barbaree et al., 2007; Barbaree, Langton, Blanchard, & Cantor, 2009; Knight & Thornton, 2007) suggest that the addition of age at

Table 6 Probability of violent recidivism as a function of quartiles for two age variables

Quartiles for age at first offense															
First (youngest)				Second				Third				Fourth (oldest)			
0.56				0.36				0.35				0.19			
				Quartiles for				Age at Release							
1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
0.63	0.55	0.80	0.18	0.37	0.67	0.21	0.25	0.25	0.42	0.43	0.30	0.13	0.24	0.19	0.16

release to SORAG scores affords no additional predictive value over SORAG scores alone. In addition, we reported above that when the base rates of recidivism were equalized for opportunity in 14 samples from Table 2, the mean SORAG score was strongly associated with the sample base rate, $r=0.59$, $p<0.05$. As might be expected, there was a small inverse association between mean sample age at release and sample base rate, $r=-0.19$, *ns*, but mean age at release afforded no significant incremental value in accounting for sample base rates. Thus, age at release, at both the individual and aggregate levels, appears to add little to the prediction of recidivism after the items of the SORAG are known (Harris & Rice, 2007b, Barbaree et al., 2007, 2009). Knight and Thornton (2007) state, based on their study, "we would not recommend adjusting actuarial risk estimates on the basis of offenders' aging in prison…inmates do not age out of risk, at least until after the age of 60" (p. 85). Statistical and theoretical complaints to the contrary (e.g., Barbaree et al., 2007, 2009) do not and cannot gainsay this empirical result.

Of course, age at release might validly index both enduring antisociality/psychopathy (perhaps through age at first offense) and maturational change. The question is, with respect to risk assessment for sex offenders specifically, which does age at release better reflect? In attempting to answer this question, we replaced age at release with age at first offense in two actuarial risk assessments for sex offenders (Harris & Rice, 2007b). If age at release mostly reflected maturational changes, then such a replacement has to have resulted in a decrease in predictive accuracy (because age at release has to be a better index of maturational change than age at first offense). The result was the opposite; replacing age at release with age at first offense improved predictive accuracy (which, incidentally, was then never improved by the re-introduction of age at release). Certainly, maturational changes occur, but among sex offenders released from secure custody, age at release appears to be a poor index of any risk-relevant maturational changes. For these reasons, we continue to regard it as scientifically unjustified to "correct" actuarial estimates using various post hoc intuitive or statistical procedures (e.g., Barbaree et al., 2009; Donaldson & Wollert, 2006; Wollert, Cramer, Waggoner, Skelton, & Vess, 2009) because such adjustments ignore known cohort-related differences in recidivism risk and are based on the invalid assumption that age at release reflects only hypothetical intra-individual changes.

The SORAG in US Commitment Proceedings

We searched a publicly available archive of legal opinions (leagle.com) for all instances in which the SORAG was mentioned in connection with SVP (or equivalent) determinations. This search yielded a total of 54 distinct documents from 12 states written between 2000 and 2011 in which the SORAG was mentioned. The party presenting testimony based on the SORAG usually prevailed, but not always. Sometimes, the most central legal issue was something other than risk of recidivism (e.g., effective representation, due process, etc.). In no instance we could find, however, was the SORAG declared inadmissible, rejected, or even criticized on grounds that it "only predicts interpersonal violence," or the like. The single exception was a 2008 case in Hawaii of a man whose only convictions were for indecent exposure and possession and distribution of pornography. The court opined that his lack of any violent history made the SORAG not applicable, a decision we support. Thus, consistent with the data on actuarial risk assessment tools in general (Monahan, 2006), the courts, even when executing U.S. statutes pertaining to SVP designation, seem receptive to the use of the SORAG. Some clinicians, attorneys, and courts might not make use of the SORAG due to the notion that its outcome is over-inclusive (overestimates sexually motivated violent reoffending). As discussed at length earlier, our considered judgment is that this belief is mistaken. It would appear that courts are willing to consider SORAG scores presented in evidence.

Limitations, Conclusions, and Future Directions

Compared to tools such as the RRASOR or the Static-99, the SORAG requires more time and more training to score (largely because it contains the PCL-R). The SORAG was developed exclusively on male offenders and there are no data to support (or refute) its use for female offenders. Existing data also suggest it is equally valid for young offenders as for older offenders, although data are only available for offenders over the age of 18 at the time of release. These are obvious directions for future research.

A statistical argument against the SORAG (or any actuarial tool) can be paraphrased as, "We can accurately predict the recidivism of a group of sex offenders defined by their obtaining the same score on the SORAG, but that tells us nothing about what any one of them will do." (Hart, Michie, & Cooke, 2007). Elsewhere, we and others have addressed the conceptual and statistical errors upon which this complaint was based (Grove & Meehl, 1996; Hanson & Howard, 2010; Harris, Rice, & Quinsey, 2007, 2008; Mossman & Sellke, 2007; Skeem & Monahan, 2011). Briefly, the complaint foundered on invalid use of a statistical approximation, inappropriate conflation of test reliability and validity, misunderstanding the technical nature of the outcome, and confusion about the meaning of "risk."

Actuarial (and mechanical) methods are not as widely used by psychologists as the evidence suggests they ought to

be (Hilton & Simmons, 2001; McKee, Harris, & Rice, 2007; Vrieze & Grove, 2009; see also Elbogen, Huss, Tomkins, & Scalora, 2005; Elbogen, Tomkins, Pothuloori, & Scalora, 2003). Some clinicians appear to simply reject actuarial methods outright, while others mistakenly believe, based on fallacious professional advice (e.g., Hart & Boer, 2010), that the intuitive combination of actuarial scores and clinical judgment is something other than clinical judgment:

[C]linical integration of MC [i.e., mechanical combination] with other information is a subtype of clinical combination. This mistake involves confusion on a critical point stated earlier, to wit: it is not the type of data combined but the way in which they are combined that matters in the clinical-mechanical prediction controversy. The clinical integration of MC and other information is a clinical combination in which the MC output, be it an MMPI profile, the outcome of Burgess's (1925) checklist, or any other MC output, has been given to the clinician and somehow combined "in their head" with other clinical impressions to arrive at a final prediction. It is this subjective, clinical combination that is important, not the MC output antecedent to the final clinical integration (Vrieze & Grove, 2009, p. 530).

Simply put, the fundamental problem appears to be empirical and professional ignorance; Vrieze and Grove (2009) documented several factual errors in their respondents' reasons for failing to rely on actuarial methods. As well, the best single predictor of use was whether such methods were discussed during graduate training (Vrieze & Grove, 2009). Such problems in evidence-based clinical training have led to renewed calls for science-based accreditation for graduate training in clinical psychology (Baker, McFall, & Shoham, 2009).

We also suggest that actuarial methods sometimes fail to garner support from clinicians for additional reasons. For example, reliance on clinical judgment allows users to bend to powerful but empirically irrelevant implicit interpersonal personal values and prejudices (probably not deliberately) such as granting release to attractive assessees (e.g., Hilton & Simmons, 2001). In addition, the predictive utility of some actuarial items and, more to the point, the lack of incremental predictive validity for others (e.g., assignment to therapy, low self-esteem, loneliness, childhood abuse) (Hanson & Morton-Bourgon, 2005) clearly imply that some practitioners' private explanations for sexual offending must be incorrect (or at least very incomplete). An actuarial tool such as the SORAG is not a "theory" of sexual aggression, but its replicated accuracy in predicting recidivism means that it is consilient with the correct explanation. Thus, substance abuse, sexual deviance, and psychopathy could be general causes of sexual aggression while loneliness (as currently conceived) could not be.

The predictive value of measures of psychopathy has some special practical and theoretical implications. From a practical perspective, it is likely that even actuarial assessments that fail to incorporate psychopathy will be suboptimal, leaving developers in the odd (and empirically unsupported) position of recommending the post-actuarial application of some form of clinical judgment in order to account for missing but relevant characteristics (e.g., Thornton, Hanson, & Helmus, 2010). From a theoretical perspective, these findings imply that psychopathy is an important cause of sexual offending. But how does psychopathy, a substantially heritable neurophysiologically based phenomenon (Lalumière, Mishra, & Harris, 2008; Rice & Harris, 2013a), cause the various kinds of sexual offending behavior? Clearly, psychopathy can be regarded as an enduring psychological predilection that, independent of such specific aspects of sexuality as pedophilia, increases many forms of antisocial conduct (Lalumière, Harris, Quinsey, & Rice, 2005). These considerations raise the question as to whether psychopathy is best conceptualized as a set of affective and emotional personality traits or whether it is best conceived of as a suite of behavioral tactics (including early-starting sexual coercion) that comprise a life history strategy (Rice & Harris, 2013a; Barr & Quinsey, 2004). In fact, both are simultaneous possibilities, the former explicating proximal mechanisms, while the latter provides ultimate explanation (Lalumière et al., 2008). Regarding proximate explanation, however, it remains unclear as to the scientific value of attributing psychopathy to an underlying personality as opposed to more direct attribution to neurophysiology and neuroanatomy.

In conclusion, we regard the SORAG as the formal risk tool of choice for the prediction of violent (including hands-on sexual) recidivism for adult sex offenders considered in secure custody. Its established high reliability, known replicated effect sizes, comprehensiveness, complete manualization, and detailed information about application make it the optimal method for making decisions about the long-term risk of recidivism among sex offenders. We also regard rap-sheet violent recidivism as the outcome closest to subsequent sexually violent behavior as specified in U.S. civil commitment laws for sex offenders. Furthermore, users are not instructed that there are additional unspecified considerations to be included, and there is evidence that the SORAG is not improved by the addition of alternative actuarial assessment information (Seto, 2005). We expect that the SORAG will eventually be improved or replaced and we are evaluating some ways of accomplishing that, such as better phallometric measurement, improved assessment of psychopathy, and the incorporation of statistical interactions in actuarial scoring. As well, we predict that functional brain imaging represents the best long-term prospect for eventually increasing the accuracy of actuarial sex offender risk assessment.

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The Minnesota Sex Offender Screening Tool-3.1 (MnSOST-3.1)

Grant Duwe and Pamela Freske

Introduction

More than 20 years ago, Epperson and colleagues began to work on developing the Minnesota Sex Offender Screening Tool (MnSOST) (Epperson, Kaul, Huot, Goldman, & Alexander, 2003). In 1996, they initiated efforts to revise the MnSOST, eventually resulting in the Minnesota Sex Offender Screening Tool-Revised (MnSOST-R). Most recently, we updated the MnSOST-R by developing the MnSOST-3 (Duwe & Freske, 2012).

The MnSOST-3 is different in a number of ways from its MnSOST predecessors. The MnSOST-R, for example, was developed on a sample of 256 sex offenders released from Minnesota prisons during the late 1980s and early 1990s. Using sex offense rearrest within 6 years as the outcome measure, Epperson et al. (2003) employed a modified Nuffield (1982) weighting scheme by first cross-tabulating potential individual items with recidivism rates and then comparing those rates with the baseline rate. Weights were assigned to items based on the magnitude of difference between the recidivism rates for individual items and the baseline rate. Individual items were retained in the MnSOST-R if: (a) the assigned value was different from 0, (b) the item was consistent with existing theory and/or practice, (c) the association with sexual recidivism was $p < 0.10$, and (d) the items significantly improved the prediction of sexual reoffending in a hierarchical logistic regression model at the $p \leq 0.20$ level (Epperson et al., 2003). Altogether, the MnSOST-R contains 16 items and is scored in a pencil-and-paper format, with scores ranging from a low of −12 to a high of 31.

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In developing the MnSOST-3, we used a sample of 2,535 sex offenders released from Minnesota prisons. The 2,535 offenders were drawn from two separate samples: the MnSOST-R cross-validation sample and a contemporary sample of released sex offenders. The MnSOST-R cross-validation sample contained 220 offenders released from Minnesota prisons during the early 1990s, whereas the contemporary sample included 2,315 sex offenders released from Minnesota prisons between 2003 and 2006. Using sex offense reconviction within 4 years as the outcome measure, we relied on multiple logistic regression to create the instrument. Moreover, we employed bootstrap resampling to not only select items to be included in the instrument but also to internally validate the model. The MnSOST-3 contains 11 predictors—nine main effects and two interaction effects. Of the nine main effects, only three were items derived from the MnSOST-R (public place, completion of chemical dependency and sex offender treatment, and age at release).

The MnSOST-3, which is scored in a Microsoft Excel application, provides several measures of sexual recidivism risk. The MnSOST-3 value an offender receives represents his predicted probability of sexual recidivism within 4 years, which varies from a low of 0 % to a high of 100 %. To provide a range in which the true risk of sexual recidivism likely falls, we calculated 95 % confidence intervals (CIs) around MnSOST-3 estimates. While the MnSOST-3 value and the accompanying 95 % CIs offer measures of absolute sexual recidivism risk, we also included percentile ranking to provide a measure of relative risk.

To illustrate, an offender with a MnSOST-3 value (i.e., predicted probability) of 10 % would fall into the 92nd percentile. Moreover, this offender would have a lower CI of 5 % and an upper CI of 16 %. Therefore, the MnSOST-3 output for this offender suggests that his likelihood of reconviction for a new sex offense within 4 years is 10 %. The CIs, meanwhile, imply that we can be 95 % confident that his true likelihood for a new sex crime reconviction falls between 5 and 16 %, and the percentile ranking indicates that only 8 %

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of the Minnesota sex offenders we examined had a MnSOST-3 value higher than 10 %.

After we completed the development of the MnSOST-3, the Minnesota Department of Corrections (MnDOC) began using it in place of the MnSOST-R in early January 2012. By the end of January 2012, the MnDOC's Risk Assessment and Community Notification (RACN) Unit had scored more than 200 cases on the MnSOST-3. Upon reviewing these cases, we identified several potential issues with the MnSOST-3, particularly involving the two interaction terms in the model.

First, in the MnSOST-3, both the effects of violations of orders for protection (VOFPs) and recent disorderly conduct convictions on sexual recidivism risk vary according to the age of the offender at the time of release. Whereas VOFPs increase the risk for younger offenders, they decrease the risk for older offenders. Conversely, recent disorderly conduct convictions increase the risk for older offenders, while they decrease the risk for younger offenders. The interaction effects may appear counterintuitive because VOFP and disorderly conduct convictions decrease an offender's risk in some instances. Moreover, given that the VOFP and disorderly conduct convictions are relatively new findings in the sex offender literature, prior research offers little guidance.

Second, although VOFPs and disorderly conduct convictions will reduce the MnSOST-3 score for certain offenders, it does not necessarily mean that these offenders would pose less of a risk for violent recidivism. We are currently analyzing additional data related to the ability to assess risk for different types of recidivism, including nonsexual violence, nonsexual, felony, and first-time sexual offending. Preliminary findings from these analyses suggest that VOFPs and disorderly conduct convictions increase the risk of nonsexual violent recidivism. This finding suggests the possibility that the risk for sexual recidivism may drop because the risk for other types of recidivism (nonsexual violence) increases. For example, the increased likelihood for nonsexual violent recidivism may shorten the at-risk period for sexual recidivism, especially if that recidivism leads to reincarceration (resulting in a more limited opportunity to sexually reoffend).

Finally, we observed that approximately 20 % of the offenders had a prior VOFP among the cases scored by the RACN Unit, which is more than three times the percentage observed (6 %) in the MnSOST-3 development sample. Given the lack of certainty in explaining the VOFP-age interaction, the higher percentage of offenders with VOFP convictions raised concerns regarding this item's interaction with age at release. Therefore, in an effort to produce an instrument that is simpler and easier to interpret, we assessed the model's performance without the two interaction terms. As shown later, removing the two interaction terms did not have a detrimental effect on predictive validity. As a result, in February 2012 the MnDOC began using the main effects-only model—the MnSOST-3.1

Present Study

In this study, we update our work on the MnSOST-3 by presenting findings from the development of the MnSOST-3.1. The development of the MnSOST-3.1 is, of course, similar to that of the MnSOST-3, and our discussion of the MnSOST-3.1's development will likely be familiar to those who have reviewed our work on the MnSOST-3 (Duwe and Freske, 2012). Where relevant, however, we will identify the ways in which the MnSOST-3.1 differs from the MnSOST-3. In addition to presenting the MnSOST-3.1 results, we also include those from the MnSOST-3 for purposes of comparison. Our concluding remarks will focus mainly on practical use of the instrument.

MnSOST-3 and MnSOST-3.1 Sample

As noted above, we examined 2,535 sex offenders who were drawn from two separate samples: the MnSOST-R cross-validation sample and a contemporary sample of released sex offenders. Included among the 2,535 sex offenders were 99 offenders whose only sex offense conviction(s) occurred as a juvenile, 53 "intrafamilial fondlers" (a group of incest-only offenders whose only sex offenses consisted exclusively of non-penetration sexual contact for whom the MnSOST-R has had limited predictive accuracy), and 12 offenders whose only sex-related offense(s) involved possession of child pornography. We included these groups of offenders in the development sample because they have at least one prior sex or sex-related offense, which triggers the need to assess their risk for sexual recidivism, as evidenced by the fact that MnSOST-R assessments were administered to these offenders while they were in prison.

The MnSOST-R cross-validation sample contains 220 offenders released from Minnesota prisons during the early 1990s, whereas the contemporary sample includes 2,315 sex offenders released from Minnesota prisons between 2003 and 2006. During this 4-year period, there were 134 sex offenders who were released from prison but were not at risk to reoffend because they were civilly committed. Due to the absence of an at-risk period, we excluded the 134 civilly committed offenders. Yet, as discussed later, we completed assessments from both versions of the MnSOST-3 on these offenders to further assess the validity of the instrument.

We used the contemporary and MnSOST-R cross-validation samples to develop both versions of the MnSOST-3 for a few reasons. First, due to the recent decline in sexual recidivism rates and to concerns raised about the inflated baseline rate for the MnSOST-R development sample (Vrieze & Grove, 2008; Wollert, 2002), it was necessary to select a group of sex offenders who had recently been released from prison. Second, as noted above, the MnSOST-R development

and cross-validation samples contained sex offenders released from Minnesota prisons during the late 1980s and early 1990s. Since that time, however, sex offenders released from Minnesota prisons have been more likely to be civilly committed, subjected to broad community notification, intensively supervised, have their parole revoked for a technical violation, and incarcerated for longer periods of time. The growing use of these external constraints has likely been responsible, at least to some extent, for the declining sexual recidivism rates observed in Minnesota since the early 1990s (Minnesota Department of Corrections, 2007). To ensure that both versions of the MnSOST-3 predict sexual recidivism risk without constraints as accurately as the MnSOST-R, it was also necessary to include the MnSOST-R cross-validation sample. Although data were available on the sample used to develop the MnSOST-R, we did not use this sample to develop either version of the MnSOST-3 because it oversampled for recidivists. As shown later, however, we use the MnSOST-R development sample to help cross-check the predictive validity of the MnSOST-3.1.

All 2,535 sex offenders in this study were scored at least once on the MnSOST-R. In some instances, offenders received more than one MnSOST-R assessment during the same sentence. For the offenders in the contemporary sample who had more than one MnSOST-R assessment during their confinement, we selected the most recent score prior to their release date. Minnesota prisoners receive a MnSOST-R assessment if they have at least one sex offense in their history for which documentation is available. Of the 2,535 offenders, 67 % were incarcerated for a sex offense while the remaining 33 % had a nonsexual index offense.

MnSOST-3 and MnSOST-3.1 Items

To recalibrate the weights assigned to the 16 items on the MnSOST-R, we created binary measures for the dichotomous items (e.g., under any form of supervision, sex offense committed in a public place, force used, multiple acts, offended against a 13- to 15-year-old victim). For example, on the MnSOST-R, offenders who have committed a sex offense in a public location are given a value of "2," whereas those who have not committed a sex offense in public are assigned a value of "0." We modified the scoring of these items in the multiple logistic regression analyses by giving them values of either "0" or "1." For the categorical measures on the MnSOST-R (e.g., length of sexual offending history, different age groups, stranger victims, adolescent antisocial behavior, pattern of recent alcohol or drug abuse, employment history, chemical dependency treatment, and sex offender treatment), we transformed these into dichotomous dummy variables. For example, on the MnSOST-R, offenders whose history of sexual offending is less than 1 year receive a value of "−1," and offenders with a history between one and 6 years are given a value of "3," while those with a history in excess of 6 years are assigned a value of "0." For the multiple logistic regression analyses, the following three variables were created for length of sexual offending history: less than 1 year (Yes = 1; No = 0), 1–6 years (Yes = 1; No = 0), and more than 6 years (Yes = 1; No = 0). Less than 1 year was the reference in the statistical analysis. Finally, we transformed three of the MnSOST-R items—number of sex offenses, discipline convictions, and age at release—into continuous variables.

To identify whether there are, in addition to the 16 MnSOST-R items, other factors predictive of sexual recidivism, we gathered all of the data collected by the MnDOC and maintained in COMS on the 2,535 offenders. The data included information relating to demographics, prior criminal history (e.g., total number of convictions, age at first conviction, type of offense, etc.), educational level (e.g., presence or absence of high school degree or general equivalency diploma at admission and release from prison), institutional misconduct (e.g., whether the offender received any disciplinary sanctions, the total number of disciplinary convictions, the type of institutional misconduct, etc.), gang membership (i.e., security threat group), involvement in institutional programming (e.g., anger management classes, critical thinking courses, etc.), prison visitation (e.g., whether offenders were visited in prison, the number of times they were visited in prison, number of prison visits divided by length of stay, etc.), length of stay in prison during the most recent incarceration period prior to release, total prison time served during the current sentence, type of offense (e.g., sex offense, assault, robbery, failure to register as a predatory offender, etc.), type of prison admission (e.g., new court commitment, probation violator, and supervised release violator), and whether they were released to supervision and, if so, what type of supervision (e.g., regular supervision and intensive supervised release) (a full list of the variables used can be obtained from the authors upon request). To facilitate valid and reliable scoring of both versions of the MnSOST-3, we focused on identifying items that significantly predicted sexual recidivism, were consistent with existing theory and/or research, and were relatively objective measures that are consistently available in COMS.

A difference between MnSOST-3 and MnSOST-3.1 items is that, in order to avoid inflated risk estimates resulting from extreme values among the five continuous items on the instrument, the values for some items on the MnSOST-3.1 are capped based on the highest value observed in the MnSOST-3/MnSOST-3.1 development sample. Therefore, the largest value an offender can receive for the sentences with male victim item is four. Predatory offense sentences are capped at 25, felony offense sentences as 20, VOFP convictions at 5, and recent disorderly conduct convictions at 2.

Measuring Sexual Recidivism

We collected sex offense reconviction data on the 2,535 sex offenders through the end of December 31, 2010. For the offenders in the contemporary sample released toward the end of 2006, 4 years was the maximum follow-up period. Because logistic regression assumes that each offender has the same amount of time in which to reoffend, we limited the follow-up period to 4 years for all 2,535 offenders in this study.

We defined sexual recidivism as a reconviction for a new sex crime within 4 years of release. In operationalizing sex crimes, we included only hands-on sex offenses. In doing so, we excluded noncontact, sex-related offenses such as possession of child pornography or indecent exposure. We used reconviction as the recidivism measure because it reduces the likelihood of including false positives (i.e., cases that are not truly instances of sexual recidivism). Although rearrest is arguably a more sensitive measure of recidivism and, thus, increases the chances of identifying more true positives (i.e., actual sex reoffenses), it also increases the odds of including more false positives. In addition, information on the date(s) when the reoffense occurred was seldom available in the rearrest data but was consistently present in the conviction data. Offense date information was necessary to exclude cases of "pseudo-recidivism," as there were a handful of offenders who returned to prison for a "new" sex offense that had been committed prior to the beginning of their previous prison term, e.g., an offender who was incarcerated from 2002 to 2005 is reconvicted in 2008 for an offense committed in 1998. In these instances, we did not consider the reconviction to be a recidivism event.

We obtained reconviction data from both the Minnesota Bureau of Criminal Apprehension (BCA) and the Federal Bureau of Investigation (FBI). Whereas the BCA data include only convictions that occur in Minnesota, the FBI criminal history data contain information on convictions that took place outside Minnesota. As with any recidivism study, official criminal history data will likely underestimate the actual extent to which the sex offenders examined here recidivated.

The recidivism data revealed that 102 (4.0 %) of the 2,535 offenders had been reconvicted of a new sex offense within 4 years of their release from prison. The 4-year sexual reconviction rate was 12.3 % in the MnSOST-R validation sample and 3.3 % in the contemporary sample.

Developing the MnSOST-3 and MnSOST-3.1

Existing research has identified three types of validity important for predictive regression modeling: apparent, internal, and external (Harrell, Lee, & Marks, 1996). Apparent validity refers to performance on the sample used to develop the prediction model. In examining the performance of the model on the population underlying the sample, internal validity is concerned with whether the model can be reproduced. External validity, meanwhile, focuses on the generalizability of the model by looking at how well it performs on a related, but slightly different, population. Applied to the present study, apparent validity addresses the performance of the MnSOST-3 on the sample used to develop it. While internal validity tells us how well the MnSOST-3 would likely perform on other samples of Minnesota sex offenders, external validity would assess MnSOST-3 performance on non-Minnesota sex offender populations. In this study, we focus on apparent and internal validity.

To assess apparent validity, statistics such as ROC curves may be estimated on the development sample to determine the predictive accuracy of the model. As for internal validity, three main methods have been developed to determine the reproducibility of a prediction model. The split-population, or data splitting, method has been the most popular approach in the development of sexual recidivism risk assessment tools. With this method, a portion (e.g., one-half or two-thirds) of the sample is used to develop the prediction model. The developed model is then applied to the remaining portion in order to test the internal validity of the model. Despite its popularity, this approach wastes data (Harrell et al., 1996).

Cross-validation, or k-fold validation, is more efficient than the split-population approach because it involves repeated data splitting. Research has demonstrated, however, that bootstrap resampling is the most efficient internal validation technique (Steyerberg et al., 2001; Steyerberg, Bleeker, Moll, Grobbee, & Moons, 2003). Developed by Efron (1979), bootstrap resampling involves pulling many smaller samples from the overall sample in order to generate estimates of error. In doing so, it makes full use of the data set for developing and validating models while also providing error estimates that have relatively low variability and minimal bias (Harrell, 2001; Steyerberg et al., 2001). As discussed shortly, we used bootstrap resampling to not only refine our selection of items for the MnSOST-3/MnSOST-3.1 but also to calculate estimates of optimism due to overfitting for both versions of the MnSOST-3.

Selection of Predictors

Stepwise variable selection procedures are frequently used in the development of prediction models. Although there are a variety of stepwise methods available, the two main approaches are forward selection and backward selection. Under forward selection, a variable does not enter the model unless it is statistically significant at a predetermined level

Table 1 Multiple logistic regression model for MnSOST-3.1

	MnSOST-3.1		MnSOST-3	
Predictors	*B*	*p*	*B*	*p*
Predatory offenses	0.289	0.001	0.292	0.001
Male victims	0.905	0.000	0.874	0.000
Public place	0.653	0.009	0.747	0.003
Felony offenses	0.126	0.000	0.129	0.000
VOFP/stalking/harassment	0.436	0.009	3.271	0.001
Disorderly conduct (last 3 years)	0.936	0.000	−1.742	0.057
Complete SO/CD treatment	−1.491	0.017	−1.557	0.013
Age at release (years)	−0.044	0.000	−0.044	0.001
Unsupervised release	1.726	0.000	1.783	0.000
VOFP X age			−0.099	0.010
Recent disorderly conduct X age			0.074	0.008
Constant	−3.254	0.000	−3.247	0.000
N	2,535		2,535	
Log-likelihood	699.107		686.075	
Nagelkerke R^2	0.209		0.225	

(e.g., alpha = 0.05). With backward selection, a variable is removed from the model if its level of statistical significance exceeds the established alpha level. Stepwise routines have been criticized on a number of grounds, especially for producing biased regression coefficients (Tibshirani, 1996) and for capitalizing on chance features of the data (Judd, McClelland, & Ryan, 2008). Still, because backward selection is generally preferable to forward selection (Harrell et al., 1996), it is the approach we used here.

We conducted multiple logistic regression analyses on the offenders in the development sample to identify significant predictors of sexual recidivism. In addition to including the 16 items from the MnSOST-R, we examined a host of variables derived from COMS data. Using an alpha of 0.10, we examined more than 100 potential predictors. Following Efron and Gong (1983), we added predictors one at a time until no further single addition achieved the significance level a = 0.10. The main effects model showed there were 10 predictors that had a significant effect ($p < 0.10$) on sexual recidivism (see "main effects" model Table 1). Among the 10 significant predictors, there were 45 possible two-way interaction effects for which we tested. Using an alpha of 0.05, we found six interaction effects that were statistically significant.

In an effort to develop a more parsimonious prediction model, we used bootstrap resampling to refine the selection of predictors included in the MnSOST-3/MnSOST-3.1. More specifically, we retained only the predictors that were consistently significant in the bootstrap samples. Although the bootstrap variable selection method has been discussed in the literature (Efron & Gong, 1983), there is no widely accepted "rule-of-thumb" threshold for retaining or removing predictors. Zhao (1998) recommended using at least a 40 % cutoff (i.e., predictors are retained in at least 40 % of the bootstrap samples), whereas Cooke and colleagues (2009) used a 60 % threshold. Here we used a relatively high threshold (70 %) to determine whether predictors should be included in the model.

After estimating 1,000 bootstrap samples from our 16-predictor model, there were five predictors (one main effect and four interaction terms) that were statistically significant at the 0.05 level in less than 70 % of the samples. After removing these five predictors, we estimated another 1,000 bootstrap samples. The results showed that 11 predictors (nine main effects and two interaction effects) were statistically significant at the 0.05 level in at least 70 % of the bootstrap samples. For the MnSOST-3.1, we removed the two interaction terms, which left nine main effects in the model. The results for the main effects model are presented in Table 1.

Discussion of Multiple Logistic Regression Results

Of the nine main effects in the model, three are items derived from the MnSOST-R (public place, completion of chemical dependency and sex offender treatment, and age at release). Although the predatory offense sentences item is somewhat similar to the number of sex/sex-related convictions item on the MnSOST-R, it is arguably a much broader measure of sexual offending history. Moreover, even among the three items derived directly from the MnSOST-R, it is worth noting that they are measured differently for both versions of the MnSOST-3. For example, public place is a dichotomous measure (as opposed to a categorical item), and completion

of both chemical dependency and sex offender treatment is a dichotomous measure that merges these two categorical items on the MnSOST-R, while age at release is a continuous, rather than a dichotomous, measure. Although a visual inspection of the residuals did not reveal any signs of nonlinearity for either age at release or number of predatory offenses, we tested for nonlinearity by estimating a model with a logarithmic transformation of both predictors. Neither coefficient, however, was statistically significant at the 0.10 level, which suggests that recidivism or, more specifically, the logit of the recidivism measure used here is linearly related to age at release and number of predatory offenses.

The results presented in Table 1 are generally consistent with existing research. We found, for example, that the risk of sexual recidivism was significantly less for offenders who completed both chemical dependency and sex offender treatment in prison, a finding that dovetails with prior research on offenders from Minnesota (Duwe, 2010; Duwe and Goldman, 2009) and in general (Lösel & Schmucker, 2005; Mitchell, Wilson, & MacKenzie, 2007). Similar to prior research on sex offenders (Hanson & Morton-Bourgon, 2004) and, more narrowly, those from Minnesota (Epperson et al., 2003), the risk was significantly greater for younger sex offenders and those with more prior predatory offenses, more predatory offenses that involved male victims, and a history of committing a sex-related offense in a public location.

The number of felony sentences of a sex offender had significantly increased the odds of reoffending sexually. We also found that the risk of sexual recidivism was significantly greater for offenders with convictions for violations of orders for protection (VOFP), stalking, or harassment. In addition to measuring impulsivity, this measure may tap into rule noncompliance and intimacy deficits, which have been found to be salient predictors in previous research (Hanson & Morton-Bourgon, 2004). The results showed that offenders with disorderly conduct convictions in the 3 years preceding their commitment to prison had a significantly elevated risk of recidivism.

We found that offenders who were released to no supervision (because their sentence had expired) were significantly more likely to reoffend sexually than those who were released to some form of post-prison supervision. Offenders were typically released to no supervision if they had multiple stays in prison as a release violator or had accumulated substantial extended incarceration disciplinary time stemming from institutional misconduct or failure to complete a sex offender treatment directive. The finding regarding the absence of post-release supervision is consistent with recent research on offenders in general, which has shown that prisoners who "max out" are significantly more likely to reoffend (Ostermann, 2009; Schlager & Robbins, 2008). Moreover, in their validation study of the MnSOST-R and Static-99, Boccaccini, Murrie, Caperton, and Hawes (2009) found that the risk of sexual recidivism was significantly greater for sex offenders who were discharged (i.e., released to no supervision).

Assessing Predictive Accuracy

The validity, or accuracy, of a prediction model is often assessed by examining its predictive discrimination and calibration (Harrell et al., 1996; Steyerberg, 2009). With the MnSOST-3.1, predictive discrimination looks at how well it separates recidivists from non-recidivists. Calibration, on the other hand, examines the extent to which there is agreement between the predicted probabilities of recidivism and the actual rates of reoffending. In light of the recent decline in sexual recidivism, one of the concerns raised about tools such as the MnSOST-R is that, despite having good predictive discrimination, it overestimates the risk of sexual recidivism (Wollert, 2006). With a well-calibrated model, however, the predicted probabilities closely correspond with the observed recidivism rates. In the ensuing sections, we examine predictive discrimination of the MnSOST-3.1 before moving on to an assessment of its calibration with actual rates of sexual recidivism.

Predictive Discrimination

We first analyzed the apparent predictive discrimination for the MnSOST-3.1 by estimating a ROC curve for the predicted probabilities derived from the main effects model shown in Table 1. The apparent AUC value for the main effects model is 0.818, which is slightly lower than the apparent AUC obtained for the MnSOST-3 interaction model (0.821). To determine the extent to which this value overestimates predictive discrimination due to overfitting, we estimated an optimism value based on the method described by Efron and Tibshirani (1993).

First, as shown above, we obtained an upwardly biased (i.e., overly optimistic) AUC estimate of apparent predictive discrimination based on the full sex offender sample (N=2,535) examined here. Second, we drew a bootstrap sample from the full offender sample and then obtained maximum likelihood estimates of beta weights based on the bootstrap sample. Third, we calculated an AUC value for that bootstrap sample. Fourth, we applied the beta weights developed from the bootstrap model to the full offender sample and obtained AUC values for these results. Fifth, we generated optimism estimates by calculating the differences in AUC values obtained during the third and fourth steps. Sixth, we repeated steps two through five 200 times, keeping track of the differences obtained at each iteration. Seventh, we used the average of the 200 differences generated during step

six as our "bootstrap estimate" of optimism for each model. Finally, we calculated an optimism-corrected AUC estimate by subtracting the optimism average obtained during the seventh step from the apparent AUC value produced during the first step.

The optimism value for the main effects model (MnSOST-3.1) was 0.022, which is slightly lower than that observed for the MnSOST-3 interaction model (0.025). As a result, the optimism-corrected AUC values are 0.796 for both the interaction (MnSOST-3) and main effects (MnSOST-3.1) models. The results suggest that removing the interaction terms produced a more stable model. The optimism-corrected AUC value of 0.796 for the MnSOST-3.1 provides an unbiased estimate that adjusts for overfitting. It may also represent an upper-level estimate as to what may be expected in validation studies on non-Minnesota sex offenders.

In examining the predictive discrimination of the MnSOST-3.1, it is worth comparing its performance not only among several different samples but also with the MnSOST-R. For the offenders released from prison between 2003 and 2006 (contemporary sample), the AUC was 0.824 compared to 0.550 for the MnSOST-R. For the cross-validation sample, the MnSOST-3.1 had an AUC value of 0.789 in comparison to 0.758 for the MnSOST-R. As noted by Epperson et al. (2003), the MnSOST-R development sample contained 256 sex offenders released from prison during the late 1980s and early 1990s. Yet, because the data needed to fully score the MnSOST-3.1 were unavailable for 13 offenders in the MnSOST-R development sample, we limited our analyses to the remaining 243 offenders. The AUC value for the MnSOST-R was 0.758 compared to 0.749 for the MnSOST-3.1, a difference that was not statistically significant ($p=0.817$) using the DeLong, DeLong, and Clarke-Pearson (1988) method for ROC curve comparison. The AUC values for the MnSOST-R development and cross-validation samples are not the same as those reported by Epperson and colleagues (2003) due to the different definitions of sexual recidivism we used here; i.e., Epperson et al. (2003) defined sexual recidivism as a new sex offense rearrest within 6 years. Overall, the findings suggest that while the MnSOST-3.1 has higher predictive accuracy for offenders recently released from prison who are subject to significant external constraints, it does not perform significantly worse than the MnSOST-R for offenders released from prison more than 20 years ago who were exposed to relatively few external constraints.

In Table 2, we take a closer look at the predictive discrimination of the MnSOST-3.1 on the MnSOST-R development sample. Epperson and colleagues (2003) distinguished the offenders in the MnSOST-R development sample on the basis of whether they were rapists or molesters. Of the 243 offenders from the MnSOST-R development sample who were examined in this study, 140 had been classified as rapists and the other 103 as molesters. The AUC values for the MnSOST-3.1 were lower for rapists (0.726) but higher for child molesters (0.781).

In Table 3, we present additional performance measures for the MnSOST-3.1. We see that the top one percent of offenders had a MnSOST-3.1 value of 40 % or higher. In other words, only 25 of the 2,535 offenders (i.e., the top one percent) had a predicted probability of sexual recidivism (within 4 years) of 40 % or higher. The top five percent had a value of 14 % or higher, the top 10 % had a value of 8 % or higher, and the top 15 % had a value of 5.8 % or higher. Among the 262 offenders with a MnSOST-3.1 value of 8 % or higher (the top 10 %), there were 53 who were recidivists, which amounts to a reconviction rate of 20 %. Considering the sexual recidivism rate was 4 % for the sample, the reconviction rate for the top 10 % is five times greater than the overall rate. For every true positive (i.e., recidivist) identified

Table 2 MnSOST-3.1 and MnSOST-3 predictive discrimination across samples

Sample	*AUC*	Lower bound	Upper bound	*N*
MnSOST-3.1				
Full sample	0.818	0.776	0.861	2,535
Contemporary sample	0.824	0.777	0.871	2,315
MnSOST-R cross-validation	0.789	0.697	0.882	220
MnSOST-R development	0.749	0.682	0.816	243
Rapist	0.726	0.634	0.817	140
Molester	0.781	0.686	0.877	103
MnSOST-3				
Full sample	0.821	0.777	0.865	2,535
Contemporary sample	0.824	0.772	0.875	2,315
MnSOST-R cross-validation	0.792	0.700	0.884	220
MnSOST-R development	0.752	0.686	0.819	243
Rapist	0.733	0.642	0.824	140
Molester	0.781	0.686	0.876	103

Table 3 MnSOST-3/MnSOST-3.1 performance metrics

MnSOST-3/MnSOST-3.1 values (percentile)	N	Sex crime reconvictions	Reconviction rate (%)	Risk ratio	True–false positive ratio	Capture rate (%)
MnSOST-3.1						
≥40 % (top 1 %)	21	8	38.1	9.5	1.6	7.8
≥25 % (top 2 %)	51	20	40.0	9.9	1.5	19.6
≥14 % (top 5 %)	124	33	26.7	6.6	2.8	32.4
≥8.0 % (top 10 %)	262	53	20.2	5.0	3.9	52.0
≥5.8 % (top 15 %)	381	61	16.0	4.0	5.2	59.8
≥2.3 % and <5.8 % (16–45 %)	760	25	3.3	0.8	29.4	24.5
<2.3 % (bottom 55 %)	1,394	16	1.2	0.3	86.1	15.7
MnSOST-3						
≥40 % (top 1 %)	25	11	44.0	10.9	1.3	10.8
≥25 % (top 2 %)	51	22	44.0	10.7	1.3	21.6
≥13.5 % (top 5 %)	127	35	27.6	6.9	2.6	33.5
≥8.0 % (top 10 %)	251	55	21.9	5.4	3.6	53.9
≥5.5 % (top 15 %)	380	65	17.1	4.3	4.8	63.7
≥2.5 % and <5.5 % (16–40 %)	637	17	2.7	0.7	36.5	9.7
<2.5 % (bottom 59 %)	1,518	20	1.3	0.3	74.9	11.4

at the 8 % cut point, there were nearly four false positives (non-recidivists). Because there were a total of 102 recidivists, the 53 recidivists with MnSOST-3.1 values of 8 % or higher accounted for 52 % (capture rate) of the total recidivists.

As noted earlier, we did not examine 134 sex offenders released from Minnesota prisons between 2003 and 2006 because they were civilly committed. Still, to further test the validity of the MnSOST-3.1, we generated MnSOST-3.1 values for these offenders. The average MnSOST-3.1 value for the 134 civilly committed offenders was 10.1 %, which is 2.5 times higher than the overall average. One of the criteria for civil commitment or sexually violent predator (SVP) decisions is the determination that the offender is either "substantially likely" or "more likely than not" to reoffend sexually, which roughly translates into a probability of 51 % or higher. Only four of the offenders (three percent), however, had a MnSOST-3.1 value greater than 50 %, and only nine (seven percent) had an upper 95 % confidence interval (CI) that exceeded 50 %. Moreover, as noted above, less than one percent of the 2,535 offenders had a MnSOST-3.1 value that exceeded 50 %, which is substantially lower than the rate (seven percent) at which Minnesota sex offenders have been civilly committed over the last few decades. These findings should not be considered too surprising, however, given that a recent report on Minnesota's civil commitment program found that county of commitment, which is unrelated to sexual recidivism risk, was a significant factor in determining whether sex offenders were civilly committed (civil commitment decisions are finalized at the county level in Minnesota) (Minnesota Office of the Legislative Auditor, 2011).

Calibration

In Table 4, we present data on the distribution of MnSOST-3.1 values and the corresponding 95 % CIs. Although the predicted probabilities from a logistic regression model can vary from 0 to 100 %, the MnSOST-3.1 values for the 2,535 offenders ranged from a low of 0 % to a high of 98 %. Only 0.5 % of the sample, or 13 offenders, had a MnSOST-3.1 value of 50 % or higher, whereas a little more than one percent ($N=33$) had an upper CI at or above 50 %. Two percent of the sample had a MnSOST-3.1 value of 25 % or higher, while nearly eight percent had a value of 10 % or higher. Nearly half of the sample (46 %) had a MnSOST-3.1 value below 2 %, while roughly one-fifth (19 %) had a value below 1 %. Overall, 77 % had a value below four percent, which was the sexual recidivism rate observed among the 2,535 sex offenders.

We first assessed the calibration of the MnSOST-3.1 by estimating a Hosmer–Lemeshow test in which MnSOST-3.1 values were regressed on sexual recidivism. The test was statistically significant at the 0.05 level, which suggests that the MnSOST-3.1 is not well calibrated with the observed rates of sexual reoffending in the sample. Yet, because the Hosmer–Lemeshow test is sensitive to sample size, a statistically significant test does not necessarily mean the MnSOST-3.1 model is not well calibrated due to the large sample size used here.

To better understand the results from the Hosmer–Lemeshow test, we present data in Table 5 that compare average MnSOST-3.1 values and observed sexual recidivism rates among the offenders in the sample according to 13 discrete

Table 4 Distribution of MnSOST-3/MnSOST-3.1 values and 95 % confidence intervals

MnSOST-3/ MnSOST-3.1 value (%)	Lower 95 % CI (%)	Upper 95 % CI (%)	*N* ≥to MnSOST-3.1 value	% of sample (*N*=2,535) (%)
MnSOST-3.1				
50	29	77	13	0.5
40	21	62	21	0.8
33	17	50	33	1.3
30	16	48	37	1.5
25	14	39	50	2.0
20	11	34	70	2.8
15	8	26	111	4.4
10	5	16	192	7.6
5	3	8	458	18.1
4	3	7	578	22.8
3	2	5	837	33.0
2	1	3	1,374	54.2
1	<1	2	2,062	81.3
MnSOST-3				
50	22	77	19	0.7
40	21	66	25	1.0
34	19	50	34	1.3
30	17	47	38	1.4
25	15	41	50	2.0
20	11	34	77	3.0
15	8	27	116	4.6
10	6	18	184	7.3
5	3	8	431	17.0
4	2	7	566	22.3
3	2	5	807	31.8
2	1	3	1,374	54.2
1	<1	2	2,014	79.4

Table 5 Calibration between actual recidivism rates and MnSOST-3/ MnSOST-3.1 values

MnSOST-3/ MnSOST-3.1	Actual rate (%)	Avg. MnSOST-3.1 value (%)	*N*
MnSOST-3.1			
60 % or higher	55.6	73.5	9
40–59 %	25.0	47.8	12
30–39 %	31.3	35.7	16
20–29 %	36.4	24.1	33
15–19 %	19.5	17.6	41
10–14 %	9.9	12.1	81
5.0–9.9 %	8.3	7.0	266
4.0–4.9 %	6.7	4.4	120
3.0–3.9 %	3.2	3.5	252
2.0–2.9 %	2.6	2.4	544
1.0–1.9 %	1.0	1.5	688
Less than 1 %	0.4	0.6	473
Total	4.0	4.0	2,535
MnSOST-3			
60 % or higher	57.1	72.3	14
40–59 %	27.3	48.2	11
30–39 %	33.3	35.7	12
20–29 %	30.0	23.8	40
15–19 %	15.4	17.4	39
10–14 %	17.6	11.9	68
5.0–9.9 %	8.9	7.0	247
4.0–4.9 %	3.0	4.5	135
3.0–3.9 %	2.9	3.5	241
2.0–2.9 %	2.3	2.4	567
1.0–1.9 %	1.2	1.5	640
Less than 1 %	0.6	0.6	521
Total	4.0	4.0	2,535

categories of MnSOST-3.1 values. Given that the average MnSOST-3.1 values are higher than the observed sexual recidivism rates for offenders with a score of 40 % or higher, the results suggest that the MnSOST-3.1 may overestimate risk for the highest-risk offenders.

The calibration patterns depicted in Table 5 are further illustrated in the Lowess plot, which is shown in Fig. 1. Whereas the dotted line represents actual rates of sexual reoffending among the 2,535 sex offenders, the solid line denotes the predicted probabilities (i.e., MnSOST-3.1 values) derived from the logistic regression model. The plot indicates a relatively tight correspondence between actual recidivism rates and predicted probabilities for offenders with MnSOST-3.1 values less than 40 %, which suggests that the MnSOST-3.1 appears to be well calibrated with actual sexual recidivism rates for roughly 99 % of the sample. The two lines begin to diverge, however, when we reach the 40 % mark. Because the solid line is below the dotted line for MnSOST-3.1 values greater than 40 %, the plot indicates that the MnSOST-3.1 overestimates sexual recidivism risk for the top 1 % of offenders in the sample.

We further assessed the calibration by estimating a Brier score, which is a quadratic scoring rule that calculates the squared differences between observed and predicted values. The results indicate a Brier score that was close to zero (0.0339) and a Spiegelhalter's z-score (0.3480) that was not statistically significant (p=0.3639). Therefore, despite the lack of calibration at the top end of the model, the results suggest sufficient overall calibration between predicted and observed outcomes.

Reliability

In our MnSOST-3 study (Duwe and Freske, 2012), we examined the reliability of scoring the instrument by conducting an inter-rater reliability assessment. Given that the nine main effects are the same in both models, the results are identical to those presented in the MnSOST-3 study except

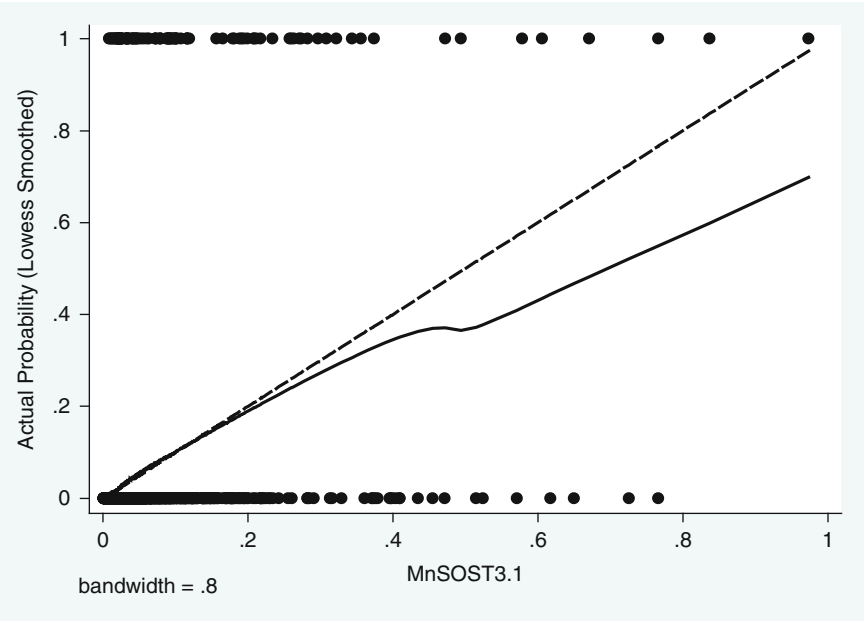

Fig. 1 Lowess plot for MnSOST-3.1 values and observed sexual recidivism

Table 6 MnSOST-3/MnSOST-3.1 inter-rater reliability assessment

	Consistency			Absolute agreement		
MnSOST-3/MnSOST-3.1 items	ICC	Lower bound	Upper bound	ICC	Lower bound	Upper bound
MnSOST-3.1 score	0.810	0.694	0.905	0.811	0.696	0.905
MnSOST-3 score	0.826	0.718	0.914	0.826	0.718	0.914
Predatory offense sentences	0.826	0.718	0.914	0.826	0.718	0.914
Male victims	0.793	0.670	0.895	0.797	0.676	0.898
Public place	0.928	0.875	0.966	0.929	0.876	0.966
Felony offense sentences	0.938	0.892	0.971	0.935	0.887	0.970
VOFP/stalking/harassment	0.671	0.514	0.822	0.669	0.513	0.821
Disorderly conduct/3 years	0.767	0.635	0.881	0.771	0.641	0.883
SO/CD treatment	0.796	0.674	0.897	0.798	0.677	0.898
Release age (years)	1.000	1.000	1.000	1.000	0.999	1.000
Unsupervised release	0.869	0.781	0.936	0.860	0.766	0.932

ICC Intraclass correlation coefficient
All coefficients were statistically significant at the 0.01 level

for the total score. For the inter-rater reliability assessment, we randomly selected 20 sex offenders who were released from Minnesota prisons between January 1 and June 30, 2010, on whom a MnSOST-R had been scored. Following a 4-h training session, eight assessors in the MnDOC's Risk Assessment and Community Notification (RACN) Unit each scored the selected cases on the Microsoft Excel application of the MnSOST-3 over a 5-day period. We created an age at release calculator on the Excel spreadsheet so as to facilitate the valid and reliable scoring of data for this item. The eight raters in this study had, on average, 7 years of experience in scoring sex offender risk assessment instruments. We analyzed the degree of inter-rater reliability among the eight assessors for these 20 cases by estimating intraclass correlation coefficients (ICC) using a two-way random effects model.

The results showed that the singular ICC for the eight raters was 0.810 and 0.811 for consistency and absolute agreement of ratings, respectively, for the 20 cases (see Table 6). These values are slightly lower than the ICC values observed for the MnSOST-3 (0.826 for both consistency and absolute agreement). The item-level data show that ratings were most consistent for age at release, which may be due in part to the creation of a calculator for this item. The ratings were least consistent, however, for VOFP/stalking/harassment sentences. Although most (6) of the items on both versions of

the MnSOST-3 are continuous (as opposed to binary or dichotomous) measures, which presumably increases the margin for error in scoring items, the items on both instruments are largely objective measures. Overall, the findings suggest that both versions of the MnSOST-3 have an adequate degree of reliability.

Discussion

In February 2012, the MnDOC began using the MnSOST-3.1 because, compared to the MnSOST-3, it is simpler, is easier to interpret, and does not have an adverse impact on predictive accuracy. Yet, due to the same optimism-corrected AUC values, both versions of the MnSOST-3 will still be available to the public on the MnDOC website (http://www.doc.state.mn.us/publications/MnSOST3/default.htm). Use of the MnSOST-3.1, however, will result in several modest changes relating to cut scores and scoring the instrument.

In Minnesota, one of the main purposes for using the MnSOST-3.1 is to assess sexual recidivism risk for community notification. Since the inception of the Community Notification Act in 1997, Minnesota has used a tiered risk management system in which the level of community notification is based on the offender's predicted risk of sexual recidivism. Sex offenders with a high predicted risk of sexual recidivism are given the most extensive level (Level 3) of notification (i.e., community meetings held by law enforcement, publication of the offender's photograph and offense description on the Minnesota Department of Corrections' website, etc.), whereas those with lower risk (Levels 1 and 2) are given more limited forms of notification. Because the MnSOST-3.1 is used by end-of-confinement review committees (ECRC) within the MnDOC to determine risk levels for offenders, it anchors Minnesota's tiered risk management system. Yet, because the ECRC considers additional factors that may either increase or decrease the risk of reoffense (e.g., an offender's stated intention to reoffend following release or a debilitating illness or physical condition that mitigates the risk of reoffense), the ECRC may override the risk level suggested by the MnSOST-3.1. As a result, the risk levels implied by either version of the MnSOST-3 are considered presumptive.

Historically, the MnDOC has given Level 3 assignments to approximately 15 % of released sex offenders, Level 2 assignments to about 30 % of offenders, and Level 1 assignments to the remaining 55 %. Cut scores for presumptive risk levels within Minnesota are therefore based on this distribution. Under the MnSOST-3, the cut scores for presumptive risk levels are:

Level 3 = 5.50 % or higher
Level 2 = 2.30–5.49 %
Level 1 = 2.29 % or lower

The 5.5 % MnSOST-3 value was selected as the cut score for a presumptive Level 3 assignment because this threshold represented the 85th percentile. In other words, sex offenders with MnSOST-3 values of 5.5 % or higher constitute the top 15 % with respect to predicted likelihood of sexual recidivism in 4 years. The values of 2.30 and 5.49 % were selected as the cut scores for the presumptive Level 2 assignment range because they represent the 55th and 84th percentiles, respectively. And the value of 2.29 % was the presumptive Level 1 cut score selected because MnSOST-3 values below 2.30 % comprise the bottom 55 % in terms of sexual recidivism risk.

Under the MnSOST-3.1, the Level 1 cut score remains the same, although there is a slight modification for the Level 2 and 3 cut scores. The MnSOST-3.1 cut scores for presumptive risk levels are:

Level 3 = 5.80 % or higher
Level 2 = 2.30–5.79 %
Level 1 = 2.29 % or lower

For offenders without VOFP and/or disorderly conduct convictions, scores from the two versions of the MnSOST-3 will vary only slightly. The major differences in scores for the two instruments will be observed among offenders who have VOFP and/or disorderly conduct convictions. Under the MnSOST-3.1, VOFP and disorderly conduct convictions will increase risk regardless of the offender's age at the time of release.

Even though the MnDOC will be using the MnSOST-3.1, we will continue efforts to better understand the interaction findings from the MnSOST-3 and further assess the impact these interactions have on assessments of risk. In particular, by estimating the impact of items such as VOFP and disorderly conduct convictions on other types of recidivism besides sexual reoffending, we anticipate that work on the global risk assessment tool may help decrease the extent to which the interaction findings appear to be counterintuitive.

We will also be collecting data on offenders who scored on the MnSOST-3.1 to determine what their scores would have been on the MnSOST-3. We expect that analyzing data on a larger number of cases, especially those scored recently, will enable us to more fully comprehend the behavior of the interaction terms in the MnSOST-3, and we plan on sharing the results of these analyses with the broader corrections and forensic communities when they become available.

Although we believe the MnSOST-3.1 offers a modest improvement in several ways over the MnSOST-3, the caveats raised about using the MnSOST-3 on non-Minnesota sex offender populations also apply to the MnSOST-3.1. For example, with either version of the MnSOST-3, we did not attempt to specifically develop a widely applicable instrument. As a result, the relatively high predictive accuracy of

either version of the MnSOST-3 may not generalize to sex offender populations in other jurisdictions. After all, Minnesota is, in several potentially important ways, different from the rest of the United States. Even though Minnesota is, compared to the other 49 states, generally in the middle of the pack for population size and crime rate, it has the second lowest incarceration rate in the nation. Because Minnesota relies more heavily on local sanctions (e.g., jail and community supervision), prison beds are generally reserved for offenders who have committed very serious offenses and/or have lengthy criminal histories. Further, unless offenders receive extended incarceration disciplinary time, prisoners in Minnesota are typically released after serving two-thirds of their sentence. This may make release at expiration of sentence less common in Minnesota relative to some other jurisdictions.

Use of either version of the MnSOST-3 outside of Minnesota may also be limited by the level of data needed to accurately score the instrument. In particular, given that six of the nine items relate, in some form or another, to criminal history (both sexual and nonsexual), access to complete and accurate criminal history data is imperative. The instrument would therefore have diminished value for agencies that have limited access to these data or in jurisdictions where the criminal history data are less than complete. In addition, although we anticipate the items included on the instrument would likely be significant predictors of sexual recidivism for populations of non-Minnesota sex offenders, the weights (i.e., coefficient values) applied to these items are less likely to generalize to other populations.

These limitations notwithstanding the relatively high optimism-corrected AUC for either version of the MnSOST-3 suggest it still may be among the better risk scales even if there is reduction in its predictive accuracy for other sex offender populations. Nevertheless, determining the extent to which the instrument is generalizable to non-Minnesota sex offender populations ultimately depends on the completion of validation studies. Accordingly, we suggest that jurisdictions outside Minnesota consider using either version of the MnSOST-3 alongside externally validated risk assessment instruments (e.g., Static-99/Static-99R, Static-2002/Static-2002R, SORAG, MnSOST-R, etc.) until results from validation studies are available.

Given that our sample contains prisoners whose index offenses included both sexual and nonsexual crimes, the instrument can be used to assess post-release sexual recidivism risk for offenders who have at least one documented sex offense in their history regardless of whether their index offense is a sex crime. The sample also included 53 intrafamilial fondlers, 99 offenders whose only sex offense conviction(s) occurred as a juvenile, and 12 child pornography offenders—a group that has expanded in size over the last decade (Wolak, Finkelhor, & Mitchell, 2011). Due to these relatively small numbers, we recommend exercising a great deal of caution in using the instrument on sex offenders who fall into one of these three groups. Again, we anticipate that external validation studies will help reveal the extent to which the instrument has predictive validity for these groups of offenders.

In an effort to facilitate the completion of validation studies and the use of the instrument in other jurisdictions, we have provided descriptions of how the nine individual items were coded in the Appendix. Moreover, we have prepared a more detailed coding manual and have developed the instrument so that it can be scored in a Microsoft Excel spreadsheet. Both the coding manual and the Microsoft Excel applications of the MnSOST-3 and MnSOST-3.1 can be found at: http://www.doc.state.mn.us/publications/MnSOST3/default.htm.

Appendix

The following lists the nine items on the MnSOST-3.1 and describes how they were measured. The coding manual for the MnSOST-3.1, which provides a more complete description of these items, can be downloaded here: http://www.doc.state.mn.us/publications/MnSOST3/default.htm.

Predatory Offenses: this item, which closely corresponds with the offenses that trigger predatory offense registration in Minnesota, measures the number of predatory offense sentences for which an offender has been convicted, including the index offense(s), up to a maximum of 25. Predatory offenses include all criminal sexual conduct crimes (1st–6th degree), murder in the first degree committed while the offender was committing (or attempting to commit) a criminal sexual conduct offense, kidnapping, false imprisonment (if the victim was not the minor dependent of the offender), indecent exposure, soliciting a minor to engage in prostitution, soliciting a minor to engage in sexual conduct, using a minor in a sexual performance, possession of child pornography, and incest.

Male Victims: this item measures the number of predatory offense sentences, as defined above, committed in which a male was the victim or one of the victims, up to a maximum of four sentences.

Public Place: similar to the MnSOST-R, this item measures whether any sexual activity with any sex offense was committed in a public place, which is defined as an area maintained for, or used by, the people or community or an area open to the scrutiny of others (Epperson et al., 2003). Offenders who have committed a sex offense, charged or convicted, in a public place received a value of "1," whereas those who did not received a value of "0."

Felony Offenses: this item measures the total number of felony-level offense sentences for which an offender has been convicted, including the index offense(s). The value entered for felony sentences is the total number of felony sentences, whether juvenile or adult, index or prior, predatory or non-predatory, up to a maximum of 20.

VOFP/Stalking/Harassment: this item measures the total number of sentences (adult or juvenile, index or prior, petty misdemeanor, misdemeanor, gross misdemeanor, or felony) an offender has for stalking, harassment, or violations of orders for protection, up to a maximum of five sentences.

Recent Disorderly Conduct: this item measures the number of sentences (adult or juvenile, index or prior, petty misdemeanor, misdemeanor, gross misdemeanor, or felony) an offender has for disorderly conduct convictions in the 3 years preceding his most recent commitment to prison, up to a maximum of two.

Completion of Sex Offender and Chemical Dependency Treatment: this item measures whether offenders have completed both sex offender and chemical dependency treatment while in prison for the index offense. Treatment completions are not included here if they occurred during a prior prison sentence or if the offender has received a new treatment directive. Offenders who complete prison-based sex offender and chemical dependency treatment while incarcerated for the index offense(s) receive a value of "1," whereas those who do not complete both types of treatment are given a value of "0."

Age at Release: the age of the offender in years at the time of release based on the date of birth and release date.

Unsupervised Release: this item measures whether offenders are released to correctional supervision. Offenders who are released to no supervision (i.e., discharged) receive a value of "1," whereas offenders released to some form of correctional supervision receive a value of "0."

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Structured Risk Assessment

David Thornton

Introduction

Over the last decade, a number of structured schemes have been designed to assist professionals in assessing the risk for future sexual or violent offending presented by men convicted of sexual offenses (see Knight & Thornton, 2007). The most common of these structured schemes are composed of items that capture simple facts from offenders' histories that are statistically known to indicate a raised risk of recidivism. These predictive facts are largely aspects of past sexual offending or of more general criminal behavior. Essentially a problem behavior (sexual recidivism) is being predicted on the basis of prior observations of the same or similar problem behaviors.

A contrasting approach to prediction is to build the predictive classification out of psychologically meaningful factors that are presumed to predispose toward the problem behavior. These psychologically meaningful predictors are sometimes referred to as Criminogenic Needs since it is believed that targeting them in treatment will reduce recidivism (Andrews & Bonta, 2006). As a kind of shorthand the first kind of assessment is sometimes referred to as risk assessment while the second is called need assessment. Evaluation protocols that combine both kinds of assessment are commonly called Risk/Need instruments.

Andrews, Bonta, and Wormith (2006) distinguish four generations of risk assessment instruments. The first generation consisted of unstructured professional judgments. Second-generation instruments are empirically based, but atheoretical, and largely composed of static items. Third-generation instruments, while also being empirically based, include a wider sampling of Criminogenic Needs and are more theoretically based. Fourth-generation instruments are more specifically tailored to support decision-making in specific risk management contexts.

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Within the sexual offender field most risk assessment tools would be categorized as second-generation instruments, but third-generation Risk/Need instruments are beginning to become available.

The focus of this chapter is on the Structured Risk Assessment (SRA) framework. This is a conceptual framework that enables the construction of risk/need instruments relevant to sexual offenders. This chapter has five purposes:

1. An overall description of the SRA framework is provided
2. The Need Assessment portion of the framework is described in detail so that the reader can use it in constructing or assessing a Risk/Needs instrument
3. The available research relevant to the empirical claims made by the Need Assessment portion of the SRA framework is described
4. The strengths and weaknesses of three instruments that are consistent with the SRA Need framework are described
5. Suggestions are made for future developments

Overall Description of the SRA Framework

The SRA framework proposes four steps in a comprehensive assessment. A risk assessment protocol that operationalized all four steps would arguably be a fourth-generation risk assessment since these steps were designed to guide decision-making at different points in the management of an offender as different kinds of information become available and different decisions have to be made.

SRA Step One: Static Actuarial Assessment

Step one is a static actuarial assessment. The SRA framework specifies that these instruments should be an appropriately weighted combination of items chosen to reflect the three underlying risk dimensions of Youth, Generally

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Criminal Behavior, and Sexually Criminal Behavior. Here Youth refers to lower ages within the adult age range. Generally Criminal Behavior refers to the range and persistence of criminal/delinquent behavior, and Sexually Criminal behavior refers to range and persistence of illegal sexual behavior. Support for these three dimensions can be found in the factor analysis reported by Roberts, Doren, and Thornton (2002). Subsequent factor analyses (e.g., Barbaree, Langton, & Peacock, 2006; Knight & Thornton, 2007) have identified more specific dimensions, but these are considered to be components of the three broader dimensions. For example, Sexual Persistence, Male Victim choice, and Relationship to the Victim factors (in Knight & Thornton, 2007) can all be thought of as aspects of the range and persistence of sexually criminal behavior.

In implementing SRA, Step One instruments should be chosen according to how well they measure these underlying dimensions and how appropriately they are weighted so as to predict sexual recidivism. In the past the instruments most commonly used for Step One have been Static-99 (Hanson & Thornton, 2000) and Risk Matrix 2000 (Thornton et al., 2003). However, the better weighting of age in Static-99R (Helmus, Thornton, Hanson, & Babchishin, 2011) gives a basis within SRA for preferring it to Static-99.

In selecting a static actuarial instrument for SRA's Step One preference should also be given to instruments that more explicitly provide scores for the three underlying dimensions over those that do not. This potential feature of static actuarial instruments has not been well developed to date with the exception of Static-2002 (Hanson & Thornton, 2003) and Barbaree's proposed new instrument (Barbaree et al., 2009).

An important advantage of Step One is that it does not require a cooperative offender, does not require treatment participation, and, in fact, can be completed on the basis of the kind of slim information that is often available at the time of sentencing. Step One is therefore an appropriate way to begin making decisions earlier in sentence or before more in-depth information has become available. It is particularly suited to initial resource-prioritization decisions.

An important weakness of Step One assessment is that its risk categories are only based on a limited set of underlying risk indicators. We know that there are important risk factors that are at least partially independent of this kind of static actuarial assessment. As a consequence, members of a risk group defined by Step One procedures may actually differ substantially in the level of risk they present, depending on which external risk factors apply. For example, offenders falling in a high-risk category according to Step One type assessment actually have quite low recidivism rates if dynamic psychological risk factors are largely absent (e.g., Thornton, 2002; Beech, Friendship, Erikson, & Hanson, 2002; Allan, Grace, Rutherford, & Hudson, 2007; Olver, Wong, Nicholaichuk, & Gordon, 2007; Beggs & Grace, 2010).

Recent research has highlighted the importance of this limitation (e.g., Hanson, Helmus, & Thornton, 2010). The expected recidivism rate associated with a static actuarial score is a function of both the factors directly implied by that score (a given level of general and sexual criminality and a certain age) together with the average level of external risk factors that accompany that score. Where selection processes shift the average level of external risk factors associated with static actuarial scores, the recidivism rates associated with those specific static actuarial score will also shift (Thornton, Hanson, & Helmus, 2010). For example, where selection to take part in sexual offender treatment increases the average level of psychological risk factors across all levels of criminal history, the risk presented by these "preselected" individuals will come both from the criminal history and from elevated levels of psychological risk factors found as a result of the selection process. In effect, the selection process is acting as a proxy variable indicating the presence of higher levels of external risk factors.

SRA Step Two: Need Assessment

Step Two has been referred to variably as Initial Deviance Assessment and as Need Assessment. The former phrase is a reference to its origins in the work of Beech and his colleagues (e.g., Beech, 1998); the latter phrase connects to Andrews and Bonta's use of the term Criminogenic Need. Need Assessment is now generally preferred since this language is thought to be helpful in engaging the cooperation of the offender being assessed. As a consequence, the implementation of SRA used by correctional services in England and Wales is termed Structured Assessment of Risk and Need (SARN: Webster et al., 2006; Mann, 2010).

Step Two involves the assessment of potential long-term vulnerabilities or propensities (Mann, Hanson, & Thornton, 2010) that may predispose toward future sexual offending. The focus of treatment then can be to help the offender to manage his long-term vulnerabilities, and where possible to develop healthy prosocial ways of functioning that he can use in circumstances which would in the past have triggered his long-term vulnerabilities. These long-term vulnerabilities are also sometimes referred to as dynamic psychological risk factors.

The SRA Need Assessment framework proposes that these long-term vulnerabilities can be classified into four domains: sexual interests, distorted attitudes, relational style, and self-management (see Thornton, 2002 where the relational style domain was referred to as the socio-affective domain). Within each domain broad groups of long-term vulnerabilities are defined. These are referred to as sub-domains. Specific long-term vulnerabilities are proposed that fall within each sub-domain. Thus Sexual Interests is a

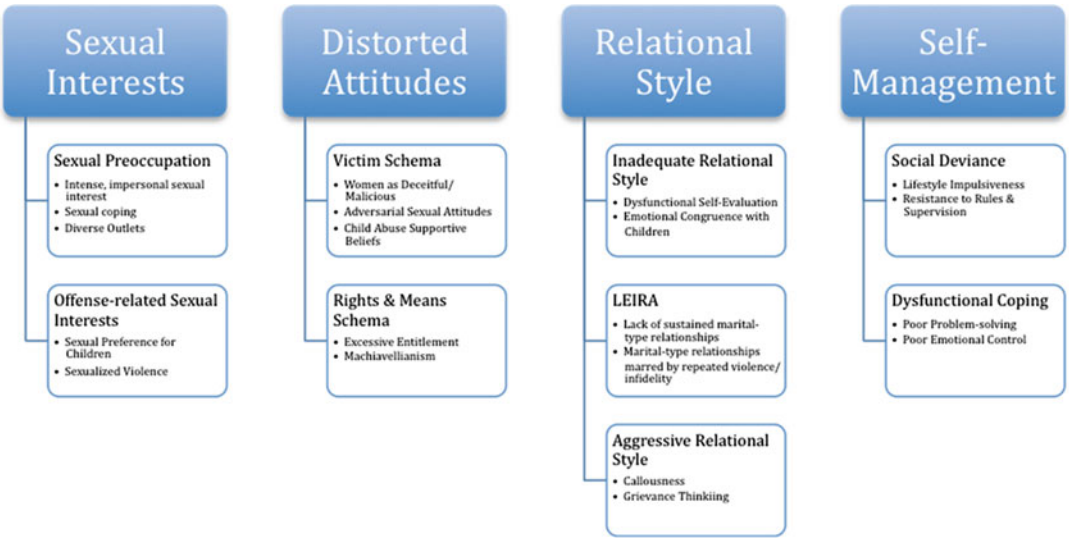

Fig. 1 Structure of long-term vulnerabilities defined by SRA

domain. Offense-Related Sexual Interests is a sub-domain. Sexual Interest in Children and Sexualized Violence are factors within this sub-domain.

In implementing SRA Step Two, Need Assessment protocols should be chosen that include psychological risk factors that fall within at least three of the four domains. Preference should be given to protocols according to how well they represent the main sub-domains within these domains. Of course in addition to this issue of balanced coverage of the domains, preference should also be given to protocols that assess the specified factors with greater reliability and validity in the intended operational context.

To assist the reader in making judgments about how well a particular instrument provides balanced coverage of the domains, Fig. 1 depicts the main sub-domains of long-term vulnerabilities within each domain and lists particular long-term vulnerabilities falling within each sub-domain.

It is important to note that since its inception in the late 1990s, SRA has been seen as an organic framework, intended to grow and incorporate new psychological risk factors within each of the domains. The principles guiding this are as follows.

1. There should be a coherent theoretical rationale for believing that the proposed new factor predisposes toward repeated offending
2. There should be empirical evidence that the factor is correlated with repeated sexual offending. Three kinds of evidence have been regarded as relevant:
   (a) Is the factor more common in those offenders with both current and prior convictions for sexual offenses and less common in those with only a current conviction for a sexual offense?
   (b) Is the factor recurrently found in the sequences of events leading to offenses?
   (c) Is the factor predictive of future convictions for sexual offenses?

This last consideration (prediction of future convictions) is given most weight. It requires that the factor be measured based on data that were created prior to the follow-up period in which recidivism was assessed.

Despite this organic openness to future research data, the main factors falling in the different domains are largely unchanged since 1999. The main development since that time is that the evidence for the relevance of the different factors has become more credible. When SRA Need factors were first proposed, it was primarily on the basis of the first two kinds of evidence. Now most of them are supported by the third, and weightier, kind of evidence (see Mann et al., 2010 for a meta-analysis of relevant studies).

The elements of the SRA Need Framework depicted in Fig. 1 are described below in sufficient detail for the reader to develop a thorough conceptual understanding of the framework.

Domain 1: Sexual Interests

This domain incorporates long-term vulnerabilities that have to do with the direction, form and strength of sexual interests.

Two sub-domains have been conceptualized within the Sexual Interests domain: offense-related sexual interests and sexual preoccupation. The better studied long-term vulnerabilities from the Sexual Interests sub-domains are described below.

1a. The Offense-Related Sexual Interests Sub-domain

Within the ***Offense-Related Sexual Interests Sub-domain***, two specific long-term vulnerabilities have been identified: sexual preference for children and sexualized violence.

Sexual Interest in Children

This refers to an intense interest in or preference for sexual activity with children. Children are defined as prepubescent or pubescent children: females aged 0–12 and males aged 0–14. Biologically, a prepubescent child would be expected not to show the physical cues typically indicative of the biological ability to mate and reproduce while a pubescent child would show them to a much lesser degree than adults.

Relevant ways in which children's bodies differ from adults' bodies include in skin texture, degree of body and pubic hair, smell, body shape, musculature, and breast and genital development.

Note that this definition is *not* equivalent to legal concepts of age at which someone can consent to sex.

Sexualized Violence

Sexualized Violence has two aspects. The factor is regarded as being present if either of these aspects is present. They are

1. An intense interest in or preference for sexual activity that involves forcing sex upon an unwilling recipient (coercive rather than consensual sexual activity). The coercive element must be a source of sexual arousal, not merely a means to overcome victim resistance
2. Sexual arousal to the idea of inflicting violence, pain, terror, humiliation, destruction, or exercising abusive control over another person

It is important to note that this factor refers to "violence" having become a source of sexual arousal, not just to its failing to inhibit sexual arousal.

1b. The Sexual Preoccupation Sub-domain

The ***Sexual Preoccupation Sub-domain*** has not generally been differentiated into more specific long-term vulnerabilities though it would be possible to conceptually distinguish some of the elements within sexual preoccupation (sexualized coping; sex disproportionately valued relative to other motivations; diversity of sexual outlets; impersonal sexuality).

Sexual Preoccupation

Sexual preoccupation involves an intense interest in sex that tends to dominate psychological functioning. Sex tends to be engaged in for its own sake, or as a way of defining the self, or as a way of self-medicating negative mood, rather than as an expression of a loving relationship. Sex is a highly salient feature of life. It is felt as an urgent need so that it is hard to stop thinking about it. Consequently large amounts of time are spent thinking about sex or engaging in sexually motivated behavior. Sexual aspects of situations are highly salient, easily becoming the focus of attention. Sexual dissatisfaction is a common feature among sexually preoccupied men; no amount of sex is felt to be "enough." A wide range of sexual outlets may be tried.

Domain 2: Distorted Attitudes

This domain incorporates long-term vulnerabilities that involve ***general*** beliefs or attitudes that make it easier for offenders to give themselves permission to commit sexual offenses. Such beliefs are sometimes described as cognitive distortions, but these should be sharply distinguished from denial and minimization which are not included in the SRA construct of distorted attitudes. The force of the phrase "general beliefs" is intended to be that what is involved are implicit theories or schema, not post hoc excuse-making with regard to particular offenses. The beliefs should refer to whole categories of activities or people, not just to specific individuals or events.

For example, when an offender is talking about a 7-year-old child who he had sexually abused says "Mary was different from other girls, she became sexually aware long before her friends," this is probably a distorted interpretation of Mary but it is not a general belief since it relates to just to one child. On the other hand, if the offender had said "Young children these days are much more interested in sex than they were when I grew up. They are flirtatious and know more about sex than I ever did," then this would be expressing a general belief about children.

Two sub-domains have been conceptualized within the Distorted Attitudes domain: schema regarding potential classes of victims (mainly women and children) and schema that relate to more general conceptions of rights and to means of gaining control of victims.

2a. Victim Schema Sub-domain

To date three general beliefs have been identified in the ***Victim Schema Sub-domain***. These are Adversarial Sexual Attitudes, Seeing Woman as Deceitful and Malicious, and Child Abuse Supportive Beliefs.

Adversarial Sexual Attitudes

As defined in SRA, Adversarial Sexual Attitudes involve three closely linked components: believing that men need to be tough and dominating while women should be submissive and accepting; seeing sexual encounters between men and

women as essentially adversarial; and seeing it as natural and appropriate for a man to use sexual activity with women as a way to bolster his sense of male dominance or masculine identity without any empathic concern for the woman's experience.

In essence this involves a linkage between a schema regarding the proper relations between men and women, and the offender's self-schema. So for a man with this belief system, experiencing himself as dominating a woman affirms his sense of his own value and the esteem in which he expects other men to hold him. It also affirms that the world is operating as it should. When such a man experiences himself as having to submit to a woman, or as failing to dominate a woman, then his sense of his own value is called into question, he expects other men to view him with contempt, and the world feels unpredictable, dangerous, and "wrong."

Seeing Women as Deceitful and Malicious

The core of this belief is the idea that women are generally deceptive and malicious towards men. Men with this belief think that women like making fools of men and that if you trust a woman then sooner or later she will let you down. Women are seen as seldom expressing their true feelings directly to men. A man with this representation of women thinks that if a woman appears sexually interested in him this doesn't imply true sexual interest, but probably means that she is trying to manipulate him in some way. Equally, if a woman is apparently cold or hostile this may reflect her really being sexually interested. Or if a woman is apparently kind or respectful to his face, it is likely that she is mocking him behind his back.

Child Abuse Supportive Beliefs

Child Abuse Supportive Beliefs include two main types of belief. One variant is seeing children as "little adults" with an adult-like capacity to enjoy sex and/or to consent to it or, relatedly, seeing children as sexually knowing and sexually provocative, deliberately inviting sexual interest from adults. The other variant is seeing sex with children as harmless for the child, or even positively beneficial, so long as the man is "gentle."

2b. Rights Schema Sub-domain

This involves ***an Excessive Sense of Entitlement.*** This takes two primary forms: a generalized sense of entitlement and a sense of sexual entitlement. A generalized sense of entitlement involves the belief that "my needs are more important than other people's rights"; such as feeling that you can "own" other people and/or feeling that you are special and as such entitled to special treatment.

Where a generalized sense of entitlement operates, it is applied to sexual behavior just as it is in other areas. Sometimes, however, a more narrowly sexual form of entitlement is found. The core element of this more specifically sexual entitlement is the sense of deserving or being owed sex, or the notion that the offender's "need" for sex is more important than other people's rights."

2c. Means Schema Sub-domain

Two Means Schema have been identified as theoretically relevant to sexual recidivism: Machiavellianism and Violent World schemas. The Machiavellianism schema has been empirically related to recidivism.

Machiavellianism

As defined in SRA, the Machiavellian belief system combines the following components: believing that human beings are weak, cowardly, selfish, and easily manipulated and sees taking advantage of this in interpersonal interactions as sensible and appropriate.

The Machiavellian offender sees acting on his view of human nature as the "smart" thing to do; believing that people aren't weak, cowardly, selfish, etc., is simply naïve. Consequently he routinely practices this kind of interpersonal manipulation in his dealings with others and, as a result, feels confident in his ability to influence them effectively. This belief system supports the kind of sexual offending that depends on effective interpersonal manipulation to create the opportunity to offend. However, while Machiavellianism supports manipulative grooming of potential victims and their natural protectors it must be remembered that this behavior can also evolve as a form of "tactical expertise" specific to sexual offending. Thus to infer the presence of the Machiavellian belief system, it is necessary to see this kind of beliefs and behaviors also being employed in nonsexual offending contexts.

Violent World Schema

Violent World schema involve seeing the world as a violent place in which effective physical violence is the natural way to achieve your ends. Persons with this schema expect others to be violent and easily resort to violence themselves. As a consequence of repeated practice, they develop some confidence in being effectively violent. Although Violent World schema haven't yet been studied in relation to sexual recidivism, it is highly probable that such beliefs which make it easier to use physical coercion to gain control of potential victims (Polaschek, Calvert, & Gannon, 2009) also represent long-term vulnerabilities for sexual offending.

Domain 3: Relational Style

As defined in SRA, the Relational Style domain (sometimes referred to as the Socio-Affective Functioning domain) concerns general patterns in the way the offender relates to

others and the feelings that are embedded in these patterns. Of particular concern is the capacity for marital-type relationships, but the manner in which friendships and social relations are conducted is also relevant.

Relationships of various kinds provide both the opportunity to satisfy important human needs (romantic and sexual needs, needs for emotional intimacy and social connection, etc.) and at the same time, seeking involvement in relationships exposes the individual to a number of threats (social aggression from others, rejection, betrayal, etc.). Relational style refers to how people cope with the opportunities and threats posed by relationships. A person's relational style will draw on their core schema about themselves and about other people. The challenges posed by relationships commonly trigger affect-laden cognition and powerful motivations. Managing these challenges consequently depends on a range of interpersonal, affective, and cognitive skills.

A healthy relational style is marked by:

- Forming and sustaining emotionally intimate marital-type relationships
- Forming and sustaining emotionally intimate friendships
- Forming and sustaining friendly and respectful social relationships
- Forming and sustaining polite and respectful casual or work-related interactions

Insecure/dysfunctional relational styles represent different ways of departing from a healthy relational style. Underlying these departures can be unbalanced or negative evaluations of the self in relation to others or overly negative evaluations of others.

If the self is undervalued relative to others then there may be nervousness about engaging in relationships as a result of doubting that the self will be valued by others. The individual may be overly concerned to please or overly quick to see others as discounting or disrespecting him. They may also enter into relationships in which they are exploited or abused by the other person. They may choose to relate to a greater degree with children who they feel will value them if adults don't.

If the self is overvalued relative to others then the individual may enter into relationships essentially for what he can gain from the other person, may treat the other exploitatively or disrespectfully, and may have little stake in sustaining the relationship.

If both the self and others are seen negatively relationships may be particularly difficult since there may an expectation that others won't value the self. At the same time, negative views of others may predispose the individual to attributions of hostility so relationships will be seen as particularly dangerous.

Three sub-domains have been conceptualized within the Relational Style domain: an Inadequate Relational Style; a Lack of Emotionally Intimate Relationships with Adults; and an Aggressive Relational Style.

3a. Inadequate Relational Style Sub-domain

Two related vulnerabilities have been identified in the ***Inadequate Relational Style Sub-domain***: dysfunctional self-evaluation and emotional congruence with children.

More specific vulnerabilities have generally not been distinguished within the ***Lack of Emotionally Intimate Relationships with Adults (LEIRA) Sub-domain***. However, Mann et al. (2010) recently suggested that failing to form any sustained marital-type relationships should be distinguished from a pattern of relationship failure due to repeated violence, infidelity, or lack of emotional intimacy. Both aspects appear to be predictive of sexual recidivism.

Two long-term vulnerabilities have been distinguished within the ***Aggressive Relational Style Sub-domain:*** Callousness and Grievance Thinking.

SRA distinguishes five relational style factors. These are Dysfunctional Self-Evaluation, Emotional Congruence with Children, Lack of Emotionally Intimate Relationships with Adults, Callousness, and Grievance Thinking.

Dysfunctional Self-evaluation

Within the SRA scheme, healthy self-evaluation is seen as involving the following elements:

- The core self is viewed positively; there is a sense of personal worth; the core self is lovable and worthwhile
- The self is seen as effective; able to make decisions and follow them through; the core self is able to make choices that determine how life goes
- The individual's sense of their own value is sufficiently secure that they can hear negative feedback and use it to make constructive changes rather than responding with denial, aggression, or falling into an overwhelming sense of worthlessness
- Self-respect is grounded in prosocial achievements. "Achievements" here can be as mundane as taking pride in working hard and earning enough money to support oneself or taking pride in being a good husband

Dysfunctional self-evaluation can be seen as a departure from the above forms of healthy self-evaluation. Common variations of dysfunctional self-evaluation include a painful sense of the self as inadequate, worthless, and defective; fragile narcissism in which the core self is seen as defective, but this schema is overcompensated for with an over-inflated self-image; and delinquent pride where self-respect is grounded in delinquent traits (pride in how much the

community is scared of him, in how effective he is at manipulating people, etc.).

Emotional Congruence with Children

Emotional congruence with children involves feeling that emotional intimacy is more easily achieved with children than with adults. Thus, children may be experienced as more satisfying companions, intimate friends, or romantic partners than adults. The individual may attribute more adult qualities to children or may see himself as a child among other children. Commonly he will feel that he can be "more himself" with children than with adults. He may well have a child-oriented lifestyle in terms of hobbies, activities, or even employment.

In considering this factor, "child" refers to someone under the age of 14. It should therefore be distinguished from the legal concept of the "age of consent."

3b. Lack of Emotionally Intimate Relationships with Adults (LEIRA) Sub-domain

More specific vulnerabilities have generally not been distinguished within the ***Lack of Emotionally Intimate Relationships with Adults (LEIRA) Sub-domain***. However, Mann et al. (2010) recently suggested that failing to form any sustained marital-type relationships should be distinguished from a pattern of relationship failure due to repeated violence, infidelity, or lack of emotional intimacy. Both aspects appear to be predictive of sexual recidivism.

Lack of Emotionally Intimate Relationships with Adults

This factor refers to a relative absence of emotionally intimate marital-type relationships, either homosexual or heterosexual. It does not refer to the closeness of family relationships or social friendships even though some of the skills needed for an emotionally intimate marital relationship can be practiced or displayed in these other kinds of relationship.

Lack of emotionally intimate marital-type relationships with adults is most obviously displayed by a history that contains no marital-type relationships with adults. Where the offender has had some kind of marital-type relationship with an adult, it is necessary to evaluate the duration for which it involved emotional intimacy and the quality of this relationship. The factor would be regarded as present if all marital-type relationships lasted less than 2 years or if they lasted longer but were marred by repeated conflicts, violence, or infidelity.

3c. Aggressive Relational Style Sub-domain

Two long-term vulnerabilities have been distinguished in the ***Aggressive Relational Style Sub-domain.*** These are Callousness and Grievance Thinking.

Callousness

This is essentially similar to the affective facet in the PCL-R (Hare, 2003). An offender showing this factor demonstrates a callous disregard for the feelings, rights, and welfare of others. He lacks an empathic emotional connection with other people. He may be cynical, disdainful, or contemptuous of others. While to other people this attitude may be expressed in how he talks about others, it is most clearly displayed through his behavior. His behavior is essentially selfish, being impacted by how things affect ***him*** but not by how others are affected. He may express a lack of concern or guilt about how his behavior has affected others or he may claim to be remorseful but has persisted in behavior that he knows hurts others.

Grievance Thinking

Grievance thinking is defined by difficulty seeing other people's point of view, believing that others have wronged you and are likely to do so again, angry rumination over past wrongs, suspiciousness of others, a sense of having a grievance against the world and others, and vengefulness. The key issues seem to be angry rumination, vengefulness, and poor perspective-taking in the sense of denying the legitimacy of other people's point of view. The intensity of this long-term vulnerability can be understood both in terms of the cognitive/affective content of relevant schema and in terms of the degree to which this drives aggressive behavior.

Domain 4: Self-Management

As defined in SRA, the Self-management domain refers to the individual's propensity to manage his immediate urges, impulses, and feelings so as to make choices that serve his longer-term self-interest.

Two sub-domains have been conceptualized within the Self-Management domain: Social Deviance and Dysfunctional Coping.

4a. The Social Deviance Sub-domain

Two related vulnerabilities have been identified in the ***Social Deviance Sub-domain***: Lifestyle Impulsiveness and Resistance to Rules and Supervision. These are both seen as habitual and automatic ways of responding which tend to lead to behaviors that are against the individual's long-term self-interest (not least because of the associated economic and legal consequences).

Lifestyle Impulsiveness

Lifestyle Impulsiveness is essentially similar to the Lifestyle Facet in the PCL-R. It refers to a lifestyle dominated by impulsive irresponsible decisions, often driven by the need for stimulation and not organized by realistic long-term goals. It is best thought of as collection of behavioral habits:

how an individual has habitually dealt with a range of situations in the past and therefore how he would unthinkingly and characteristically deal with them now.

Resistance to Rules and Supervision

Resistance to Rules and Supervision is essentially the Antisocial Facet in the PCL-R. In SRA this factor is conceptualized as a habitual and automatic resistance to rules, laws, supervision, or to any attempt at imposing external control. It is apparent from childhood onwards and manifests itself in terms of resistance to a broad range of rules/external controls, both large and small.

4b. Dysfunctional Coping Sub-domain

Two long-term vulnerabilities have been identified in the ***Dysfunctional Coping Sub-domain:*** Poor Problem-solving and Poor Emotional Control. These are both seen as deficiencies in more active coping processes.

Poor Problem-Solving

Poor problem-solving includes lacking effective cognitive problem-solving skills or using faulty (maladaptive) coping strategies in a way that blocks the deployment of cognitive skills the individual actually possesses. Examples of poor coping might include use of alcohol or drugs to self-medicate; using violence or aggression to force change in a situation; trying to distract himself by engaging in other tasks such as working harder, taking long walks alone, or having one-night stands.

Effective problem-solving requires the integrated deployment of a range of skills so poor problem-solving can result from weaknesses in any of these component skills. Examples of weaknesses in component skills include poor problem recognition or definition; avoiding thinking about stress or problems; believing that problems are too hard to solve; lack of creativity in generating options; lack of consequential thinking; believing that violence or aggression is a good way to solve problems; and making assumptions about things without checking facts. Any of these can lead to repeated selection of unhelpful strategies or solutions.

Poor Emotional Control

Poor emotional control may be episodic or chronic. Chronically poor emotional control involves repeatedly behaving in an emotional, unconstrained manner. Episodic emotional dyscontrol involves generally good control of emotions (sometimes overcontrol) with occasional loss of control involving extreme, emotionally driven behavior.

Poor emotional control often is seen in uncontrolled outbursts of emotional behavior. This differs from poor problem-solving in that persons with poor emotional control may be aware of the consequences of acting on their emotions but can't control what feels to them like an overwhelming tide of emotion. Their emotions are easily triggered and are more intense and long lasting than the situation requires.

SRA Step Three: Progress Assessment

Step Three is Progress Assessment. Step Three is appropriate after the offender has participated in some intervention designed to reduce recidivism. Two aspects of progress should be evaluated: criminal vs. prosocial engagement and manifestation vs. Management of long-term vulnerabilities.

Protocols for implementing SRA Step Three should be judged in terms of how well they provide operationally practical ways of assessing both these aspects of progress. To date there are no protocols in the literature that fully do this. In the absence of standardized protocols, this part of the framework could reasonably be used to structure professional judgment of progress.

Engagement: Criminal versus Prosocial

This aspect of assessment focuses on evidence pointing to the degree to which the offender is deliberately and actively engaged with further offending vs. being deliberately and actively engaged with developing a prosocial life.

Three inter-related aspects of Criminal Engagement are distinguished:

1. ***An Active Offense Process*** — when the individual is scanning the environment for potential opportunities to offend rehearsing tactical plans for offending, actively setting up potential victims, attempting to carry out offenses, etc.
2. ***Antisocial Network/Associates*** — when the individual invests significant time with people who are more likely to support or enable his criminal activity
3. ***Criminal Identity*** — when the individual thinks of himself as an offender and understands his criminality as naturally and inevitably emerging out of enduring aspects of who he is

Three parallel aspects of Prosocial Engagement can be distinguished:

1. ***An Active Change Process*** — when the individual actively avoids potential victims, chooses to participate in and complete meaningful treatment programs, and works to build a prosocial lifestyle
2. ***Prosocial Network/Associates*** — when the individual invests significant time with more prosocial people who discourage offending and support or enable his community reintegration.

3. ***Prosocial Identity***—when the individual thinks of himself as a prosocial person. He believes his criminality resulted from bad influences and made bad choices in the past, but he now has his life under control and is building a decent future for himself

There are several studies that empirically support the relevance of the Active Offense/Change Process. For example, Hanson, Harris, Scott, and Helmus (2007)'s finding that victim access behaviors were a risk factor; Hanson and Thornton (2003)'s finding that recency of past sexual offenses predicts future recidivism; Heil, Harrison, English, and Ahlmeyer (2009)'s finding that sexual offenses committed in prison raise the probability of sexual offenses committed after release; the finding that treatment completion is associated with reduced recidivism (Hanson et al., 2002); and the inclusion of attitude to treatment items in empirically validated risk assessment instruments (the SVR-20; the VRS-SO).

The Associates/Networks factor is empirically supported by the general criminological finding of Associates as one of the Big Four predictors of recidivism (Andrews & Bonta, 2006); from Hanson et al. (2007)'s finding that Associates is predictive of sexual recidivism; and from the more general criminological literature that has implicated the active use of prosocial networks in desistance (e.g., Laub & Sampson, 2003; Giordano, Cernkovich, & Rudolph, 2002).

The identity factor is empirically supported by the work of Maruna (2001). Maruna found that persisting offenders tended to have developed a life-narrative that he characterized as a "condemnation script." This incorporates a number of elements including seeing a deviant criminal self as who they really were; seeing their past bad acts as due to their being this criminal self; and feeling helpless or disinterested in changing this. In contrast, Maruna (2001) found that desisting offenders tended to have developed a "redemption script." This involves their having constructed a prosocial identity with which they increasingly identify. They come to believe their prosocial identity is who they had always really been. To accomplish this they find ways of explaining their *past* bad behavior as due to external factors that in some way repressed their real selves while determinedly asserting self-control of their current and future conduct.

Put a little more broadly, Criminal Engagement might be regarded as the ongoing intentional aspect of the problem behavior (sexual offending itself). Considering the factors indicated above is one way of asking the question, "does this individual intend to reoffend?"

Long-Term Vulnerabilities: Manifestation Versus Management

An offender with (say) three long-term vulnerabilities may allow these to dominate his psychological functioning and to drive his behavior. Alternatively he may recognize this pathological functioning for what it is and actively manage himself so that his vulnerabilities are triggered less often, are internally less intense or prolonged, and have less effect on his behavioral choices. This part of the SRA framework assists the evaluator by (a) telling him what aspects of functioning to focus on (the long-term vulnerabilities identified in Step Two) and (b) providing three questions to use in collecting potentially relevant behavioral information and interpreting the information that has been collected.

For each long-term vulnerability relevant to the individual the following questions are asked:

1. How well does the individual control the expression of this long-term vulnerability in situations where it potentially would be triggered?
2. To what extent has the individual developed healthy alternative strategies/behaviors to use in situations that used to trigger the long-term vulnerability and how reliably are these deployed
3. How consistently does the individual avoid triggers for long-term vulnerabilities and seek out environments conducive to strengthening healthy alternative behaviors?

In relation to each of these questions the critical issue is the consistency with which the long-term vulnerability is managed over time and across settings that challenge it. Similarly one may consider the consistency of healthy alternative behavior over time and across situations.

The evaluation of progress through examining evidence for manifestations versus management of long-term vulnerabilities is supported by a variety of research. Notably supportive are findings from research with the Violence Risk Scale-Sexual Offender Version (VRS:SO—Olver et al., 2007). This instrument incorporates a way of rating change that is based on a modification of the trans-theoretical stages of change. Close examination of the VRS-SO's scoring rules, however, makes it clear that reduced risk is only assigned when the kind of behavior implied by the above three questions is shown in relation to previously identified dynamic risk factors (or what here would be called long-term vulnerabilities). "Change scores," defined in this way, have twice been shown to relate to recidivism in two independent studies (Olver et al., 2007; Beggs & Grace, 2010).

SRA Step Four

Step Four of the SRA conceptual framework is Risk Management. It is applied either when a release plan is being developed or when an offender is being managed in the community. It has two aspects: assessing the form a future offense is most likely to take and assessing acute risk factors.

Making Judgments About the Likely Form of a Reoffense

The first part of SRA Step Four requires the evaluator to make judgments about the likely form of any reoffenses. The SRA approach requires that these judgments be supported by empirical findings. This is guided by two principles.

1. Victim choice is partially predictable based on the age and sex of prior victims. Longitudinal research indicates that the sex of future victims is generally consistent with the sex of prior victims, especially if prior victims were aged at least 13 (Friendship & Thornton, 2002). For those with prior victims aged 13+, future victims were 10 to 40 times more likely to be of the same sex as prior victims. For those with prior victims under age 13, future victims are about 4 times more likely to be of the same sex as prior victims.
2. Modus Operandi in future offenses is partially predictable both from the modus operandi employed in prior offenses and from some more general aspects of criminal history. Specifically, there is generally specialization by the gross level of violence and intrusiveness involved. High degrees of brutal violence and intrusiveness (as in a physically violent rape) are predictable to a degree from repeated prior occurrence of this kind of offense and from the following more general features: youth, general criminality, and a history of nonsexual violence. A simple algorithm for predicting this specific kind of offense is described by Thornton and Travers (1991) and is reproduced in foot note.[1]

The first part of Step Four then involves applying these two principles in judging the kinds of offense that the supervision regime should invest most effort in blocking (or making more difficult). Despite their apparent simplicity, when combined with an overall risk assessment, these two principles have remarkable power. For example, only a very low risk to male children, regardless of his Static-99 risk classification, is presented by a man whose only past offending is against females aged 13 or above. In contrast where the potential victim being considered is of the same sex as past victims, the risk is much higher.

Similarly, offenses that involve lower levels of gross physical violence generally depend on more extended grooming of potential victims and accordingly are easier to block through supervision. In contrast, where the indicators from the Thornton/Travers algorithm (see note) are present, less confidence can be placed in the ability of supervision to block offending.

Acute Risk Management

The level of risk presented by an offender may vary over time. Such variation is of limited significance when the offender is being physically prevented from reoffending (for example by incarceration), but when an offender is returned to the community it becomes far more important. In the community, periods of heightened risk call for an increase in the intensity of rehabilitative or supervisory services. The concept of acute risk monitoring is to use the ongoing contact between the offender and relevant agencies (for example, the containment team in jurisdictions that use that model, often community corrections/probation/parole agents) to generate data that can inform risk management decision-making. The factors that are observed in this monitoring process are sometimes known as "acute risk factors" since they are measured in a way that allows them to change rapidly (for example, compliance with supervision over the last month).

The SRA framework prescribes that acute risk monitoring in the community should be focused in the same manner as progress assessment. That is, it should focus on indicators of criminal vs. prosocial engagement and on indicators of the manifestation vs. management of long-term vulnerabilities.

A key issue here is that potential acute risk indicators are subject to a number of sources of error. There are several reasons for this. The behaviors monitored are chosen to reflect the individual offender's long-term vulnerabilities, but they are also liable to be influenced by a number of unrelated factors. An offender's recent behavior does not occur in a vacuum. In part it will be an expression of long-term vulnerabilities, but it will also be affected by the behavior of others around him (other offenders, non-offenders, supervising staff), by how far the immediate environment affords an opportunity to engage in the behavior, and by immediate events. This suggests that averaging scores on acute risk indicators over time, and preferably over observations made by different staff, will give more valid results than attending exclusively to the most recent observations.

Support for this principle can be found in results obtained with the ACUTE scale from the Dynamic Supervision Project (Hanson et al., 2007). A notable finding from this

[1]Thornton & Travers' algorithm was as follows. To predict general violence (future convictions for rape and non-sexual assault) among sexual offenders sum the following items: Does the current conviction include charges for Rape or Non-sexual assault? Do prior convictions include charges for Rape or Non-sexual assault? Did he have more than three convictions (sentencing occasions) of any kind prior to the current conviction? Was he under 30 at the time he was sentenced for his current conviction? 0 or 1 factors present was categorized as Low; 2 factors present was categorized as medium; and 3 or more factors present was categorized as high. In these researchers analyses each of these factors predicted future rape convictions but had no relation to the probability of less violent kinds of sexual offense. Rape here is as defined by the law in England and Wales (basically forcible penile penetration of the vagina).

study was that averaging ACUTE score over 6 months gave better results than taking the most recent months observations.

Although Hanson et al's ACUTE is a groundbreaking instrument, from an SRA perspective it has a number of limitations. First, ACUTE items were developed in a somewhat ad hoc way rather than being deliberately linked to long-term vulnerabilities. From the perspective of the SRA framework, a better instrument would ground ACUTE items in known long-term vulnerabilities. Second, items were tailored for a particular setting in a particular jurisdiction (parole and probation supervision in Canada). Experience trying to implement ACUTE in other settings has sometimes encountered reliability problems. From the perspective of the SRA framework a better instrument would have items developed that corresponded to what different kinds of staff can observe in particular settings. For example, different behaviors are observed by a hostel warden who supervises offenders in a probation hostel, by a police officer who is checking whether a registration address is still accurate, by a therapist providing outpatient treatment, and by a supervising agent. Third, by focusing exclusively on acute risk factors, ACUTE and similar instruments encourage a rather negative strategy in managing offenders that makes an offender who puts out no interpretable behavior look "safe." A more productive approach is to define protective factors corresponding to each acute risk factor. This inclines offender managers to encourage the development of these positive behaviors and provide the offender with a motive to work towards these accomplishments.

Determining whether an active offense process has been initiated is a more troubling problem than seeking to monitor the ongoing expression of long-term vulnerabilities. Clearly this is something that the offender can be expected to actively hide.

It is plausible to suppose that the item referring to Victim Access Behavior in ACUTE may have this meaning, but it is not known whether this is actually the case. The item may simply be a reflection of a long-term vulnerability (sexual preference for children for example).

The issue has been addressed in a practical way by police forces in England and Wales who were operating in the context of a system informed by SRA and trained by this author. In some circumstances, the combination of high risk and need from Steps One and Two, together with evidence of Criminal Engagement from observations in prison (for example, being overheard discussing possible future offenses, trying to establish contact with potential victims, etc.), has motivated mounting operations to try to observe selected offenders and intervene when they are about to reoffend.

Operations of this kind are expensive and face the difficulty that intervening too early may simply alert the offender to the fact of observation while not providing a legal basis for detaining the offender. Intervening too late of course means that the offense has not been prevented. There are also complicated human rights issues that have to be negotiated. Nevertheless there are striking individual case examples where a mixture of surveillance technology and the use of undercover officers has credibly identified an active offense process, documenting planning and gathering of equipment for intended offenses, and prevented very serious offenses (abduction, torture, murder).

Implementing SRA Need Assessment

SRA Need Assessment is a conceptual framework that can be implemented in a number of different ways. It is not in itself a risk assessment tool. Rather the framework can be thought of as defining a family of risk assessment tools that are alike in important ways. Choosing the best implementation of the SRA Need Assessment framework requires taking into account the purpose of the assessment, the kind of relationship that can be established with the person being assessed, and the quality of available file information.

To implement the SRA Need Assessment framework in a meaningful way an assessment protocol should use contextually valid and reliable measures of a balanced selection of factors from a minimum of at least three of the four domains.

Importantly, self-report measures that are relatively valid and reliable in more collaborative settings are often of little value in adversarial contexts. In such adversarial settings structured ratings of file information may be more valid and reliable especially when richly informative files are available. Yet they may be of little value where file data are thin and unreliable.

The protocol should afford a balanced assessment of the domains based on the structural model laid out in Fig. 1. "Balanced" here means that the protocol affords assessment of all of the sub-domains from within each of at least three domains. Protocols can be judged according to how well they approximate this standard.

Given the above criteria, an assessment protocol does not have to be intentionally designed as an implementation of SRA for it actually to be a valid implementation of the SRA conceptual framework. Indeed any assessment protocol that successfully characterizes long-term vulnerabilities from at least three of the four domains can be considered an implementation of the SRA Need Assessment framework. Instruments can be judged in terms of whether the factors they contain fall into the SRA Need domains in a way that meets the criteria for a balanced implementation. Where this happens without the intent of instrument's designer to deliberately following the SRA Need framework the result is referred to as an emergent implementation of the SRA framework.

Implementations using Questionnaires

There have been a number of deliberate implementations of SRA using questionnaires and at least one emergent implementation.

Thornton (2002) reported results with a questionnaire implementation of SRA Need Assessment designed to be used prior to prisoners' participation in Her Majesty's Prison Service's National Sexual Offender Treatment Programme (Mann & Thornton, 1998). This battery has subsequently been greatly extended and elaborated (Wakeling, Beech, & Freemantle, 2009).

Parallel to this work, a battery of questionnaires was developed for research evaluating community and prison treatment programs in England and Wales (e.g., Beech, 1998). Subsequently, a method of scoring this battery has been developed so as to deliberately implement the SRA framework (Harkins, Beech & Thornton, 2009). Similarly, Craig, Thornton, Beech, and Browne (2007) reported results from implementing the framework with a subset of the questionnaires used by Harkins et al.

Quite independently of this an emergent implementation of the SRA Need framework can be found in the work of Allan et al. (2007). They analyzed data from a battery developed to assess treatment needs in the Kia Marama sexual offender treatment program. Factor analysis of their scales identified four factors: Sexual Interests, Pro-offending Attitudes, Social Inadequacy, and Anger/Hostility. In developing a predictor they weighted the first two factors twice as heavily as they weighted Social Inadequacy and Anger/Hostility. Reference to Fig. 1 indicates that while the first two factors correspond to SRA Sexual Interests and Distorted Attitudes domains, the second two factors actually correspond to two of the sub-domains of vulnerabilities (Inadequate Relational Style and Aggressive Relational Style) within the Relational Style domain. Thus Grace et al's way of weighting the factors creates the equivalent of equally weighting the first three SRA domains.

Implementations Using Ratings

There have been three deliberate implementations of the SRA Need Assessment framework and two emergent implementations that relied on clinical ratings as the main methodology. Two of these are very similar.

The generic scoring guide for SRA and the version developed for Her Majesty's Prison Service (SARN) have been deliberately linked to each other, with refinements in each being used to drive changes in the other. They are both primarily intended to be integrated with a treatment process, typically carried out part way through treatment, and used to focus further treatment activity and risk management planning. SARN is an in-house tool not generally available to professionals working outside the aegis of the National Offender Management Service of England and Wales (Mann, 2010). It is supported by staff training, central quality control, and an ongoing research program.

The initial dynamic score from the Violence Risk Scale—Sexual Offender Version (VRS-SO) is an emergent implementation of the SRA Need Assessment framework. The VRS-SO (Olver et al., 2007) was developed by adapting a more general model of criminogenic needs to apply to sexual offenders. Factor analysis of its items indicates three broad factors (Sexual Deviance, Treatment Responsivity, and Criminality that correspond respectively to the Sexual Interests, Distorted Attitudes, and Self-Management SRA domains. Additionally, there is one item (Intimacy Deficits) that clearly corresponds to the relational style SRA domain. There is some evidence that a four-factor solution may provide a better fit (Beggs & Grace, 2010) for the VRS-SO dynamic items and this gives a picture of factors for the Sexual Interests and Distorted Attitudes SRA domains, plus two factors that correspond to the major sub-domains of vulnerabilities in the Self-Management SRA domain (Social Deviance and Dysfunctional Coping). Table 1 shows the mapping of the VRS-SO items into the four SRA domains.

Table 1 STABLE-2007 and VRS-SO items by SRA domain

SRA domains	STABLE-2007 items	VRS-SO items
Sexual interests	Sex drive Sexual preoccupation Sex as coping Deviant sexual preference	Sexually deviant lifestyle Deviant sexual preference Offense-planning Sexual offending cycle Sexual compulsivity
Distorted attitudes	Hostility toward women	Insight Treatment compliance Cognitive distortions Release to high-risk situations
Relational style	Emotional identification with children General social rejection Capacity for relationship stability Lack of concern for others Negative emotionality (hostility)	Intimacy deficits
Self-management	(Antisocial) social influences impulsive Poor problem-solving skills Cooperation with supervision	Impulsivity Interpersonal aggression Substance abuse Compliance with community supervision (–) Criminal personality Community support (–) Emotional control (–)

STABLE-2007 is a revision of the original version of STABLE based on the analysis of a large community supervision sample of sex offenders (Hanson et al., 2007). STABLE ratings of psychological risk factors are predictions about the next 12-months functioning based largely on functioning in the recent past. This differs in principle from SRA's focus on long-term vulnerabilities. However, the empirical revision of STABLE used to produce STABLE-2007 has shifted the model towards the long-term vulnerability concept, at least for some factors. The other big revision was based on the determination that attitudes could not be accurately assessed in the kind of adversarial context (ratings by supervising agents) that STABLE was intended for. STABLE 2007 is regarded as another emergent implementation of the SRA Need Assessment framework. Table 1 shows the mapping of STABLE 2007 items into the four domains.

Finally, Knight and Thornton (2007) tested a planned implementation of SRA Need Assessment using ratings designed to be applicable to the clinical files generated in relation to sexual offenders being considered for an early version of civil commitment. A modification of this intended for use in forensic settings has also been described (Thornton & Knight, 2009, 2014). This last is referred to as SRA:FV (SRA: Forensic Version) since it is intended to be useful in adversarial evaluations carried out for the courts though it can of course be used in other settings.

Empirical Claims

A number of empirical claims are made for the SRA Need Assessment framework. Specifically it is claimed that:

1. Established psychological risk factors will fall within the four proposed domains
2. Each domain, considered by itself, is predictive of sexual recidivism
3. Overall Need (summed across the domains) is predictive of sexual recidivism
4. Overall Need shows incremental predictive validity relative to the static actuarial predictors considered in SRA Step 1

More generally the claim is that predictions 2, 3, and 4 will generally hold for balanced implementations of the SRA Need Assessment framework (deliberate or emergent).

This section reviews the evidence relevant to these claims.

Established Predictors Fall Within the Domains

Mann et al. (2010) review the results of relevant meta-analyses to create a list of empirically supported psychological risk factors; they also create a list of promising risk factors (those with some empirical support). Table 2 maps these two lists of factors into the SRA domains.

Table 2 Psychologically meaningful risk factors by SRA domain

SRA domains	Empirically supported factors	Promising factors
Sexual interests	Sexual preoccupation Multiple paraphilias Sexual preference for children Sexualized violence	Sexualized coping
Distorted attitudes	Offense-supportive attitudes	Hostility toward women Machiavellianism
Relational style	Emotional congruence with children Lack of emotionally intimate relationships with adults Never married Conflicts in intimate relationships Grievance/hostility	Callousness
Self-management	General self-regulation problems Impulsivity/recklessness Employment instability Childhood behavior problems Noncompliance with supervision Noncompliance with conditional release Negative social influences Poor cognitive problem-solving	Dysfunctional coping (externalizing)

As claimed, the existing empirically supported and promising risk factors fall into the four domains, with each domain having several factors within it.

Each Need Domain Is Predictive

Table 3 shows how well each of the domains predicted sexual recidivism in six different studies using various of the SRA implementations discussed above. Typically, a study will have results for three of the four domains. The table also includes the AUCs for overall level of Need and three additional studies report this but did not report results for different domains. Note that the length of follow-up is given with the study authors' names and that the results from the VRS-SO studies are those for the Initial Dynamic scores.

The results are summarized by the median AUCs which indicate moderate predictive accuracy for any domain considered by itself. The Sexual Interests and Distorted Attitudes domains appear to be a little more predictive than the Relational Style and Self-management domains, perhaps reflecting that they are more specific to sexual offending.

It is also important to note that some of the offenders included in the Craig et al.'s study were also in the Harkins et al.'s study which has a much longer follow-up. However, dropping the Craig et al.'s study from the table would not have materially changed the median results.

Table 3 Prediction of sexual recidivism from SRA domains and overall need

Study	AUC for sexual interest	AUC for distorted attitudes	AUC for relational style	AUC for self-management	AUC for overall need
Thornton (2002) (3–years)					0.78
Hanson et al. (2007) (41 months)					0.67
Craig et al. (2007) (5-years)	0.72	0.64	0.64	0.66	0.69
Knight and Thornton (2007) (10 years)	0.67		0.70	0.64	0.73
Allan et al. (2007) (5.8 years)	0.72	0.70	Inad = 0.62 Host = 0.60		0.76
Olver et al. (2007) (10 years)	0.59	0.58		0.63	0.66
Harkins, Beech, and Thornton (2009) (10 years)	0.76	0.74	0.79	0.64	0.79
Eher, Matthes, Schilling, and Rettenberger (2011) (5.5 years)					0.71
Beggs and Grace (2010) (12.2 years)	0.72	0.73		0.69	0.78
Median AUC	**0.72**	**0.70**	**0.67**	**0.64**	**0.73 (0.76 without STABLE)**

Overall Need Is Predictive

Based on the nine studies, overall Need defined using the SRA framework is consistently predictive. The results appear relatively robust in the sense that the inclusion or exclusion of any particular kind of study does not materially shift the median AUC. The one minor exception to this is that the inclusion of the two STABLE-2007 studies does pull the median AUC down a little and in fact the average AUC for STABLE-2007 is 0.69 as compared to the median AUC for the other implementations being 0.76. It is mainly the Hanson et al. (2007) study that seems to show a lower AUC and it is possible that this reflects considerable variation in how conscientiously the ratings were completed. Hanson et al. report that for a subset of "conscientious" raters the AUC for sexual recidivism rose to 0.77, essentially the same as that for the non-STABLE studies (0.76). Only limited weight can be put on this finding however since the definition of "conscientious" was post hoc, a little idiosyncratic, and has not been applied in other studies.

Overall Need Shows Incremental Predictive

In all of the nine studies summarized in Table 3 the implementation of overall Need showed statistically significant incremental predictive validity over a static actuarial instrument (usually Static-99). The one qualification to this is for Hanson et al. (2007) where the data set was used to empirically revise the original STABLE-2000 items. In fact, in both STABLE studies it was only the 2007 version of STABLE that showed significant incremental validity for sexual recidivism.

Robustness of Empirical Results

In reviewing the above data from Table 3, it is important to note that essentially similar patterns of results are observed in all nine studies. This number of conceptual replications indicates that the basic finding is robust. In addition, the fact that these studies use different measures, involve samples released in different eras, involve multiple jurisdictions, community and prison samples, and both more adversarial and more collaborative settings, and still get similar results implies that the results have remarkable generality.

Strengths and Limitations of Existing Measures

This section considers the potential of a number of existing implementations of the SRA Need Assessment framework from the perspective of a forensic evaluator. Three implementations are considered: the forensic version of SRA, STABLE 2007, and the initial dynamic score from the VRS-SO. These implementations are considered because each is potentially available from its authors with training in its use and because each uses ratings rather than depending

on questionnaires. Questionnaire implementations are considered impractical in the forensic context since there is too great an incentive for the offender to fake good.

Five criteria are considered: relative predictive power; institutional vs. community setting; length of follow-up for which predictive power has been demonstrated; and use in adversarial vs. treatment contexts.

Relative Predictive Power

Thornton & Knight (2009) reported AUCs for the forensic version of SRA of 0.72. The mean AUC for the VRS-SO initial dynamic score was also 0.72. The mean AUC for STABLE-2007 was 0.70. Given the number of studies involved, these AUCs are similar enough that it would be hard to justify choosing one instrument over another on this basis.

Institutional Versus Community Setting

This consideration is important since it impacts the kind of information available to evaluators. In addition, where imprisoned offenders are involved an important consideration is how long they served before being released. An instrument can be used more credibly with offenders from a particular kind of setting if it has been tested with offenders from that kind of setting. For example, if an instrument had only been tested in the community it would not be clear whether the results could be generalized to offenders being assessed in prison. In general there is more information relevant to future community functioning for assessments carried out when the offender is now in the community or was in the community relatively recently.

SRA:FV was tested with a diverse sample of imprisoned sexual offenders being considered for an early version of civil commitment.

STABLE-2007 has been tested with a diverse sample under community supervision (largely in Canada) and with a sample of child-molesters serving, by American standards, relatively short (mean 31 months) prison sentences in Europe.

The VRS-SO was tested in the Canadian federal prison system (Corrections Canada) and with imprisoned child-molesters in New Zealand. In both contexts prison sentences would have been relatively short by American standards.

Adversarial Versus Treatment Context

Treatment normally provides a more collaborative setting while forensic evaluations are usually more adversarial. Information that is available in a treatment setting may therefore not be available in a more adversarial setting.

The forensic versions of SRA and STABLE have both been tested in relatively adversarial settings. This is particularly true of the forensic version of SRA where decisions about possible civil commitment were explicitly part of the context of assessment. In contrast the VRS-SO has only been tested with ratings made in the context of treatment.

Length of Follow-Up

Psychological risk factors, especially when assessed with the philosophy that informs STABLE, might be expected to change over the medium term. This raises a question regarding how well they will predict long-term recidivism rates.

The forensic version of SRA was found to have the same AUC for both 5-year and 10-year sexual recidivism rates. STABLE-2007 has so far been tested with follow-ups of around 3 and 5 years. The VRS-SO has been tested with a 10- and 12-year follow-up.

Recommendations

Taking these factors into account the following recommendations can be made.

1. The forensic version of SRA is suitable for sexual offenders serving longer sentences being assessed under more adversarial circumstances. It is known to be relevant to both short-term and long-term recidivism rates
2. STABLE-2007 is suitable for use with offenders being supervised in the community and with those serving relatively short prison sentences (under 4 years real time). It can be used under adversarial conditions. It is known to be relevant to short-term recidivism rates, but its relevance to long-term recidivism rates is not yet known
3. The VRS-SO is suitable for imprisoned sexual offenders serving moderate length prison sentences assessed under more collaborative conditions. It is known to be relevant to short- and long-term recidivism rates

In high-stakes risk assessment such as SVP hearings there would be some merit in using more than one of these instruments. Where consistent results were obtained the evaluator would have a sounder basis for inferring that they were drawing on the SRA Need Assessment framework as a whole (and hence a larger group of studies). If conflicting results were obtained then this would signal a need for caution and care would have to be taken to identify the reason for the inconsistency and hence the relative validity of the two assessments as applied to the specific case. It will also be important to take into account how similar the offender being

evaluated is to those in the different studies with which the scale has been tested. For example, the VRS-SO will be most relevant for offenders who have participated in treatment but hard to apply if they have not.

Summary of the Purpose of SRA Steps

The preceding in-depth focus on Step Two may well have made it difficult for the reader to discern how the steps fit together. Accordingly Table 4 recaps the main purposes and character of each SRA step. How they fit together in practice is then discussed below prior to making suggestions for future research.

SRA Step One is intended for initial resource prioritization decisions, for example, decisions about the degree of resources that should be used for treatment or risk management. Good practice models (Andrews & Bonta, 2006) make the degree of treatment/management resources proportionate to risk.

In addition it can be used for overall risk assessment in circumstances where more comprehensive assessments are not practical.

SRA Step Two is primarily intended for the identification of treatment needs. However, when combined with the static actuarial assessments from Step One, it also allows a more refined assessment of overall level of risk.

Table 4 Outline of the function and content of the SRA steps

Step	Function	Content
1: Static-actuarial risk	Initial resource prioritization decisions. Risk assessment where only thin information is available	Sexually criminal behavior + Generally criminal behavior + Youth
2: Need assessment	Identification of treatment needs. More refined prioritization decisions. More refined risk assessment	Sexual interests + Distorted attitudes + Relational style + Self-management
3: Progress assessment	Determine need for further treatment. Revision of risk assessment in the light of interventions.	Criminal vs. prosocial engagement + Manifestation vs. management of long-term vulnerabilities
4: Risk management	Release planning Focusing and determining the intensity of community risk management.	Likely form of reoffense + Acute risk

High-stakes risk assessment where both the community and the offender will pay a substantial cost for erroneous risk classification should where possible include at least the first two steps, namely including both a consideration of both static and long-term psychological vulnerabilities or predisposing factors. Although research testing how to integrate these two kinds of factor is still in its early days, the findings are sufficiently clear-cut to support the use of this kind of integration in clinical practice. Evaluators wishing to carry out this kind of integration currently have a limited set of instruments to choose between (largely the three reviewed above). While there is sufficient evidence to justify using these instruments in this way, research guidance on their use can be expected to develop significantly over the next decade and additional instruments can be expected to emerge.

SRA Step Three provides a basis for evaluating response to substantive interventions designed to reduce risk. It should be used in conjunction with the first two steps in making decisions about the need for further intervention and about the appropriate intensity of community risk management.

SRA Step Four provides a basis for planning and moderating community risk management processes.

The reader will have noted that the first two steps are better developed with a number of research-based mechanical assessment tools available. In contrast less development work has been done for the third and fourth steps. Nevertheless the conceptualization of these steps offered here would be of assistance in structuring and supporting the relevant kinds of professional judgment much in the way that other "Structured Professional Judgment" tools are.

Prospects for Future Developments

Research within or consistent with the SRA framework has been going on for a decade now. Unsurprisingly, however, as we have learned more, so additional questions emerge. Suggestions for profitable lines of future research and development projects are organized below in terms of the SRA steps.

Suggestions for Step One

Four developments would improve Step One of the SRA framework.

1. Better Normative Samples—the existing normative data for most actuarial instruments that meet SRA Step One requirements is largely drawn from samples of convenience rather than being true representative samples of defined populations. If populations with different base rates are going to be distinguished then these need to be defined more clearly than is currently possible

2. Instruments should provide scores that place offenders on each of the three underlying dimensions, not solely on level of risk
3. Placement along these underlying dimensions should have a more absolute conceptual meaning rather than simply placing offenders relative to each other
4. Together these developments would allow us to move beyond specific instruments to specifying risk in relation to placement on absolute dimensions defined in an instrument-free way

Suggestions for Step Two

Four developments would improve Step Two of the SRA framework.

1. Specific implementations of the framework should be tested repeatedly in different kinds of sample and in conjunction with static actuarial instruments so that the implications of specific combinations of static risk and need can be determined
2. Specific implementations should be developed that are optimized for particular contexts, for example, for a treatment context, for a forensic evaluation context, etc.
3. Long-term vulnerabilities should be understood in terms of more fundamental processes including socio-biological developmental models
4. Measures of long-term vulnerabilities should be developed that are less reactive to the demand characteristics of the assessment situation and more truly dynamic so that current levels of long-term vulnerabilities can be assessed

Suggestions for Step Three

Three developments would improve Step Three of the SRA Framework.

1. While SRA currently suggests an appropriate focus of progress assessment it does not presently provide a mechanical assessment protocol. Currently the most promising is probably the change rating system from the VRS-SO but a range of protocols should be developed and tested
2. Ways of managing offenders in institutional and community settings should be developed that increase the degree to which long-term vulnerabilities will be tested and the degree to which their activation can be observed
3. Preferably protocols should distinguish changes in the underlying long-term vulnerability, changes in how well the offender manages the vulnerability, and the degree to which competing strengths have been developed

Suggestions for Step Four

Three developments would improve Step Four of the SRA Framework.

1. It should be possible to develop empirically based guidelines for other aspects of reoffense than those considered above
2. Systems for rating Acute risk factors should be developed in ways tailored to the kinds of information available in different settings
3. More cost-effective methodologies than police observation should be developed to detect the onset of the Active Offense Process

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Beyond Static Risk Assessments? Assessment of Psychologically Meaningful Risk Factors via STABLE-2007 and the SRA:FV

Harry M. Hoberman

Over the last 15 years, so-called dynamic risk factors have become a popular topic in sexual offender research and practice. The available empirical evidence indicates that most persons in the general population do not commit sexual offenses and that even most identified sexual offenders are not detected again for additional sexual offenses. Presumably something about persons (e.g., predisposing genetic and/or psychosocial characteristics likely in interactions with situations) differs between offenders and non-offenders and between those offenders who appear to cease offending from those who do not. Moreover, while identifying sexual and antisocial domains as broad, general determinants of sexual offending, research to date has also demonstrated that sexual offenders are heterogeneous and that sexual offending appears most likely to be the result of multiple, cumulative factors interacting in context. The heterogeneity of sexual offenders also has implications for potential treatments for such individuals. The concept of providing treatment for identified sexual offenders is premised on the notion that relevant underlying causal or maintaining factors can be identified and that such aspects of those individuals can be modified or managed in some manner to a sufficient degree that their risk of sexual offending might be decreased. Conceptually, then there are psychosocial and/or biological characteristics of persons that predispose them to—increase the likelihood of—sexual offending that differ among persons and that are of a nature that they are potentially "malleable" or changeable from some type of experiences or other influences.

Risk factor is a term from epidemiology that is the scientific study of the patterns, etiology, and effects of "disease" (e.g., physical and mental disorders) in defined populations or groups. Epidemiology assumes that disorders do not occur randomly in a group of individuals and that identifiable subgroups, including those who have certain characteristics or experience particular conditions, are at increased risk of exhibiting some disease or disorder. Of note, as a scientific endeavor, epidemiology focuses on the question of general causation (e.g., is some factor capable of causing disease or disorder?) rather than that of specific causation (e.g., did it cause disease or disorder in a particular individual?). Risk refers to the probability of an outcome within a population of subjects, while the term risk factor is typically used to indicate particular conditions or experiences that affect the probability of such an outcome. In their seminal article, "Coming to Terms With the Terms of Risk," Kraemer et al. (1997) defined a risk factor as "a measurable *characterization* of each *subject* in a specified population that precedes the outcome of interest and which can be used to divide the population into two groups (the high-risk and the low-risk groups that comprise the total population)" (p. 338) The "subject" referred to could be a group, individual, or community. Per Kraemer et al., "We suggest that labeling a factor with the generic term risk factor with no further effort to delineate its roles as fixed marker, variable marker, or causal risk factor is a limited finding…" (p. 342). A key distinction in epidemiological research is that correlation is not causation; some characteristic may be associated with a particular outcome as consequence or result of that outcome/condition. Unless there was evidence that the characteristic preceded the outcome/condition, it would be known as simply a correlate of the outcome. A risk fact, however, is "a special type of correlate that requires documentation of precedence" (p. 340). Kraemer et al. (1997) offered some important cautions about the nature of risk and the potential meaning of risk factors. They noted that statistical significance often indicates only that the sample sizes were sufficiently large and the research design and measurement adequate to document nonrandom association between some characteristics of an individual and an outcome of

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interest. Further, they pointed out that with large enough combined sample sizes, many factors could be demonstrated to be associated with a particular outcome. Regarding the meta-analyses for sex offender recidivism, it is known that the identified risk factors are more than correlates since they precede the measured outcome in temporal terms. However, per Kraemer et al., it remains unknown if a static risk factor is a "fixed marker" (e.g., year of birth) or if a static risk factor can change (e.g., deviant sexual interest or antisocial orientation). If it can change, then it can be viewed as a "variable" risk factor (a potential dynamic risk factor). Yet that "variable" risk factor can be considered a *causal* risk factor only if the "variable" risk factor can actually be manipulated or modified in such a way that *change* in the factor is demonstrated to also be associated with a *change* in the relevant outcome of a disease or disorder.

The Brief History of Dynamic Risk Factors for Sexual Offending

The term "dynamic predictors" appears to have emerged from Andrews and Bonta (2006) in their discussion of the Psychology of Criminal Conduct (PCC); it is largely a criminological perspective. They distinguished *static* risk factors (SRF) as relatively fixed aspects of offenders' histories, such as age and the extent of previous offending, which increase the risk of reoffending but do not change and cannot be changed through intervention. As largely fixed, historical characteristics such as SRF are not meaningful targets for intervention. In contrast, Andrews and Bonta (2006) used the term *dynamic risk factors* (DRFs) to describe psychological or behavioral features of the offender that raise the risk of reoffending and that are potentially changeable: "ones on which assessed change is associated with subsequent criminal behavior" (p. 55). They noted some DRFs may be relatively stable for criminal offenders (in that change occurs over weeks, months, or even years), while other DRFs are less stable and "may change almost instantaneously"; they labeled this second group as acute DRFs and "typically reflect immediate situations or immediate circumstances… and/or more immediate emotional states such as anger, resentment, or desire for revenge…" (p. 55). Andrews and Bonta further suggested that DRFs "are often called criminogenic need factors. The term 'need' is used for the practical reason that it carries with it the *hope* that if criminogenic need factors are reduced, the chances of criminal involvement will decrease" (p. 56, emphasis added). From the perspective of social learning theory, when human "needs" (e.g., requirements or desires) are met in an antisocial manner or through antisocial means, an individual's criminality develops and is reinforced; criminogenic needs are then a subset of risk factors that can be demonstrated to be directly related to criminal behavior (including reoffending), some of which may be modifiable so that evidence of a change in the "dynamic" risk factor is associated with evidence of a change in risk of offending or reoffending. As Ogloff and Davis (2004) point out, while offenders may have many needs which may be targeted in some type of treatment, not all are criminogenic (e.g., related specifically but not necessarily uniquely to criminal behavior); however, only focusing on those DRFs or needs associated with offending behavior may lead to a reduction in an individual's risk for offending. Andrews and Bonta (2006) suggested that assessment of DRFs would lead to improved "forecasting" of criminal events and that interventions targeting those DRFs might influence the likelihood of the occurrence of those such criminal events. In particular, they called for the classical experiments (e.g., control groups, random assignment to groups) designed to maintain control over variables that might compete for causal status related to increased or reduced criminal behavior. Empirical work on nonsexual criminal offenders suggested that DRFs predicted recidivism as or better than static, historical variables (e.g., Gendreau, Goggin, and Paparozzi (1996); Zamble & Quinsey (1997)). However, as of 2000, Hanson and Harris (2000) wrote: "When the specific goal is to prevent sexual offense recidivism there is almost no empirical foundation for identifying treatment targets or determining whether interventions have been successful…" (p. 6). They suggested that the development of reliable dynamic risk assessment instruments would therefore greatly assist clinicians: (1) correctly identify dynamic risk factors and (2) measure the effect of treatment in changing such factors.

Several alternative models have been proposed regarding the distinction between so-identified DRFs and other risk-related phenomena. Beech and Ward (2004) suggested that historical and static risk factors function as markers of underlying psychological vulnerabilities to commit a sexual offender and that actuarial risk assessments based on such "fixed" static factors are good predictors of sexual offense recidivism because those static factors "mark" offense-related "proclivities" in certain individuals. Ward and Beech (2004, 2006; this volume) proposed that "clinical factors or symptoms" were clinical risk factors created when stable risk factors transformed into "states" of acute clinical risk in the presence of triggering contextual cognitive, affective, and behavioral triggering factors. Thus, "these clinical or state variables are best viewed as the expression of individuals' underlying vulnerabilities that have been activated by situational events" (p. 47, Ward & Beech, 2006). Those vulnerabilities and/or traits can only be inferred from behavior or overt responses "which are indicative of deeper casual properties of a person's functioning" (p. 47), and "What we are proposing is that the psychological vulnerability factors identified by various theorists in the sexual offending domain

do not pick out in any meaningful sense the underlying causal mechanisms that actually generate sexual abuse. Our suggestion is, rather, that they are simply useful descriptive terms for referring to the surface manifestations of the underlying neuropsychological systems; what we have termed clinical phenomena" (p. 47). Ward and Beech appear to suggest sexual offenders are characterized by long-term, underlying vulnerabilities (risk factors) which in particular situations or contexts "emerge"—"that these clinical risk factors are created when Stable dynamic risk factors become transformed into states of acute clinical risk in the presence of triggering contextual cognitive, affective, and behavioral triggering factors…Therefore these clinical or state variables are best viewed as the expression of individuals' underlying vulnerabilities that have been activated by situational events" (p. 48). Thus, what others regard as "dynamic" risk factors are viewed by Ward and Beech as context-induced "acute" psychological trait-directed "states" that reflect more basic vulnerabilities or psychological predispositions; DRFs are simply the acute mental "states" or surface manifestations that emerge out of or caused by "Stable risk dynamic risk factors" or "underlying traits" which are "activated" in specific contexts. Beech and Ward (2004) suggested that static risk factors are etiologically and predictively significant because they represent *markers* of the past expression or enactment of DRFs as such underlying traits; static or historical risk factors are proxies for such traits or DRFs. Per their "risk-etiology" model of sexual offending, then, "acute" DRFs are simply the manifestation of "stable" DRFs; states are effectively manifestation of more "trait-like" features.

More recently, Mann, Hanson, and Thornton (2010) proposed that "…another way to understand risk factors, instead of classifying them as static or dynamic, is by adopting the concept of *psychologically meaningful risk factors*. Such risk factors can be conceptualized as individual propensities, which may or may not manifest during any particular time period. Like the traditional concept of trait, propensities are enduring characteristics that lead to predictable expressions of thoughts, feelings, or behaviors. Although propensities are characteristics of individuals, these propensities can also be recognized by individuals' transactions with others and the environments in which they live. Through consistency in beliefs, actions, and appearance, offenders can contribute to consistencies of their environment in ways that are relevant to their recidivism risk (e.g., high-crime neighborhoods, criminal associates). The propensity to gravitate toward criminogenic environments would be expected to be a conceptually distinct (and potentially better) indicator of long-term recidivism risk than the criminogenic environments themselves. Although certain circumstances would be expected to contribute to sexual crime (e.g., drinking or using offenders with the propensity to place themselves in such situations would be expected to be at increased long-term recidivism risk compared with offenders whose natural tendencies lead them to safer environments…. We use the term *propensities* to describe psychologically meaningful risk factors in order to emphasize that the problematic behavior of interest arises through interactions with the environment. Aggressive offenders are not aggressive all the time—they become aggressive given certain interpretations of their environment (in the classic cognitive-behavioral sense)" (pp. 194–195). Mann et al. chose not to label these propensities as "traits" because of historical connotations of relatively absolute cross-situational consistency or stability (e.g., Mischel, 1968). Rather, they noted: "Alternate terms that are compatible with our conceptualization are *long-term vulnerabilities* and *if… then…behavioral signature*," (p. 194) citing to Mischel and Shoda (1995). Finally, Mann et al. wrote: "In the context of sexual offender treatment, the most useful propensities are those that are amenable to change. It is not necessary, however, that propensities be amenable to change for them to be psychologically meaningful risk factors or for them to be of interest to treatment providers. For example, the extent to which male sexual interests can be changed through deliberate intervention is debatable. Nevertheless, there is widespread agreement that having deviant sexual interests is a risk-relevant propensity. Even if some criminogenic propensities cannot be changed, it is possible that such propensities can be neutralized through compensatory strengths or prosthetics" (p. 195).

In part as a response to Mann et al. (2010), Ward and Beech (2014) recently elaborated on the distinctions they had made in previous papers. They reiterated: "the following clusters of problems can be reliably discerned in sexual offenders: distorted thinking, social difficulties and intimacy problems, problems with controlling mood, negative mood, inappropriate sexual thoughts and fantasies, substance use problems and difficulty problem solving and goal setting" (p. 7). However, they now made the distinction between the descriptive aspect of identifying DRFs and the explanatory or etiological aspect of causal risk factors. They used the term "exemplar" as the representation of the typical course and symptoms of a disorder, and DRFs should be regarded as descriptive attributes of clinical "exemplars" (a new term). Attributes, descriptively, are linked to the mental state or experiential aspects of the sets of problem clusters related to sexual offending. However, Ward and Beech argued that such exemplars do not necessarily provide a clear explanatory model that is inclusive of interactions among the key psychological, social, and biological constructs and the common trajectories of such constructs and problem clusters. They stressed the importance of an etiological model, which provides "guidance concerning how the causal aspects of dynamic risk factors interact to actually generate observed clinical features and subsequent sexual offending…" (p. 10). Ward and Beech raised concerns that, in effect, lists of iden-

tified correlates or even prospective risk factors do not, in and of themselves, provide causal explanations of the diversity of sexual offending. They conclude:

> In summary, we have argued that in the current state of research dynamic risk factors are really hybrid concepts containing 'symptom' or phenomena aspects and etiological aspects. In our view, the conflation of the descriptive and explanatory elements within a single concept is confusing and runs the danger of derailing research and practice into dead ends. We have argued that viewing the descriptive aspects of dynamic risk factors as attributes of an exemplar(s) and introducing a separate explanatory phase of research that concentrates on developing causal explanations of the exemplar and its associated phenomena and course are ways forward. (p. 12)

Thus, Ward and Beech recommend that after identifying DRFs as clinical phenomena that are effects of causal processes, it is necessary to explain the occurrence of such phenomena (e.g., clinical attributes) and their interrelationships.

The evolution of the conceptualization and attempts at operationalization of DRFs occurred contemporaneously in both the UK and Canada. Following the initial development of static actuarial risk assessment instruments such as the Rapid Risk Assessment for Sexual Offenses (Hanson, 1997) and the Static-99 (Hanson & Thornton, 2000), Hanson in Canada and Thornton in the UK began developing and operationalizing approaches to the conceptualization and measurement of DRFs for sexual offenders.

Following the work of Andrews and Bonta (1998), Hanson and Harris (2000) in Canada began by attempting to empirically identify potential DRFs for sexual offenders. Initially, they studied approximately 400 sexual offenders with different types of target victims, excluding incest offenders. Recidivists had committed a new sexual offense while on community supervision within a 15-month period, whereas a group of informally matched non-recidivists were selected from sexual offenders who had completed comparable supervision for, on average, 24 months. Data was extracted retrospectively from records of relatively brief case notes and 1-h interviews with community supervision officers regarding both groups of individuals; 128 items were reduced into 22 scales. The risk factors identified were assumed to reflect relatively Stable characteristics, and they were rated in terms of whether they changed for the better or worse or showed no change during the study period (identified as acute changes).

Hanson and Harris reported overall, substantial differences between the sexual recidivists and the non-recidivists across a variety of areas. They also noted "supposedly dynamic problems observed during the course of supervision could proxies for enduring (static or highly stable) risk factors" (p. 29). However, even after statistically controlling for the more severe or negative ratings of the sexual recidivists, dynamic variables continued to be strongly associated with sexual offense recidivism: "The recidivists were generally more problematic than the nonrecidivists and their behavior deteriorated just before recidivating" (p. 29). They found that Stable dynamic factors most strongly differentiated recidivists from non-recidivists. Hanson and Harris (2001) organized the DRFs identified in their previous study into a scale they termed the Sex Offender Need Assessment Rating (SONAR) and applied that scale to their previous data set. Based on research-based rationale for the identified constructs, the SONAR items were divided into five Stable factors (intimacy deficits, negative social influences, attitudes tolerant of sexual offending, sexual self-regulation, general self-regulation) and four acute factors (substance abuse, negative mood, anger, and victim access). Inter-rater reliability was consistently high for all sources of data for the 10 % of cases that were coded separately by two raters. The subscores of the recidivists were higher than what the non-recidivists had on the total SONAR score as well as each of the subscales. The ability of the scale to distinguish between groups was moderately high (e.g., $r=0.43$; ROC = 0.74). Even after controlling for preexisting risk factors such as age, IQ, and static actuarial measures, the SONAR continued to distinguish between sexual recidivists and non-recidivists.

In the UK, theoretical and empirical work by several investigators formed the foundation for the development of another approach to the appraisal of DRFs (e.g., Beech, 1998; Thornton, 2002). Utilizing a psychometric battery adjusted by social desirability, Beech (1998) attempted to examine a typology for sexual offenders; he hypothesized that high-deviance group of offenders (those who were socially inadequate with many offense-related problems) would be more likely to have a long history of sexual offending and be at greater risk of reoffending than a low-deviance group of sexual offenders. He found that sexual offenders with more deviant personalities, attitudes, and beliefs were more likely to have a more extensive history of sexual offending, including incest offenders. He concluded: "Deviancy, therefore, may be a used way of defining a baseline in terms of defining treatment need." Based on the cumulative research from a variety of approaches conducted largely in the U.K. correctional system, Thornton (2002) suggested the structured risk assessment (SRA) as a process for evaluating the risk presented by sexual offenders. The full scheme covers static assessment based on unchangeable, statistical risk factors, initial deviance assessment (IDA) based on potentially changeable but relatively Stable psychological risk factors, evaluation of progress based on response to treatment, and risk management based on offense-specialization and acute risk factors. In that article, Thornton described the framework for the IDA and its ability to predict sexual offense recidivism. Per Thornton, deviance was defined in terms of the extent to which the offender's functioning is dominated by the psychological factors that contribute to his offending so that "high deviance" meant that the DRFs

underlying offending are "relatively intense and pervasive" and "low deviance" meant that DRFs were relatively weak in intensity and circumscribed in their effects. He postulated "that the main dynamic risk factors fall into four domains: sexual interests, distorted attitudes, socioaffective functioning and self-management (these domains are discussed in much more detail in Thornton, 2015 this volume). High Deviance is defined as the individual showing problems within at least two domains, Low Deviance is when no marked dynamic risk factors are apparent, and Moderate Deviance is when marked dynamic risk factors are present in just one domain" (p. 140). Thornton (2002) demonstrated that repeat sexual offenders versus one-time sexual offenders were distinguished by greater deviance in the areas of socio-affective dysfunction, self-management, and distorted attitudes as indicated by various psychometric measures (no data was available regarding sexual interests so that domain was not studied at that time). In a separate study reported in the same paper, Thornton found that scores for the three areas of the IDA assessed showed an ROC of 0.78 and that the Static-99 was only moderately correlated with IDA (e.g., $r=0.30$). Of those sexual offenders who were classified in the "high" category on the Static-99 and who scored as "high deviance" on the IDA, 67 % were reconvicted of a later sexual offense (even without information or inference about sexual interests). Thus, these studies suggested that the appraisal of psychological characteristics of sexual offenders was related to but different in terms of the association with sexual offense recidivism as measured by reconviction.

Thornton (2002) identified that the SRA model was intended to be a framework of organizing judgment similar to instruments of structured professional judgment; he queried whether an appraisal of relative deviance might be better accounted for by some weighted combination of the different components within each domain. Subsequently, a version of the SRA was implemented by the correctional services in England and Wales but was termed Structured Assessment of Risk and Need (SARN: Webster et al., 2006). The SARN, like the SRA, considers four domains of DRFs: sexual interests, distorted attitudes, socioaffective functioning, and self-management; 16 DRFs within those four clusters are considered for their relevance to an individual offender. Per Webster et al. (2006), in SARN terminology, DRFs are referred to as "treatment needs" because the SARN is primarily a treatment planning tool. Per Webster et al.: "The SARN utilizes a scoring protocol that examines the relevance of each dynamic risk factor as present both in the proximal lead-up to the sexual offence (the "offence chain"), and/or in the offender's life generally ('generality'). Each risk factor is scored 0 (not present), 1 (present but not a central characteristic) and 2 (a central characteristic). There is a 'not possible to score' option for occasions when information is poor or inconsistent. The basis for scoring each individual dynamic risk factor is set out in a scoring manual that defines each factor, summarizes the research base for its inclusion in the framework, and explains how the scoring system should be applied. This scoring protocol is very similar to that of the SONAR (Hanson & Harris, 2001)…Any factor scored as '2' in both offence chain and generality is defined as a relevant treatment need area for the offender." Webster et al. (2006) reported on the results of two studies (involving three samples) regarding the inter-rater reliability of the SARN. The initial study showed high-inter-rater reliability for a sample of seven expert raters. The second study involved a more diverse group of raters in terms of clinical experience and education (e.g. some with just bachelor's degrees) who had received some training in the use of the SARN; Webster et al. also found support for reliability of the SARN although variability depending on the method of analysis applied. They observed that: "…it may be that in the complicated world of sex offender assessment, where information can be messy and conflicting, and where offenders routinely and intentionally use denial and minimization to confuse their assessors, consistently high levels of inter-rater reliability are not realistically obtainable" (p. 451). Webster et al. concluded that the SARN should be used for guiding clinical assessment of treatment needs.

Of note, Allan, Grace, Rutherford, and Hudson (2007) utilized a psychometric battery to study potential DRFs among approximately 500 sexual offenders who had participated in a prison-based sexual offender treatment program and followed for an average of just under 6 years (p.440). They identified their measures as appraising: sexual interest, anger/hostility, pro-offending attitudes, and social inadequacy. All but anger/hostility had moderate degrees of predictive accuracy. They found that the overall deviance score was correlated to a similar degree compared to an actuarial measure's association with sexual offense recidivism and that the overall score was more strongly related than any of the individual four domains.

The Stable-2007

Background Research

Based on the development of the SONAR, Hanson, Harris, Scott, and Helmus (2007) developed the Stable-2000 and later the Stable-2007. The unique feature of this study was that it was essentially a prospective investigation conducted in the field by actual community supervision officers, and a limitation was that it only followed offenders for 3 years. The most promising Stable and acute DRFs identified by previous work (primarily the SONAR) were organized into a comprehensive assessment package, which was refined through field-testing with experienced supervision (e.g., parole/probation) officers. Next, diverse jurisdictions were

approached with an offer to train officers in the assessment package if they were willing to contribute data for a period of 3 years. Consequently, the data collected for this study represented the combined efforts of community supervision officers from all Canadian provinces and territories, the Correctional Service of Canada, and the states of Alaska and Iowa. Officers participating in the project were asked to collect the following information on new sexual offenders on their case loads: (a) static risk factors upon intake, (b) Stable risk factors every 6 months, and (c) acute risk factors at every offender contact. All offenders were adults starting a period of community supervision (probation or parole) for a recent sexual offense. A sexual offense was defined as an offense with a sexual motivation involving a non-consenting person or persons unable to provide consent.

The measure of Stable risk factors, Stable-2000, was developed for this study. Stable risk factors were defined as offender characteristics that are related to recidivism and capable of changing over months or years. The 16 factors were assessed using three-point ratings scales "0 (no problem)," "1 (some concern/slight problem)," and "2 (present/definite concern)," following a structured scoring manual. The manual instructed evaluators to estimate the offender's typical or baseline level of functioning during the following 6–12 months based on all available information. The minimum information required was a structured interview with the offender and a file review of sufficient depth to score the static information requested above (Static-99 scores, victim information, demographics). When available, evaluators were encouraged to use other sources of information, such as psychological assessments, police reports, specialized testing, previous presentence reports, and collateral contacts. All officers submitting data to the project were required to attend a 2-day training session.

The 16 items were organized into six sections and were scored on a Tally Sheet. The first section, *significant social influences*, identified the "nonprofessional" people in the offender's life who were not paid to be with him or her and then computed a section score based on the number of positive and negative social influences. The *intimacy deficits* sections contained 5 items: (a) stability of the offender's current intimate relationship, (b) emotional identification with children, (c) hostility toward women, (d) general social rejection/loneliness, and (e) lack of concern for others. Three items were included in the *sexual self-regulation* section: (a) high sex drive/sexual preoccupations, (b) use of sex as a coping strategy, and (c) deviant sexual interests. The *attitude* section assessed (a) sexual entitlement, (b) attitudes tolerant of rape, and (c) attitudes tolerant of adult–child sex. The fifth section assessed the officers' assessment of the degree to which the offender was *cooperating with supervision*. Per Hanson et al., this included explicit compliance with the conditions of supervision and a more general evaluation of whether the offender was "working with" or "working against" the officer. The final section, general self-regulation, addressed three items: (a) impulsive acts, (b) poor cognitive problem-solving skills, and (c) negative emotionality/hostility. After scoring all the subsections, for the Stable-2000, the *highest score in each subsection* counted as the section score, resulting in total scores that could range from 0 to 12. The following nominal categories for the degree or "density" of DRFs or sexual offending "needs" were proposed for the Stable-2000: 0–4 was "low" need, 5–8 was "moderate" need, and 9–12 was "high" need.

The Acute-2000 included seven items access to victims, emotional collapse, collapse of social supports, hostility, substance abuse, sexual preoccupations, and rejection of supervision. Each item was rated according to a scoring manual from "0 (no problem)," "1 (maybe/some)," "2 (yes, definite problem)," and "3 (intervene now)". An "intervene now" category was designed to indicate situations in which the officer felt that the risk of new offending was sufficiently high that preventive actions were immediately necessary (e.g., offender making direct threats against a specific victim, realistic suicidal ideation).

Regarding reliability, the agreement was high between the original ratings and the consensus ratings developed through file reviews. The intraclass correlation was 0.89 for Stable-2000 total scores ($k = 87$). The ICCs for the individual Acute items ranged from 0.64 to 0.95, with a median of 0.90 ($k = 75$). The Stable item with the lowest rater reliability was significant social influences (ICC of 0.66) and the acute item with lowest rater reliability was collapse of social supports (0.64). Analyses were conducted on the subgroup of offenders for whom complete data were received to examine the effects of variable data quality on the results. For these offenders, the officers had completed the static assessment, an override rating, and at least one Stable and at least one acute assessment. Hanson et al. assumed that the officers who completed the full assessment package were the most conscientious and committed to the project and, as a result, would produce the most reliable data ; these individuals were subsequently referred to as the "conscientious" evaluators. The only item that had unacceptable levels of rater agreement was the override rating, in which the ICC was not meaningfully above chance levels (ICC = 0.15, $k = 74$).

The outcome variable of recidivism was obtained via various sources. Information concerning new offenses was gathered through reviews of state, provincial, and national (Canadian) criminal history records, as well as from supervising officers and local police jurisdictions. For Canadian offenders, centralized criminal history records maintained by the RCMP were received at two points in time; in addition, provincial/state records were received from the following several provincial jurisdictions. The Offender Management System of the Correctional Service of Canada (CSC) was

also checked in recidivism information of the CSC offenders registered in the project. For the purpose of survival analyses, the start date was the date of the first assessment or the date of release into the community, whichever was latest. The survival end date was the earliest of the following events: sexual recidivism, death, deportation, end of follow-up, or incarceration for a period of time that included the follow-up end date.

Five types of recidivism were available for study. The first category was "sexual crime recidivism," which included all crimes with a sexual motivation, whether or not the name of the offense was explicitly sexual. This included contact and noncontact offenses, as well as sexual offenses involving consenting adults (e.g., prostitution, public sex). The second category, "any sexual recidivism," included sexual crimes as well as sexual breaches, defined as official sanctions for sexually motivated violations of the conditions of community supervision including behavior that was not otherwise illegal (e.g., child molester loitering in a park). "Violent recidivism" was defined as all crimes that involved direct confrontation with the victim and included sexual crime recidivism but not sexual breaches. Given that some of the sexual offenses were not violent (e.g., prostitution), this category could also be called "violent or sexual recidivism." The fourth category was "any criminal recidivism," which included all crimes but excluded breaches. The final category, "any recidivism," included all crimes (sexual, violent, and nonviolent) as well as all breaches (sexually motivated and other). The overall recidivism rates for the 991 male offenders in the sample for the 3-year follow-up were as follows: sexual crime, 7 % (68); any sexual recidivism including sexual breaches, 9 % (90); any violent or sexual recidivism, 14 % (134); any criminal recidivism, 19 % (185); and any recidivism including breaches, 28 % (277). There were significant differences in the recidivism rates across jurisdictions. Such differences would be expected given the differences in the follow-up times and the sources of the recidivism information and that the different jurisdictions were responsible for different offenders (only those with probation sentences, only those with sentences of 2 years or more, all sex offenders sentenced in a state for nonfederal offenses).

Analysis of the collected data leads to the modification of the Stable-2000 such that a new instrument, the Stable-2007, was created. Results showed that 7 of the 16 items were characterized by significant linear relationships to all outcomes: (1) negative social influences, (2) hostility toward women, (3) rejection/loneliness, (4) lack of concern for others, (5) lack of cooperation with supervision, (6) impulsive acts, and (7) poor cognitive problem-solving. An additional three items showed significant, linear relationships with the outcome criteria they were specifically designed to predict: (8) sexual preoccupations and (9) sex as coping were significantly related to sexual recidivism; (10) negative emotion/hostility was related to violent and general recidivism. These 10 items were retained without revision in the Stable-2007.

None of the three attitude items as rated was found to be significantly related to sexual recidivism. Emotional identification with children showed significant, but nonlinear relationships with sexual recidivism in the total sample and among the child molesters (ROC AUC were nonsignificant). For child molesters, there was little difference in the sexual recidivism rates of those who scored zero or one (5 %), but those who scored two showed significantly higher rates of sexual recidivism (16 %).

Deviant sexual interests were only weakly related to sexual reoffending, which was surprising given its strong association with sexual recidivism in previous meta-analyses of static risk factors associated with sexual offense recidivism (Hanson & Bussiere, 1996, 1998; Hanson & Morton-Bourgon, 2004, 2005). The original scoring rules of the Stable-2000 specified that deviant interests could be assessed via self-report, specialized testing, or offense history. However, examination of the obtained data suggested that a significant minority of the corrections officers had given insufficient weight to offense history in their judgment of deviant interests (e.g., an offender with eight boy victims was scored as a "zero"). Consequently, this item was revised for Stable-2007, requiring offense history to be considered in the assessment of deviant sexual interests. Specifically, minimum scores were set based on the total number of prior victims (two to seven victims required a minimum score of "one"; eight or more victims required a minimum score of "two"). Given that requiring scorers to count prior victims makes it methodologically "impossible" for those with eight or more victims to improve, a sub-item was added that addresses whether sexual behavior during the past 2 years indicated nondeviant adjustment. In summary, ten of the original Stable-2000 items predicted recidivism as well or better than expected and were retained in Stable-2007. Of these, three additional items were retained with minor modifications (relationship stability, emotional identification with children, and deviant sexual interests). Since the three attitude items did not meaningfully predict sexual offense recidivism, they were deleted from the Stable-2000 when it was modified to the Stable-2007. Overall, there are three key differences between the Stable-2000 and the Stable-2007. First, the Stable-2007 does not attempt to appraise or utilize information related to attitudes supportive of sexual offending. In addition, the scoring criteria were refined for three times: deviant sexual interests, lovers/intimate partners, and emotional identification with children. Finally, the procedure for calculating the total score was simplified and nominal categories (low, moderate, high) were based on the observed distribution of scores in the DSP sample.

Additionally, the method of combining the Stable items was reevaluated and changed from the Stable-2000 to the Stable-2007. Two main options considered were (a) using the worst score in each subsection (the original method) and (b) summing all items. Neither method was more accurate than the other; the relative superiority of the two approaches changed based on the outcome criteria and subgroup examined, and none of the differences in predictive accuracy was statistically or practically significant. Consequently, for simplicity, in scoring the Stable-2007 Stable items, a sum of item scores is utilized. Given that emotional identification with children is scored only for child molesters, total scores can range from 0 to 24 for sexual offenders without child victims and 0 to 26 for sexual offenders with child victims (e.g., including the possibility of two more points for emotional identification with children). In the DSP study, the average total Stable-2007 score was 7.5 ($SD = 4.9$, range of 0–26, $n = 792$). The internal consistency (alpha) of the 13 Stable-2007 items was 0.80 (for the 16 Stable-2000 items, alpha was 0.83).

Stable assessments were to be completed every 6 months for the duration of community supervision. For the sample of 991 offenders, 799 initial Stables were obtained; in addition, the investigators collected 293 s Stables, 114 third Stables, 46 fourth Stables, and 19 fifth Stables, and for one offender, a sixth Stable was obtained. Given the short follow-up time and low recidivism rates, it was deemed most appropriate to test the relationship to sexual recidivism with the first and second Stable assessments. The Stable-2007 scores were highly consistent between the first and second assessment, ICC of 0.79 (« =292). On average, offenders were assessed as having fewer needs on Stable-2007 at the second assessment ($M = 6.5$; $SD = 4.9$) than at the first assessment ($M = 7.2$; $SD = 4.6$; $t = 3.79$; $df = 291$; $p < 0.001$). The amount of change between the first and second assessments was unrelated to any form of recidivism. To examine whether the second assessment was more accurate than the first assessment, the first Stable-2007 assessment and the second Stable-2007 assessment were used to predict recidivism 12 months and 24 months after the second assessment. The predictive accuracy of both assessments was similar. When both the first and second assessments were entered simultaneously in logistic regression to predict 12 months and 24 months recidivism for the five outcome variables, the overall model was significant in all cases, but neither assessment contributed uniquely in 9 of the 10 analyses. The only exception was that the second Stable assessment significantly contributed beyond the first Stable assessment for the prediction of sexual recidivism during the following 12 months. This finding is consistent with expectations, but should be treated cautiously because it was based on only six sex offense recidivists.

Regarding acute dimensions presumed to function as DRFs, over approximately a 5 ½ year period, 149 officers had submitted 7,050 acute ratings for 744 adult male offenders. The number of acute ratings per offender ranged from 1 to 70, with a median of 7 ($M = 9.5$, $SD = 9.2$). A "unique" acute factor was rated in 75 % of the assessments. However, "unique" acute factors were not significantly related to any form of recidivism. The seven acute factors were all significantly correlated with each other, with a median correlation of $r = 0.24$ (range of 0.13–0.49). A principal component factor analysis generated the following initial eigenvalues: 2.6, 1.0, 0.87, 0.85, and 0.65. The scree plot suggested a single factor, but a two-factor varimax rotation provided a relatively clean second factor composed of sexual preoccupations (0.75), victim access (0.74), rejection of supervision (0.61), and hostility (0.51). The internal consistency of these four items was 0.65 (alpha) and 0.72 for all seven items.

A variety of different analyses were conducted using acute ratings from different time frames to examine the predictive accuracy of acute variables: (a) the most recent rating within 45 days of recidivism, (b) the average rating within 45 days, (c) the average rating within 90 days, and (d) the average rating within 183 days (6 months). The acute ratings for the recidivists were compared to acute ratings for non-recidivists based on a randomly selected date. For these analyses, the recidivists were defined as those offenders who reoffended within the specified time frame, while the non-recidivists were those who never reoffended with the specific type of crime. Offenders who reoffended with the specific type of crime outside of the time frames were considered to be "missing." Each of the five recidivism outcomes was analyzed separately, with different recidivism and non-recidivism dates in each sample.

Regarding the Acute variables, (1) victim access, (2) sexual preoccupation, and (3) rejection of supervision were associated with all types of recidivism in all analyses, and (4) hostility was significantly related to recidivism in 13 of 15 analyses. These are the same four variables that clustered together in the factor analyses. (5) Emotional collapse, (6) collapse of social supports, and (7) substance abuse were significantly associated with any recidivism in all time frames, and with any criminal recidivism in two of the three time frames. These three factors (emotional collapse, collapse of social supports, and substance abuse), however, were not consistently related to sexual or violent recidivism. Consequently, the acute variables were considered to comprise two scales: (a) the total of the seven items as a predictor of general recidivism and (b) a subscale consisting of the four sexual/violence items (victim access, sexual preoccupation, rejection of supervision, and hostility).

For the four sex/violence factors, the recommended cut scores were as follows: none = low, one (maybe/possible problem) = moderate, and two or more = high. For all seven acute factors, the recommended cut scores were as follows:

none = low, one to two = moderate, and three or more = high. The acute scales showed moderate ability to differentiate between the imminent recidivists and the non-recidivists (ROC AUCs of 0.65–0.74). Out of the total collection of 7050 ratings, the average score for the sex/violence factors was 0.99 (*SD* = 1.4, range of 0–12) and 1.68 (*SD* = 2.1, range of 0–18) for all acute factors. Results for the 45 days averages showed essentially the same results as the 90 days averages. Hanson et al. examined whether the correlations with recidivism were higher for the assessment conducted in the most recent time period compared to the assessments conducted in the next previous time period. There was no clear superiority for the most recent assessment for time periods less than 6 months. For the 6 months average, however, the average ratings in the most recent 6 months were generally better predictors of recidivism than the average ratings in the prior 6 months (correlations based on all acute totals: 0.25 vs. 0.24 for sexual crime recidivism, 0.18 vs. 0.26 for any sexual recidivism [*wrong direction*], 0.30 vs. 0.29 for any violent recidivism, 0.31 vs. 0.24 for any criminal recidivism, and 0.38 vs. 0.32 for any recidivism; sample sizes range from 217 to 235). Importantly, however, the differences were not strong even at 6 months, suggesting that the acute variables assessed in this study were more "Stable" than originally conceptualized. A related, important finding was that *averaging* the acute ratings over longer time periods increased their predictive accuracy. For example, for the predictions of sexual offense recidivism, the correlations with victim access increased from 0.12 for the most recent assessment in the last 45 days, to 0.23 for the average of all assessments in the last 45 days, to 0.29 for the average of the last 6 months (all $p < 0.01$). Similar patterns were shown for all other risk factors.

The absolute risk of imminent recidivism was small for all types of recidivism. Out of the total 7050 acute assessments, only 17 immediately preceded a new sexual crime (approximately one in 400). Even for the most frequent types of recidivism (any), the frequency was only one in 75 (93/7050). A series of different analyses was conducted to determine the extent to which change in the acute factors was associated with increased risk, including the most recent and the average scores for 45, 90, and 183 days each compared to the average rating of the next comparable time period. In *none* of the analyses were the difference scores significantly related to any type of recidivism. As well, the officers' global ratings of whether the factors were "getting better," "getting worse," or "staying the same" were *not* related to recidivism. That is, attempts to measure and understand factors or changes related to imminent recidivism were unsuccessful; raters were not able to identify "acute" indicators of such behaviors.

Relative predictive accuracy of the risk scales was measured using the area under curve or the receiver operating characteristic curve (AUC; Swets, Dawes, & Monahan, 2000); for the Stable-2000, the ROC was 0.64, and for the Stable-2007, the ROC was 0.67.[1] However, when only the Stable-2007 ratings completed by the subset of "conscientious" raters (e.g., those who had completed at least one full assessment) were examined, the AUC for sexual recidivism rose to 0.77, suggesting that the overall ROC for the Stable-2007 reflected significant variation in how carefully items were rated by some community officers. Similar to other areas and activities of risk assessment, the degree of carefulness and value placed on instrument scoring lead to a significantly higher degree of predictive accuracy.

An important question for the DSP was the extent to which DRS variables added useful information beyond that captured by Static-99. In the DSP data set, the average Static-99 score was 3 (*SD* = 1.9), and it showed moderate relationships with the recidivism outcomes, with ROC AUC ranging from 0.69 to 0.74. In order to test the incremental validity of Stable-2000 and Stable-2007 over Static-99, Hanson et al. employed Cox regression (with jurisdictions identified as strata) and Static-99 scores as the covariate. They found that Stable-2007 made a significant incremental contribution for all types of recidivism, while Stable-2000 made a significant incremental contribution for all types of recidivism, *except* for sexual offense recidivism. Thus, the Stable-2007 demonstrated statistically significant for sexual crime, any sexual recidivism (including breaches), violent or sexual crime, any crime, and any recidivism (including breaches).

Hanson et al. also explored the optimal method for combining the static and Stable variables into nominal categories using different cut-points and combination rules. The previous categories proposed for Stable-2000 were deemed not optimal. Rather, the predictive accuracy of the need categories was initially found to be improved by using the following categorization: 0 to 2 = low need; 3 to 7 = moderate need; and 8 or greater = high need. The recommended three-group categorization for Stable-2007 is as follows: 0 to 3 = low need, 4 to 11 = moderate need, and 12 or greater = high need. Approximately 20 % of the high-need group reoffended with a sexual crime or sexual breach compared to approximately 8 % in the moderate need group and 3 % in the low-need group. However, in addition, study results indicated that sexual offenders who were classified as high risk on the Static-99

[1] An AUC of 0.56 corresponds to a small effect size, while 0.64 reflects a moderate effect and 0.71 reflects a large effect size (Rice & Harris, 2005). An AUC value is statistically significant if the 95 % confidence interval does not include 0.50. The AUC can vary between 0 and 1, with 0.50 indicating the level of prediction that would be expected by chance, and AUCs above 0.50 demonstrating positive predictive accuracy (i.e., higher risk scores are associated with a higher likelihood of reoffending). AUCs can also be interpreted as the probability that a randomly selected recidivist would have a higher risk score than a randomly selected non-recidivist.

but low or moderate need on Stable-2007 were still classified as high priority cases. Further, a fifth category of "very high priority" was created for individuals who scored high on both Static-99 and the Stable variables. To further reduce variability due to diverse sources of recidivism information, other reliability analyses were restricted to Canadian offenders for whom national criminal history records had been received. In these analyses, the predictive accuracy of the static and Stable variables was high. The median AUC for the Static-99/Stable-2007 categories was 0.80.

Hanson et al. concluded that the DSP demonstrated that community supervision officers were able to assess current social and personal characteristics of sexual offenders that were meaningfully related to sexual, violent, and general recidivism. Previous research has documented that recidivism can be predicted by static, historical variables, such as offense history and victim characteristics; in the current study, such static variables also showed moderate to large associations with recidivism. Nevertheless, it was possible to improve the accuracy of risk assessments by using a structured approach to combine static, Stable, and acute characteristics into an overall evaluation of current risk.

The current results were consistent with previous studies in which Stable dynamic characteristics significantly contributed information to the prediction of recidivism above that given by established, static actuarial measures (Beech, Friendship, Erikson, & Hanson, 2002; Hanson & Harris, 2000; Thornton, 2002). To our knowledge, the current study is unique in that it used a truly prospective design in which officers conducted assessments as part of routine supervision practices. The officers were trained in the risk assessment methods, they assessed new cases, and recidivism information was collected on those cases during an average 3-year follow-up period.

More recently, Helmus and Hanson (2013) provided data, including updated 5-year recidivism tables for the Stable-2007 in combination with the Static-99R (Hanson & Thornton, 2000; Helmus, Thornton, Hanson, & Babchishin, 2012) and the Static-2002-R (Hanson & Thornton, 2003; Helmus, Thornton et al., 2012). They advise that this updated information be utilized in place of that previously provided in the appendices of Fernandez, Harris, Hanson, and Sparks (2012).

Recidivism estimates for the Stable-2007 (when combined with Static-99R, Static-2002R) were calculated using life table survival analysis (Soothill & Gibbens, 1978). By estimating what the recidivism rate for the sample would be if everyone had been followed up to that point (based on information from cases with that length of follow-up), survival analysis corrects for unequal follow-up times. Although the median follow-up period was 8 years, recidivism estimates are presented only up to 5 years. For the overall sample, 5-year recidivism rates (from survival analysis) were 11 % for sexual recidivism, 13 % for sexual recidivism including breaches, 15 % for nonsexually violent recidivism, 20 % for any violent recidivism, 30 % for any new crime, and 36 % for any recidivism. As Helmus and Hanson point out, these rates may be higher than recidivism rates published from other relatively routine samples of sex offenders for several reasons: recidivism information was obtained from multiple diverse sources, attempts were made to identify the circumstances of offenses so that seemingly nonsexual offenses could be classified as sexual offenses if there was a sexual motivation, and analyses used the date of offense, which was often much sooner than the date of charge/conviction that is typically used in other studies.

Relative predictive accuracy of the risk scales for a 5-year follow-up period was again measured using the area under curve or the receiver operating characteristic curve (AUC; Swets et al., 2000). The Stable-2007 significantly predicted all five recidivism outcomes (sexual, sexual including breaches, violent, any crime, and any recidivism). For predicting sexual recidivism, the Stable-2007 demonstrated moderate predictive accuracy for all outcomes. ROCs for the Stable-2007 were sexual recidivism, 0.67; sexual (including breaches), 0.73; violent recidivism, 0.71; any crime, 0.73; and any recidivism, 0.70.

Cox regression analyses were used to examine whether the Stable-2007 added incremental predictive accuracy to the static risk scales (i.e., does it provide unique information?). Cox regression estimates relative risk ratios (hazard rates) associated with one or more predictor variables from survival data with unequal follow-up times (Allison, 1984).[2] Each of the Static-99R and Static-2002R scores was entered first into the regression equation to control for their effects. When examining all cases, the Stable-2007 provided incremental predictive accuracy over Static-99R and Static-2002R for the prediction of any sexual (including breaches) recidivism, violent recidivism, any crime, and any recidivism. For sexual recidivism utilizing available ratings by all participating community supervision officers, the Stable-2007 did not provide incremental predictive accuracy over Static-99R in the overall analyses; the incremental effect of Stable-2007 over Static-2002R, however, approached significance for sexual recidivism ($p = 0.060$). However, when analyses were restricted to conscientious officers (again defined as those who submitted more complete information than was requested of them; see Hanson et al., 2007 for more information), the incremental effects over both Static scales increased and were statistically significant for all outcomes (Static-99R: $p < 0.048$ and Static-2002R: $p < 0.044$). Percentages of sexual offense recidivism are provided below for combina-

[2]For analyses of the incremental effect of Stable-2007 above Static-99R or Static-2002R, the analyses used the offender's jurisdiction (e.g., province or region) as a strata variable, which takes into account different survival rates across the jurisdictions.

Table 1 Stable-2007, SRA-FV, and VRS-SO domains and subdomains

SRA domains	Stable-2007 items	SRA-FV	VRS-SO items
Sexual interests	Deviant sexual preference	Sexual preference for children	Sexually deviant lifestyle
	Sex drive	Sexualized violence	Deviant sexual preference
	Sexual preoccupation	*Sexual preoccupation*	Sexual compulsivity
	Sex as coping	*Rule based/narrow*	Offense planning
		Concept based/broad	Sexual offending cycle
Distorted attitudes	Hostility toward women		
Relational style	Capacity for relationship stability	Lack of emotional intimacy with adults (LEIRA)	Intimacy deficits
	Emotional identification with children	Emotional congruence with children	
	General social rejection or loneliness		
	Lack of concern for others		
	Negative emotionality (hostility)	Callousness	
		Grievance thinking	
		Internal grievance thinking	
		Poorly managed anger	
Self-management	*Social influences (antisocial)*		***Criminality***
			Impulsivity
	Impulsive acts	Lifestyle impulsivity	Interpersonal aggression
	Poor (cognitive) problem-solving skills	Dysfunctional coping	Substance abuse
	Cooperation with supervision	Resistance to rules and supervision	Compliance with community supervision (–)
			Criminal personality
			Community support (–)
			Emotional control (–)
			Treatment responsivity
			Insight
			Cognitive distortions
			Treatment compliance
			Release to high-risk situations

tions of Static-99R and Static-2002R score levels, respectively, with Stable-2007 score levels (Tables 1 and 2).

Administering the Stable-2007

As an empirical actuarial risk tool purportedly assessing dynamic risk factors among adult male sex offenders, the Stable-2007 is a scale composed of 13 items modified from the Stable-2000. For the Stable-2007, there are no acute factors to be considered. For the item measuring relationship stability, the scoring rules were modified to incorporate relationship history in addition to current relationship situation. The emotional identification with children item was revised so that it is only scored for offenders with at least one victim under 14 years of age. The deviant sexual interest item was revised to provide more detailed scoring guidelines and also to incorporate victim information as indicators of sexual deviance. A particularly detailed and comprehensive structured manual and semi-structured interview were created by Fernandez et al. (2012) to guide the information collection and scoring of Stable-2007 items.

Regarding data to be used to score the Stable-2007, Fernandez et al. recommend utilizing comprehensive information about the offender; it is noted that judgment is involved for all items. As noted, Fernandez provides a detailed semi-structured interview. They state that potentially useful interview questions are suggested with each item. Those potential questions are collated into a sample interview; the interview questions are provided as a guide and experienced interviewers are encouraged to use their judgment regarding the most appropriate phasing of questions to best obtain the necessary information. In addition, "there is no expectation that experienced interviewers will use all of the provided questions or use them in the order they are presented." It is noted that in the areas of sexual self-regulation and general self-regulation, the link between interview questions and scoring is less direct; from a global inquiry and in the context of all available information, the evaluator is expected to make judgment based on their over-

Table 2 Predictive accuracy of Static-99R, Static-2002R, and Stable-2007[a]

		Sexual recidivism			Sexual (including breaches)			Violent recidivism			Any crime			Any recidivism (includes breaches)		
	n	AUC	95 % CI		AUC	95 % CI		AUC	95 % CI		AUC	95 % CI		AUC	95 % CI	
Static-99R	764	0.73	0.67	0.80	0.73	0.67	0.78	0.71	0.67	0.76	0.73	0.69	0.77	0.74	0.70	0.77
Static-2002R	710	0.73	0.67	0.79	0.73	0.68	0.79	0.73	0.69	0.78	0.75	0.72	0.79	0.76	0.72	0.80
Stable-2007	615	0.67	0.60	0.74	0.69	0.62	0.75	0.67	0.62	0.72	0.69	0.64	0.73	0.71	0.67	0.75

[a]Table taken from Helmus and Hanson (2013)

all opinion of the offender's functioning in that area. They noted that it was designed so that it could be completed in a single, 1-h session. However, they note that in practice, most evaluators have reported spending between 90 and 120 min spread over two sessions with offenders in the community. Scoring should consider all available collateral information—both historical and recent and item scores for community subjects are scored both on the basis of interview and collateral information. Ratings represent estimates of a community-located offender's typical or current "baseline" functioning with "the primary task to determine expected functioning over the next 6–12 months." It should be noted that Eher in their application of the Stable-2007 to an incarcerated sample of offenders found that reliable and valid ratings of the times could be based on just archival and/or institutional information. After the findings by Hanson et al. (2007), Fernandez recommends that raters "need to be conscientious (i.e. committed to completing a thorough and quality assessment)" (p. 23).

The manual provides a detailed description of the "basic concept" behind each item, a short description of the research related to the item, issues to consider, special considerations as appropriate, information needed to score each item, other possible sources of information, and detailed description and criteria for scoring. In addition, sample interview questions, cross-references to other subsections or items on the Stable-2007 that may relate to the particular subsections or items, and scoring profiles or exemplars are provided. Each item is rated using a three-point rating system, where 0 refers to "not present" or "no concern" and 2 refers to "definitely present" or "definite concern." A score of "1" is given when there is uncertainty about whether the factor(s) is present, it is somewhat present, or it is present but it is not strong enough to justify a "2." When scoring the items for sexual offenders in the community, evaluators should estimate the offender's typical or baseline level of functioning during the following 6–12 months based on all available information. For scoring offenders who are incarcerated or otherwise institutionalized, evaluators should rate the offender's typical or baseline functioning prior to being detained (e.g., Eher et al., 2012). Training by identified certified trainers is strongly recommended for individuals not already trained in the Static or Stable measures or wishing to improve their scoring acumen.

In the initial DSP report, the best method of combining the Stable-2007 with Static-99 and Static-2002 was explored, and an algorithm was proposed. With the updated findings and revised Static scales, the data were reexamined and did not demonstrate a need to revise these rules. Helmus and Hanson (2013) provided the rules for combining Stable-2007 with Static-99R and Static-2002R, respectively. The result of this combination is named the "overall priority level" or the "overall risk level." The basic rules start with the Static risk categories, and the overall risk/priority category is *increased* one category if the Stable-2007 score is high and *reduced* one category if the Stable-2007 score is low. If the Stable-2007 score is moderate, the offender's overall risk/priority category remains the same as that determined by the Static tool. Helmus and Hanson caution that nominal labels for risk categories refer only to relative risk. That is, offenders in the "high" category would be expected to be more likely to reoffend than offenders in the "moderate" category; however, the category labels are not intended to conform to any absolute recidivism rates or thresholds for specific decisions

Helmus and Hanson identified certain exceptions to the basic rule. Offenders are not assigned to a new category lower than "low," even if the offender's Stable score is low. For Static-2002R, offenders are not assigned to a new category higher than "high," even if the Stable score is high. However, for Static-99R, in contrast, a new "very high" category was created for offenders scoring high (6+) on the Static measure and high on Stable-2007 (this new category means there are 5 overall risk categories regardless of whether an evaluator uses Static-99R or Static-2002R in conjunction with Stable-2007). Further, offenders who receive high scores on Static-99R are not assigned to the next lower category even if they have low Stable scores [in the original DSP analyses, there were only two offenders with a high Static-99R score and low Stable-2007, one of which sexually reoffended (an exhibitionist)] (Tables 3 and 4).

Other Research Regarding the Stable-2000/2007

The Stable-2007 has been studied by a number of independent investigators. Nunes and Babchisin (2011) examined the construct validity of the Stable-2000 and Stable-2007 by

Table 3 Incremental predictive accuracy of Stable-2007 above Static-99R and Static-2002R[a]

	All officers						Conscientious officers only					
	Controlling for Static-99R			Controlling for Static-2002R			Controlling for Static-99R			Controlling for Static-2002R		
	N recid/ total	HR	*p*	*N* recid/ total	HR	*p*	*N* recid/ total	HR	*p*	*N* recid/ total	HR	*p*
Sex	64/572	1.049	0.081	64/538	1.057	0.049	34/313	1.082	0.048	34/303	1.085	0.044
Any sex	78/580	1.075	0.003	77/545	1.077	0.004	42/317	1.134	0.001	42/307	1.132	0.001
Violent	125/600	1.054	0.007	123/544	1.053	0.011	67/326	1.075	0.010	66/306	1.069	0.020
Any crime	189/609	1.047	0.003	186/569	1.050	0.002	104/337	1.077	0.001	102/317	1.078	0.001
Any recid	224/610	1.066	<0.001	220/569	1.068	<0.001	120/338	1.086	<0.001	118/317	1.084	<0.001

HR hazard ratio
[a]Table taken from Helmus and Hanson (2013)

Table 4 Combining Stable-2007 with Static-99R[a]

Static-99R category	Stable-2007 category	Combined Static/Stable priority category
	Low	Low
Low (1 or lower)	Moderate	Low
	High	Moderate–low
	Low	Low
Moderate–low (2,3)	Moderate	Moderate–low
	High	Moderate–high
	Low	Moderate–low
Moderate–high (4,5)	Moderate	Moderate–high
	High	High
	Low	High
High (6+)	Moderate	High
	High	Very high

[a]Table taken from Helmus and Hanson (2013)

examining correlations between selected items and independent self-report measures of relevant constructs in samples of convicted sexual offenders. One group consisted of a convenience sample of 33 adult male child molesters, while another group was a sample of 95 adult male sexual offenders participating in sexual offender treatment. As they reported, the results generally suggested that the Stable items examined were associated with measures of similar constructs. However, the investigators noted that the degree of convergence was lower than expected. Comparing evaluator ratings to offender self-report of offense-supportive attitudes, deviant sexual interests, etc. may, in and of itself, be problematic; as Nunes and Babchisin noted social desirability and/or lack of insight might account for the diminished convergence and that current brief self-report measures may not provide complete and accurate description of the Stable constructs.

Eher, Rettenberger, Matthes, and Schilling (2010) studied a group of contact child molesters ($n=127$) released from prison and followed for approximately an average of 6.4 years. Most of the subjects met criteria for pedophilia and a personality disorder (predominantly from Cluster B). All ICCs were highly significant ($p<0.001$) for the Stable-2007 (ICC = 0.90). The results indicated that ROC of the Stable-2007 was in the moderate high range (e.g., 0.77). In addition, using the coding rules specified in Hanson et al. (2007) or simply adding the scores of the Static-99 and Stable-2007 "yielded the beset predictive accuracy of all risk assessment methods leading to high AUC-values" (e.g., 0.86). In addition, Eher et al. (2010) found that a diagnosis of narcissistic personality disorder demonstrated a unique relationship with sexual offense recidivism, even when static risk and DRFs as measured by the Stable-2007 were controlled for.

Eher et al. (2012) extended the application of the Stable-2007 to adult sexual offenders ($n=263$) who had been released from incarceration (in Austria) and followed for an average of 6 years. Participants were included if they had a sexual offender as their index offense and had been released to the community for a minimum of 50 months prior to August, 2010; they had served a mean sentence of 32 months. Approximately half of the sample was described as rapists, with the other half described as child molesters.

Each offender received a comprehensive forensic assessment involving both static actuarial risk assessment instruments; the assessments were conducted by "experienced forensic psychologists and psychiatrists." Information was originally collected to score the SONAR and then its successors the Stable-2000 and the Stable-2007. With the exception of Item 1 (significant others) on the Stable-2001 and Stable-2007, the 16 and the 10 items (on each measure respectively) were rated. The items for the Stable-2007 regarding lovers/intimate partners and sexual deviance were rated retrospectively by analysis of archival material. The inter-rater reliability of each Stable instrument was assessed on 15 randomly selected cases and evaluated by intraclass correlation coefficients (ICCs). All ICCs were highly significant

($p < 0.001$) for the Stable-2000 (ICC = 0.89) and the Stable 2007 (ICC = 0.90).

In the total sample, the average Stable-2000 score (without Item 1"significant others") was 7.5 ($SD = 1.5$), and the average Stable-2007 score (without Item 1 "significant others") was 10.9 ($SD = 2.9$), compared to a mean of 7.5 from the DSP study. Regarding sexual offense recidivism, the AUCs for the Stable-2000 and Stable-2007 were 0.62 and 0.71, respectively. The Stable-2007 demonstrated a significant and comparable AUC relative to the Static-99 (Hanson & Thornton, 2000) and the Sex Offender Risk Appraisal Guide (SORAG; Quinsey, Harris, Rice, & Cormier, 1998, 2006). Since the Stable-2000 was shown to have relatively weak predictive accuracy for sexual offense recidivism and no association with violent recidivism, the Stable-2000 was excluded from subsequent data analyses. In contrast, regarding validity, the Stable-2007 correlated 0.23 with sexual offense recidivism and 0.25 with violent recidivism.

A comparison between the 4-year predicted sexual offense recidivism rates of the five Static-99/Stable -2007 nominal priority categories showed no differences in absolute risk relative to those rates identified by Hanson et al. (2007). Despite the strong correlations for variables related to sexual interest found in studies on specific static risk factors for sexual offense recidivism, Eher et al. found weak correlations between the Stable-2007 sexual self-regulation domain and sexual offense recidivism. Of particular importance, the Stable-2007 sum score made a significant incremental contribution over both the Static-99 and the SORAG (e.g., when each static risk measure was controlled prior to testing, the predictive validity of the Stable-2007 sum score) for imprisonment (general and violent) and for reoffense in general. The AUC for sexual offense for the combination (sum) of the Static-99 and Stable-2007 scores was 0.76. Relative to the five nominal risk categories identified by Hanson et al. (2007), Eher et al. found that just three risk/need categories (low need, moderate need, and high need) produced better predictive accuracy compared to the cutoffs or categories proposed by Hanson et al. (2007). These Stable-2007 nominal risk categories made a significant incremental contribution over the Static-99 for all reoffense categories except for sexual reoffense, which approached significance ($p = 0.086$). Eher et al. suggested that the predictive accuracy of the Stable-2007 need categories could be improved by using new cutoffs (e.g., three risk/need categories) for their sample.

In summary, applying the Stable-2007 to the follow-up of an incarcerated sample of sexual offenders, Eher et al. confirmed the findings of Hanson et al. that (1) the Stable-2007 clearly outperformed the Stable-2000 for all outcome variables of reoffense/reconviction; (2) the Stable-2007 total or sum score, as a putative measure of DRFs, contributed to predictive accuracy beyond that of just static variables (was a significant predictor even after controlling for static risk factors); predictive reoffense/reconviction; and (3) the Stable-2007 total or sum score did not make a significant incremental contribution to Static-99 scores when predicting sexual offense recidivism, but the Stable-2007 score did for the SORAG. Eher et al. (2010) did find that their modified (three tier) nominal risk system was more effective than the five-tier system utilized by Hanson et al. Eher et al. concluded: "In summary, our study provides further support for the utility of the Stable -2007 in risk prediction of sexual offenders. Stable -2007 scores were not only found to predict sexual reoffense, but also general and violent reoffense. The combination of STATIC-99 and Stable -2007 led to a significant improvement of risk prediction over the STATIC-99 scores alone…. A combination of an actuarial and a dynamic risk-prediction tool, therefore, was demonstrated to lead to an improvement in predictive accuracy in sexual offenders…" (p. 24).

Seto and Fernandez (2011) applied the 6-item Stable-2000 to over 400 sexual offenders referred for assessment between 2000 and 2007; such appraisals occurred at entry to a federal penitentiary. Applying a two-stage cluster analysis, they identified four dynamic risk groups. They described the groups as follows:

> The first group (32 % of the sample) was labeled *low needs* because they scored below the overall sample mean on all of the Stable-2000 items. The second group (32 % of the sample) was labeled *typical* because members of this group tended to have moderate scores close to the overall sample mean scores on many items, including both antisociality and sexual deviance items. The third group (16 % of the sample) was labeled *sexually deviant* because they had the highest scores of the four groups on emotional identification with children, deviant sexual interests, and attitudes tolerant of adult–child sex and tied for the highest average score on sex drive/preoccupation. Post hoc comparisons…found that the sexually deviant offenders did not significantly differ from the typical offenders on 7 of the 16 Stable-2000 items. On the items they did differ, sexually deviant offenders were higher than typical offenders on sex drive/preoccupation, sex as a means of coping, deviant sexual interests, emotional identification with children, and attitudes tolerant of sexual offending against children; they were also higher on general social rejection/loneliness but lower on negative social influences, impulsivity, and hostility toward women. The fourth group (20 % of sample) was labeled *pervasive high needs* because these offenders had scores above the overall sample mean on 13 of the 16 variables and were significantly different from the other groups on 9 of these variables in the post hoc comparisons. Total Stable-2000 score increased across these four groups, with the low-need offenders scoring lowest ($M = 3.13$, $SD = 1.61$), followed by the typical offenders ($M = 6.38$, $SD = 1.46$), sexually deviant offenders ($M = 7.12$, $SD = 1.58$), and, finally, the pervasive high-need offenders ($M = 9.14$, $SD = 1.50$), $F(3, 415) = 289.25$, $p < 0.001$. (p. 499)

A second method of cluster analysis suggested fair agreement with 75 % of the sample matching in across the two methods. Matching was particularly good for low-need offenders and sexually deviant offenders. It was poorest for

pervasive high-need offenders; in the second cluster analysis method, the non-matching pervasive high-need offenders were instead identified as sexually deviant or typical offenders. It was notable that offender types based on victim age and relatedness were distributed across the four dynamic risk groups, but there were apparently few or no differences between the types of offenders on dimensions that might be presumed to be victim specific. That is, incest offenders were not overrepresented in the low-need group and offenders against extrafamilial victims were not overrepresented in the sexually deviant group. Offenders in the four dynamic risk groups did not significantly differ from each other in terms of age, marital status, or number of sexual offense victims; the groups also did not differ on mean Static-99 scores, suggesting that the density of DRFs was independent on static risk levels. Seto and Fernandez commented on the fact that their analyses did not identify a group that was high on antisociality items but low on sexual deviance items. The typical group came closest, showing moderate scores on many antisociality and low-to-moderate scores on sexual deviance items. Seto and Fernandez commented that "the lack of redundancy between dynamic risk groups and offender types was consistent with previous research that has suggested that incest offenders can be as sexually deviant as offenders against unrelated children…and studies that suggest a majority of convicted rapists are sexually deviant by showing relatively greater arousal to depictions of coercive sex compared with other men…" (p. 503).

Structured Risk Assessment: Forensic Version

Background Research

Following the line of thought embodied in the SRA framework and the recent meta-analysis by Mann et al. (2010), Thornton has continued to work on delineating and appraising the significance of more dispositional risk factors or long-term vulnerabilities (LTV) for sexual offending. In somewhat of a distinction from the model of empirically derived DRFs as criminogenic needs, Thornton's approach has been focused on understanding the significance of more enduring predispositions. Per a workshop in 2010, he described LTVs as ways of functioning that become sufficiently persistent and generalized that it is likely to reoccur, regardless of whether it is being currently displayed. He also indicated that once a "way of functioning" has operated for a sufficient period of time and been sufficiently intense and general, it gets established as an LTV, as a persistent way of functioning that may be active or inactive at any particular time depending on situational or contextual influences. Relative to other conceptions of DRFs, LTVs are understood such that any changes occur slowly and likely with difficulty.

Knight and Thornton (2007) conducted a study to evaluate the then extant actuarials in a sample of sexual offenders on whom long-term follow-up were available; this sample was the so-called Bridgewater sample. In prior studies, follow-up investigations had been conducted on 599 offenders who had been referred to the Massachusetts Treatment Center (MTC) for evaluation between 1959 and 1984 (e.g., Prentky, Lee, Knight, & Cerce, 1997). Of these, 266 (Bridgewater Treatment [BT] sample) had been committed to MTC as "sexually dangerous" and subsequently released, and 333 (Bridgewater Observation [BO] sample) had been determined not to be sexually dangerous and returned to finish their sentences. Of the 333 BO offenders, 200 constituted a matched sample (on age at evaluation, marital status, and number of prior crimes) and 200 were randomly sampled from the entire sample BO population evaluated. There was an overlap of 67 offenders selected by both the random and matched process. For all these offenders, we had accessed and integrated four outcome record sources, including the Massachusetts Board of Probation records, the Massachusetts Parole Board records, the Massachusetts Treatment Center Authorized Absence Program records, and the Federal Bureau of Investigation (FBI) records. For the 2007 study, Knight and Thornton accessed the archival clinical files for these offenders and coded those records both on modern empirically derived, mechanical actuarials that have been developed since 1997 for predicting sexual recidivism and on a new measure based on the SRA Need Assessment model (Thornton, 2002). In the 2007 report, the measure was referred to as the SRA Need Assessment. Following early writings and the work developing and implementing the SARN, this version of the SRA had been intended primarily to be utilized for treatment planning and assumed a relatively collaborative relationship with an offender. In addition, this version of the SRA was necessarily written to be scorable based on the kinds of data included in the Bridgewater case files.

Several years later, Thornton and Knight (2014) published data on the SRA-FV as a Need Assessment instrument intended specifically for use under the kind of adversarial conditions that apply during forensic evaluations. Per Thornton (2002), to count as an implementation of the SRA Need Assessment framework, a measure has to have quantitatively assessed items providing a reasonable representation of at least three of the four domains identified as central to the SRA model. SRA-FV items were written so that they could be used under more adversarial conditions where offenders believed that displaying potential risk might have serious negative consequences. Thornton and Knight presumed that it would be particularly difficult to assess the Distorted Attitudes domain in adversarial contexts and so

that domain was excluded from the outset of the construction of the SRA-FV (as it was for the Stable-2007). Consequently, the SRA-FV samples *subdomains* from three of the four possible SRA factors or domains: sexual interests, relational style, and self-management. Most of the items used in SRA-FV Need Assessment were selected and their scoring rules written on the basis of previous research; the scoring rules for the subdomains and factors were initially tested on a subset of approximately 90 members of the Bridgewater sample for whom information was available for less than 5-year follow-up. Specific rating instructions were written for sexual interest in children, sexualized violence, sexual preoccupation, emotional congruence with children, lack of emotional intimacy with adults (LEIRA), internal grievance thinking, and dysfunctional coping. In addition, it was decided in advance that Facets 2, 3, and 4 of the PCL-R (Psychopathy Checklist-Revised; Hare, 2003) would be used to represent the SRA factors of callousness (under aggressive relational style), lifestyle impulsiveness, and resistance to rules and supervision (both under social deviance). Two items were added based on an initial investigation of members of the sample for whom there was less than 5 years of follow-up; concept-based sexual preoccupation and poorly managed anger were added on this basis.

As noted, the SRA Need Assessment "framework" conceptualizes that these long-term vulnerabilities can be classified into four particularly relevant *domains*: sexual interests, distorted attitudes, relational style, and self-management. Within each domain, several subsidiary sets of groups of long-term vulnerabilities are defined; these are referred to as subdomains. Specific long-term vulnerabilities are proposed that fall within each subdomain. For the SRA-FV, sexual interests is the first domain considered. Offense-related sexual interests is a subdomain. Sexual interest in children and sexualized violence are factors within this subdomain. Another subdomain within the domain of sexual interests is sexual preoccupation; this is composed of the average of two factors: rule-based and concept-based sexual preoccupation. The relational style domain has four subdomains: lack of emotionally intimate relationships with adults (abbreviated as LEIRA); emotional congruence with children; callousness (Facet 2 from the PCL-R); and grievance thinking (this is composed of the average of two factors: internal grievance thinking and poorly managed anger). Finally, the self-management domain consists of three subdomains: lifestyle impulsiveness (Facet 3 from the PCL-R), resistance to rules and supervision (Facet 4 from the PCL-R), and dysfunctional coping (Table 5).

In addition, Thornton (2010a, 2010b); Thornton & D'Orazio, (2011) provided an alternative method for scoring the SRA-FV when it may not be practical to complete the PCL-R, either because rating a subject on the PCL-R might be too time-consuming, no one is available who has been properly trained in scoring the PCL-R, or the information required to score the PCL-R may not be available. The SRA-Forensic Version Light (SRA-FVL) is intended for use in circumstances such as these. The SRA-FVL provides a less complete assessment of known long-term vulnerabilities. In trainings, Thornton (2010a, 2010b); Thornton & D'Orazio, (2011) has discussed this approach to the SRA-FV (Light), provided a scoring manual and coding form, and reported that this form of the instrument has been found to add additional predictive information to that provided by Static-99R. However, no specific research on the SRA-FVL has been published or presented.

Table 5 Combining Stable-2007 with Static-2002R[a]

Static-2002R category	Stable-2007 category	Combined Static/Stable priority category
Low (2 or lower)	Low	Low
	Moderate	Low
	High	Low–moderate
	Low	Low
Low–moderate (3, 4)	Moderate	Low–moderate
	High	Moderate
	Low	Low–moderate
Moderate (5, 6)	Moderate	Moderate
	High	Moderate–high
	Low	Moderate
Moderate–high (7, 8)	Moderate	Moderate–high
	High	High
	Low	Moderate–high
High (9+)	Moderate	High
	High	High

[a]Table taken from Helmus and Hanson (2013)

As described in Knight and Thornton (2007) and Thornton and Knight (2014), the sample from which the SRA-FV subjects were drawn were 566 sexual offenders who had been (1) evaluated between 1959 and 1984 at the Massachusetts Treatment Center (MTC) for Sexually Dangerous Persons in Bridgewater, Massachusetts, and (2) released from MTC in or before 1984. For the purposes of testing, the predictive accuracy of SRA-FV attention was restricted to the 480 participants who had been released and had at least the opportunity for 5 or more years of street time. Of these 480, a total of 215 had been committed before release, whereas 265 had been found not sexually dangerous and had been returned to prison to serve their sentence. The mean age at release of the participants was 35 years ($SD = 14.8$), and prior to the index incarceration, 61 % of these individuals had incurred charges or convictions for sexual offenses and 31 % for nonsexual violence. The *n*s available for analysis varied slightly depending on the measures included in specific analyses as the amount of missing data differed for specific scales. Static-99R scores were available for only 522 subjects and Need scores were available for 534. In addition, only those

who had the opportunity for 5 or more years of street time were used for the cross-validation analyses; whereas 480 participants had the opportunity for 5 or more years of street time, 391 had the opportunity for 10 or more years of street time. There were a total of 418 participants who had SRA-FV Need Assessment, Static-99R, another actuarial risk measure, and the opportunity for 5 or more years of street time. There were a total of 345 participants who had SRA-FV Need Assessment, Static-99R, another actuarial risk measure, and the opportunity for 10 or more years of street time.

Different coders rated file information for the SRA-FV relative to those who obtained recidivism data. Outcome recidivism data was based on four official sources: the central bureau of the Massachusetts Board of Probation, the Massachusetts Parole Board, the Massachusetts Treatment Center Authorized Absence Program, and the Federal Bureau of Investigation. Recidivism was defined as a record of a new charge for a participant per any of the follow-up sources. The overall sexual recidivism rates were 19 % (92 of 480) at 5-year follow-up and 23 % (91 of 391) at 10-year follow-up.

A total of five trained coders blind to the follow-up data rated the SRA-FV items using the MTC's clinical and criminological files. The coders were trained and supervised and consulted with Dr. Thornton when they had questions about rating items. The MTC files contained all the information collected during the 60-day evaluation period at the MTC. During the observation process, caseworkers routinely solicited institution records, school reports, parole summaries, and probation reports. They also conducted interviews with the offender and often gathered additional information through interviews with the patient's family, teachers, and past employers. In addition, for those committed, there were also data on institutional adaptation and progress in treatment. To evaluate inter-rater agreement, two evaluators independently coded the instruments for approximately one third of the participants. The cases were randomly selected, and evaluators did not know which ones were to be coded twice. If two evaluators coded the participants, the mean score was used for statistical analyses. Inter-rater agreement was calculated using intraclass correlation coefficients (ICCs). For SRA-FV Need Assessment, the ICC for a single rater was 0.64, and for the average of two raters, it was 0.78. It should be noted that the rates were utilizing archival records, much of which were written prior to more contemporary conceptualizations regarding sexual offending and case files that were "thin" relative to persons who were only placed for a 60-day evaluation period.

Cases from the Bridgewater sample with 5 or more years of follow-up were used as a cross-validation sample ($n = 365$–444); none of these cases were used in any part of the construction sample (those under 5-year follow-up).

As with the Stable-2007, predictive accuracy was characterized using the AUC statistic for cases in the validation sample. For the specific domains of the SRA-FV, the AUCs for the three domains were 0.62 for sexual interests, 0.86 for relational style, and 0.66 for self-management. For fixed 5-year sexual recidivism, the AUC for the total or overall SRA-FV Need score was 0.72 ($p < 0.001$). For the subsample of rapists, it was 0.74 ($p < 0.001$), and for the subsample of child molesters, it was 0.72 ($p < 0.001$). For fixed 10-year sexual recidivism, the AUC for the Need score was also 0.72 ($p < 0.001$) for the entire sample, 0.70 for rapists ($p < 0.005$), and 0.76 ($p < 0.001$) for child molesters. Clearly, the discrimination of the SRA-FV "holds up" for longer follow-up period.

Logistic regression equations were calculated to test the incremental validity that the Need score added to Static-99R for 5-year and 10-year sexual recidivism. The sample was 418 subjects with fixed 5-year follow-up, including 88 recidivists. The Need score contributed significant incremental predictive validity ($p < 0.001$) at both 5- and 10-year follow-ups. The AUC of the total Need score of the SRA-FV and Static-99R score was 0.75 relative to 0.68 for the Static-99R alone. In addition, SRA-FV Need Assessment continued to show statistically significant incremental predictive validity relative to sexual offense recidivism even when the designation of being sexually dangerous was controlled for.

Thornton and Knight acknowledged a number of limitations with their study of the SRA-FV. First, the observed inter-rater reliability was lower than desirable. In explanation, the authors stated: "Very thin file information, combined with defensive self-report (or refusing to be interviewed), might make it hard for the instrument to be applied. Similarly, the scale's properties will likely also be affected by the professional competencies of the raters, their participation in sufficient scorer training to learn the scoring rules thoroughly, the time and care given to the task of making the ratings, and so on." Second, because the 2014 results were limited to a particular population, cross-validation of the scale in other populations is essential. Third, given that the offenders in the Bridgewater sample were released some decades ago, Thornton and Knight identified that it would be important to establish both the comparability of this sample to current offenders functioning within the context of general changes in policies and management of sexual offenders. Fourth, they noted that the 2014 study involved retrospective ratings focusing exclusively on clinical files and indicated the potential value of conducting a true prospective study as well as investigating how ratings might be affected by the addition of a standardized clinical interview and other improved assessment methods. Finally, Thornton and Knight noted that the 2014 study does not provide a direct examination of the construct validity of the different factor ratings that are combined to produce the overall Need score.

Administering the SRA-FV

The SRA-FV is intended to be scored based on all available information about a particular sexual offender, inclusive of files

and potentially an interview. Thornton (2010a, 2010b, 2011) recommends that evaluators collect and rely on as much relevant information for scoring each factor, including psychophysiological information such as that from a penile plethysmograph (PPG).

A detailed scoring manual for the SRA-FV was developed in 2010 and subsequently has been modified several times by Thornton (2010a, 2010b); the current version is 1.55. For some subdomains, multiple items are combined into a single factor, and these items are averaged for the subdomain score. Thus, for example, when items from the PCL-R Facet 2 are combined to produce a score for callousness, the scores for each individual item on that facet are averaged, which is different from the standard PCL-R procedure where item scores are summed. As a result of this averaging approach, all factors or subdomains are on a scale that runs from 0 to 2. Factors or subdomains each are averaged to give domain scores. Finally, the three domain scores are summed to give a total SRA-FV or Need score that ranges from 0 to 6. The SRA-FV manual contains a definition of the concept domains with very detailed, carefully anchored scoring criteria for each subdomain. Item scoring rules were developed so that self-report could be taken into account if available but that factors could be coded on the basis of the commonly available historical information found in typical files of individuals. Each subdomain or item in the instrument is rated on a 0, 1, 2 scale per very specific criteria; 0 reflects "Does not apply," 1 reflects "Partially applies," and 2 reflects "Generally applies." A rating of "Does not apply" indicates no evidence exists for the requisite scoring criteria or there is weak evidence for them that is contradicted by strong evidence of contrary functioning.

An evidence-grid is suggested as a means to indicate evidence supportive of the presence of the details of each subdomain as well as evidence that might weigh against a higher score for the subdomain. Raters are cautioned to score one domain at a time, to not score impressionistically, and to assign subdomain scores based upon the conceptual definition and more specific rules delineated for the factor or subdomain. In addition, scores of 2 on the subdomains can be reduced by one point if the only evidence for the factor relates to behavior before the offender was 18 and/or if there is no evidence of the factor during the offender's last 5 total years in the community and during any periods of custody sandwiched within or after those months for a cumulative total of 5 years in the community. Subdomain scores are entered into a specific coding form, and the factor, domain, and total need scores are calculated.

Per the Coding Manual, the SRA-FV is intended to be used by professionals who have a master's or doctoral level qualification in psychology, clinical social work, or related disciplines, who have experience in working with sexual offenders, and who have participated in at least a 1-day training in how to score the instrument including practice with case studies. As research has demonstrated with other risk assessment instruments, scoring accuracy is likely to increase with greater clinical sophistication, experience in using the instrument, and participation in further training.

The offender should be aged at least 18 at the time of assessment and should have committed their most recent sex offense after their 16th birthday. Caution should be used in interpreting the results for those whose most recent sexual offense was when they were 16 or 17 years old. Similarly caution should be used when applying the scale to persons aged 70 or older at the time of assessment.

Thornton (2010a, 2010b) demonstrated that variation in known psychological risk factors, including both DRFs [as measured by the Stable-2007 and Violence Risk Scale-Sex Offender Version] (VRS: SO; Olver, Wong, Nicholaichuk, & Gordon, 2007; Olver, Beggs, Christofferson, Grace, & Wong, 2013)] and long-term vulnerabilities as measured by the SRA, can explain the variation in sexual offense recidivism rates after controlling for static actuarial scores. Thus, persons scoring one standard deviation above or below the mean "need" score showed marked differences in their sexual reoffending. Thornton 2011; Thornton & Knight, 2011; D'Orazio & Thornton, 2012a, 2012b described the application of qualitative norms for differing need levels based on scores for the SRA-FV (and the SRA-FV Light). He distinguished four score bands for the SRA-FV based on qualitative need level: routine (below 1.7), moderate–high (1.7–2.5), high (2.6–3.4), and very high (3.5 and above). On this basis, he identified a level of need index (LONI) that provided a basis for distinguishing sexual offenders with particular risk scores (e.g., on the Static-99, Static-99R, and/or Static-2002R) as having higher or lower absolute recidivism rates relative to other members in preselected groups. Offenders scoring at the routine level of need would likely require no more than "routine" risk management. In contrast, offenders scoring in the very high category of need are suggested to receive intensive and enhanced levels of risk management and prioritization for more intensive treatment programs.

More recent research has attempted to validate the LONI relative to different samples. Thornton and Sachsenmaier (2012) examined the frequency of different needs in a sexually violent predator (SVP) sample. They found that offenders diagnosed with pedophilic disorder and "agonistic" disorders (rape paraphilias and sexual sadism) manifested needs in the expected domains. They also attempted a cluster analysis by identified needs and found that offenders showed diversity in their need profiles. They distinguished between romantic and aggressive pedophiles, as well as agonistic and antisocial offenders. Thornton and Sachsenmaier concluded that based on the nature and range of needs represented in this generally high need sample that treatment should be individualized to a marked degree. D'Orazio and Thornton (2012a,

2012b) examined the degree to which individual needs corresponded to different diagnoses in comparing an SVP and outpatient sample. Utilizing a cluster analytic procedure, they found that sexual offenders in the outpatient sample appeared to fall into four clusters: pedophilic offenders, unstable hostile offenders, lower need offenders, and unstable sexually preoccupied offenders. Again, overall the investigators found that sexual offenders were characterized by a diversity of needs and recommended that sexual offender treatment be individualized on that basis. In addition, they identified a set of needs that appeared to be common across outpatient sexual offenders including dysfunctional coping, difficulty forming emotionally intimate relationships, and sexual preoccupation (including sexual coping).

Other Research Regarding SRA Approaches to Need Assessment

Mann and Wakeling (2006) presented data on two studies of inter-rater reliability of the SARN based on the SRA framework with 16 factors. In the first study, seven expert users rated four cases using realistic files; the % agreement ranged from 75 to 91 % across the four cases, while kappa scores ranged from 0.61 to 0.84. The intra-class correlations among the four domains ranged from 0.91 to 1.0 (sexual interests showed perfect agreement). The investigators concluded that expert raters showed good to excellent inter-rater reliability. In a second study, Mann and Wakeling evaluated two samples of novice raters; approximately half had bachelor's degree and no knowledge of the SARN prior to training. All participants scored two cases and were compared to a "Gold Standard" rating. They found that average percent agreement was good and moderate for the two cases, while kappas showed moderate reliability. They determined that novice users of the SARN were less reliable and that some errors were systematic and could be traced to ambiguities in the case materials or scoring guide. They emphasized the importance of field reliability over research reliability. In a conference presentation, Sachsenmaier, Thornton, and Olson (2011) reported on a study of 15 evaluators who administered the SRA-FV as part of sexually violent predator evaluations. They reported inter-rater agreement of 55 % for 19 psychologists who completed the SRA-FV on 69 persons previously committed to a civil commitment center. However, they found that there was a 91 % chance that one rater's score would fall within one level of another rater's score relative to the total need score and a 90 % chance that one rater's score would fall within two levels of another rater's score relative to the total need score. Sachsenmaier et al. identified that evaluation of lower functioning individuals (e.g., those with cognitive deficits or severe mental illness) may have compromised evaluator's judgments; it was noted that some raters discounted evidence in support of SRA-FV domains by attributing the characteristics to particular conditions (e.g., lower IQ). When low functioning individuals were excluded, the intra-class correlation increased to 0.68, closer to strong agreement among raters. Since all of the subjects were in treatment, it was also noted that raters overweighed recent apparent improvements in functioning rather than considering and rating previous behavior that was indicative of long-term vulnerabilities or in the context of lifetime presence.

How Can DRFs Best Be Understood and Applied?

The consistency of the clusters of DRFs that have repeatedly emerged from varied research efforts and methods of information is striking and thus seems significant. Virtually, all investigations to date have identified remarkably similar sets of primary dimensions of predisposing characteristics: sexual interests and degree of sexual preoccupation, antisocial dimension as indicated by self-regulation or self-management deficits, "distorted" attitudes about self and types of victims, and social/emotional functioning (Table 6).

Clearly, there has been an increasing amount of research regarding putative or alleged DRFs; the empirical evidence is mounting that whatever DRFs represent, they carry some significant degree of weight in predicting sexual offense recidivism. However, what is currently known about likely relevant DRFs is a function of what has been and can be measured. Simply because some condition is difficult to measure and consequently doesn't "show up" in available analyses of risk factors does not mean that there are conditions that are important to understanding sexual offending. It would be a mistake to stop actively conceptualizing and attempting to develop new measures or refine existing ones that might "capture" substantive aspects of persons that are related to sexual offending. Knowledge of DRFs exists and more knowledge of DRFs is possible and likely necessary.

In addition, a related value of the study of DRFs has been to provide some additional perspectives on the nature of sexual offenders and sexual offending. Implicitly suggested in the research and theory related to the Stable-2007 and the SRA-FV is that sexual offenders are heterogeneous and characterized by diverse, even person-specific needs. Further, the combined research literature regarding DRFs seems to increasingly point to the importance of considering sexual offenders dimensionally and not necessarily or at least only categorically. As Seto and Fernandez wrote: "The present finding suggests that designing interventions based on offender victim choice (e.g., rapists versus child molesters) may be less effective than designing treatment based on dynamic risk assessment. These results also suggest that developing typologies of sexual offenders based on dynamic

Table 6 SRA-FV domains

Sexual interests domain (SID): incorporates long-term vulnerabilities that have to do with the direction, form, and strength of sexual interests	
Sexual interest in children factor	Sexual interest in children refers to an intense interest in or preference for sexual activity with children
Sexualized violence factor	An intense interest in or preference for sexual activity that involves forcing sex upon an unwilling recipient (coercive rather than consensual sexual activity) or sexual arousal to the idea of inflicting violence, pain, terror, humiliation, or destruction or exercising abusive coercive control over another person. The coercive element must be a source of sexual arousal, not merely a means to overcome victim resistance
Sexual preoccupation factor	Intense interest in sex; sexual focus dominates psychological functioning; impersonal rather than relational sex; sexualized coping
Rule based/narrow	Atypically or unusually intense interest in sex; much behavior is sexually motivated
Concept based/broad	Global rating of the amount of sexual activity relative to norms; preoccupation with sexual urges or gratifying sexual needs; sexualized coping; impersonal, not relational sex
Relational style domain (RSD): concerns general patterns in the way the offender relates to others and the feelings that are embedded in these relational patterns. It particularly concerns capacity for marital-type relationships and how friendships and social relations are conducted	
Lack of emotionally intimate relationships with adults (LEIRA) factor	This refers to the absence of emotionally intimate marital-type relationships, where a marital-type relationship involves two adults living together as lovers, sharing a household, sharing bills, and making a life together. A marital-type relationship can be seen as lacking emotional intimacy if it is significantly marred by any of the following: frequent fights, domestic violence, repeated infidelity, or emotional distance between the partners
Emotional congruence with children factor	Finding it easier to relate to children than to adults or preferring the company and companionship of children to that of adults to satisfy emotional needs for such things as acceptance, friendship, validation, emotional intimacy, and/or romantic love
Callousness factor	Callous, lack of empathic connection to others, shallow affect, behavior not regulated by feelings of guilt or by empathic distress at harm caused to others
Grievance thinking factor	An easily triggered sense of grievance that results in internal anger which drives poorly regulated aggressive behavior
Internal grievance thinking	Easily feels wronged; suspicious; ruminates angrily; tends not to see or accept other's point of view
Poorly managed anger	Generalized and persistent pattern of poorly managed anger. Includes repeated verbal aggression and angry outbursts, threatening and intimidating behavior, and physical assaults of a nonsexual kind. The key issue here is poorly managed anger being apparent across both persons and situations
Self-management domain (SMD): refers to the individual's propensity to manage his immediate urges, impulses, and feelings so as to make choices that serve his longer-term self-interest	
Lifestyle impulsiveness factor	An impulsive irresponsible lifestyle, driven by sensation-seeking and poor tolerance of boredom, and lacking regulation by realistic long-term goals
Resistance to rules and supervision factor	A generalized and persistent oppositional reaction to rules, supervision, and other attempts by authority figures to control him
Dysfunctional coping factor	Reacts to stress or problems in an impulsive/reckless way

risk factors can shed new light on the understanding of the psychological origins of sexual offending when compared with typologies of sexual offenders based on victim choice, given that victim choice is constrained by opportunity and other situational factors and may therefore be less strongly related to offender motivations" (p. 10). Overall, the studies of DRFs and/or criminogenic needs suggests that sexual offenders are characterized by a diversity and intensity of such needs and that sexual offender assessment and treatment be as comprehensive and individualized as possible.

On the one hand, efforts have been made to identify empirically based risk factors that may be or appear to be causally related to sexual ***re***offending or more persistent sexual victimizations. This conceptualization of DRFs as criminogenic needs suggests that DRFs are capable of changing and consequently can be appropriate targets of psychosocial interventions and/or management strategies. Such a view is supported by the finding of Hanson et al. (2008) that psychosocial sexual offender treatment for sexual offenders may be similar to that for other criminal offenders so that the "more" intervention is directed at empirically defined criminogenic needs, the more likely it is to be effective at reducing recidivism. The notion of DRFs as mutable is a hopeful perspective premised on the possibility that effective interventions exist, that key personal characteristics can change, and that a significant number of sexual offenders might be motivated to commit to personal change.

On the other hand, another perspective of DRFs is reflected in a conceptualization that DRFs, while also causal risk factors, are far more dispositional in nature and reflect

enduring or persisting ("long-term") vulnerabilities (LTV) for sexual offending; such LTVs are viewed as more enduring predispositions than more easily or readily mutable "dynamic" risk factors. As noted above, Thornton has described LTVs as ways of functioning that become sufficiently persistent and generalized that it is likely to reoccur, regardless of whether it is being currently displayed. He also indicated that once a "way of functioning" has operated for a sufficient period of time and been sufficiently intense and general, it gets established as an LTV, as a persistent way of functioning that may be active or inactive at any particular time depending on situational or contextual influences. Relative to other conceptions of DRFs, LTVs are understood such that any changes occur slowly and likely with difficulty. While the constructs of LTVs do not completely mitigate against mechanisms and the potential for personal change, it certainly emphasizes that individual LTV—and particularly an accumulation of interacting LTV—might not respond readily to short-term interventions and show limited plasticity. As Mann et al. (2010) wrote:

> It is quite possible, however, to conceive of causal factors that do not change. Most obviously, many biologically or genetically determined propensities are considered to be lifelong enduring characteristics -present since birth. We expect that most, if not all, of the risk factors we propose here are underpinned by neuropsychological mechanisms (for further information, see Ward & Beech, 2006) as well as social and psychological mechanisms. It is not clear that all of the factors in our list [of psychologically meaningful risk factors] would be expected to be changed by deliberate intervention. For instance, the scientific community has yet to establish consensus concerning the mutability of some deviant sexual preferences, such as pedophilia… (p. 211)

Thus, DRFs as LTVs *may* be causal factors of repeated behavioral enactments of sexual offending, but, in fact, they *may* be quite difficult to modify and manage (e.g., Hoberman, 2015).

Some evidence suggests that sexual offenders may be able to change something that is observable to others as the result of treatment (e.g., McGrath, Lasher, & Cumming, 2012; Olver et al., 2013), such that "change" measures in uncontrolled studies of sexual offenders exposed to treatment show associations with reduced sexual offense recidivism. This should be viewed as a potentially positive finding that at least some sexual offenders may be sufficiently motivated to commit to learning and actually enacting behavioral changes – at least in controlled settings and/or with goals of release present – that such they may have that diminished their likelihood of sexual offense recidivism. However, despite these limited findings, a much more substantial body of evidence would suggest that psychosocial treatments for sexual offending have yet to have been empirically demonstrated to have any small, let alone robust, effect in reducing sexual offense recidivism (e.g., Hoberman, 2015) and that an examination of the specific components of various sexual offender treatment programs do not appear to impact on even the low-moderate risk sexual offenders to any significant degree (Hoberman, 2015).

Other perspectives would strongly suggest that much of what is significant about personality and related conditions reflects a significant genetic and biological basis. Thus, as Hoberman (2015) reviewed, many personality characteristics related to violent and sexual offending (e.g., features of externalizing spectrum disorders) and related executive functioning, self-control, and substance use have been demonstrated to have particularly substantial genetic components, which in turn affect characteristics of environmental selection and exposure that often magnify or exacerbate such biologically based liabilities. Numerous authorities in the field of behavioral genetics speak to the likely development and expression of a self-reinforcing cycle, for example, where impulsivity and antisocial behavior (substance use) lead to increases in disinhibition/novelty seeking and more persistent antisocial behavior and substance use. Further, genetic or evolutionary perspectives suggest that persons who are "competitively disadvantaged" in terms of obtaining resources through socially acceptable means (e.g., agreeableness and higher intelligence) and are characterized by a higher degree of impulsivity and sensation-seeking than others may be particularly likely to engage in antisocial behavior as a means of obtaining those resources.

Consequently, it would appear that DRFs might actually function as more static or at least relatively stable or persisting risk factors; psychologically meaningful risk factors are best viewed as robust, persisting predispositions. Despite the compelling explanatory power of Mischel and Shoda, (1995) "if… then… behavioral signature," highlighting the contextual nature of the expression of select personality dimensions, the research to date on DRFs has revealed little explanatory power of more immediate contexts or "triggering" events. The DSP indicates that acute DRFs explained none of the variability in future sexual offending or criminal behavior; they had no association to recidivism but were highly correlated with one another. Similarly, despite the potential for change in stable DRFs in the DSP, when both the first and second Stable assessments were entered simultaneously in logistic regression to predict 12-month and 24-month recidivism for the five outcome variables, the overall model was significant in all cases, but neither assessment contributed uniquely in 9 of the 10 analyses. The predictive accuracy of both assessments was similar despite a 6-month passage of time while the offender was residing in the community with potential situational opportunities, reduced monitoring of behavior, and opportunities for desired victims. So, acute DRFs have no predictive validity and stable DRFs appear to remain relatively constant over time from the perspective of trained observers whose role is to attend to potential changes in offender presentation.

To date, there is little empirical support for a distinction between stable and acute DRFs.

If DRFs do not represent, to any great degree, characteristics of sexual offenders that are potentially modifiable through intervention (e.g., "change mediators"), then what might explain their incremental predictive validity relative to future sexual offending? It is notable and significant that predictive validity of future outcomes improves when DRFs are combined with static risk factors; clearly DRFs capture some aspects of an offender that specific historical risk factors do not. However, while adding to incremental validity of static risk factors, the relative amount of incremental validity is fairly small relative to the contribution made by the static risk factors. Further, when the statistical process is reversed, with DRFs entered first into a predictive equation (before the static risk factors), the static risk factors continue to carry the lion's share of predictive validity. Thus, those phenomena of the person and environment that are captured by relatively specific features of a limited number of static risk variables represent considerable predictive weight and explanatory power. Yet the more "general" or "global" characteristics of stable DRFs carry some incremental predictive validity. In addition, research indicating that groups of sexual offenders with similar static risk scores manifest different degrees of sexual reoffending also suggests that different rates of sexual offense recidivism likely depends on some unspecified factors external to the actuarial risk items. Thus, Helmus (2009) identified significant variability in risk estimates associated with various cut scores on the Static-99. She determined that this variance was to a large degree accounted for by sample preselection effects [i.e., effects due to factors inherent or characteristic in samples, such as whether it was a relatively lower-risk "routine" prison sample or whether it was a relatively "high-risk" sample where the subjects had been referred to some judicial or quasi-judicial process (e.g., to determine if they met the criteria to be a "sexually dangerous person")]. These findings too suggest that some variables not captured by static or historical factors may also affect the relative and absolute risk of persons with a particular level of static risk factors.

Given the available scientific evidence, it seems most likely that both static and putative stable DRFs represent different perspectives or measurements of constructs of "psychologically meaningful risk factors." As Mann et al. wrote: "Such risk factors can be conceptualized as individual propensities, which may or may not manifest during any particular time period. Like the traditional concept of trait, propensities are enduring characteristics that lead to predictable expressions of thoughts, feelings, or behaviors. Although propensities are characteristics of individuals, these propensities can also be recognized by individuals' transactions with others…" (p. 211). Perhaps individual propensities are best "captured" for purpose of appraisal or measurement by their actual behavioral expression as opposed to a more global characterization as a predisposition or enduring characteristic. Thus, the predisposition of paraphilic sexual interests may account for less variance than the number of times someone has been accused or adjudicated of illegal paraphilic behavior. Similarly, the predisposition toward may account for less variance than the number of times someone has been accused or adjudicated of illegal criminal or violent behavior. Various aspects of social functioning may account for less variance than the "fact" that someone has never had a marital-type relationship of at least 2 years. While static risk factors constitute the "skeleton" of predictive validity in risk assessment, DRFs function as "interstitial" elements both overlapping and entwined with actual historical behavioral markers and carrying their own predictive weight. Thus, while behavioral, historical markers are the best means of demonstrating stable risk factors, some additional explanatory power is provided by the more general identification of predisposing characteristic that does underlie or cause the behavioral marker.

As Quinsey et al. (2006) and Rice, Harris, and Lang (2013) have written, given the high degree of predictive accuracy of actuarial measures of risk based on historical, static factors in an individual's life, such approaches may effectively create a ceiling so that the ability of DRFs to make more substantive contribution than what has been demonstrated to date may not be possible. To this effect, Harris et al. (2003) showed that the predictive accuracy of actuarial instruments increased to as high as 0.84 with standard fixed follow-up periods and the completeness of information in completing those instruments. Similarly, Helmus and Hanson (2013) have noted that overall lack of substantive improvement in actuarial measures despite modifying theoretically presumed relevant variables (e.g., age at release) might indicate that current static actuarial instruments may have reached an "asymptote" or plateau for what can be achieved with currently identified or measured historical predictors. It may also be the case that interaction effects of select stable or static risk factors may add some increased predictive validity to a simple summation of such factors, although such interaction effects are notoriously hard to demonstrate in a robust manner.

A related issue to be noted is the approaches to assessment of DRFs or psychologically meaningful risk factors. Evidence exists that self-report can contribute to the identification of putative DRFs (e.g., Hoberman & Riedel, 2015). However, it is also the case that select types of self-report in particular contexts are not useful measures of change after sexual offender treatment (e.g., Wakeling & Barnett, 2014) but are useful measures of risk assessment, particularly when obtained at initial evaluation or pretreatment (Hanson & Morton-Bourgon, 2004, 2005). In contrast, structured clinical judgment as per the Stable-2007 and SRA-FV appears to provide relatively reliable and valid contributions

to understanding a key dimensions of a particular sexual offender associated with sexual reoffending and informing risk assessment. In this manner, they may represent a means of representing the type of multidimensional risk profile suggested by Doren (2010). However, results to date would also suggest that continued refinement of the means and source of measurement, as well as different methods of combining different sources of information, might improve the utility of DRFs.

Additionally, following Ward and Beech (2014), an important step is to systematically and iteratively, both through etiological theory or model development and empirical research, clarify the nature of putative DRFs as more than "psychological meaningful risk factors" as causal risk factors (e.g., after Kraemer et al., 1997) and the nature of processes by which such casual risk factors work to determine the particular pathways or trajectories by which sexual offending occurs for particular individuals. Thus, there should be continued attempts to describe, define, and refine DRFs and their related experiential states. In addition, addressing these phenomena from a comprehensive and sophisticated perspective, researchers need to articulate and test factors and processes that may or can provide explanatory theories of sexual offending. In turn, Ward and Beech argue, such understanding and clarification will lead to improvements in the ability to provide individual case formulations and treatment plans. However, Ward and Beech's critique of the current status of DRFs raises significant questions about the increasingly common use of DRFs as targets of sexual offender treatment. Per Ward and Beech, it remains unclear if commonly referenced DRFs are, in fact, causally related to sexual offending but are simply attributes or exemplars of other yet unidentified causal predispositions. Consequently, the apparent ineffectiveness of current programs of sexual offender treatment (e.g., Hoberman, 2015a, 2015b, 2015c) may be the result of misdirected programs that are intended to target putative criminogenic needs (e.g., often so-called DRFs) but are not actually addressing, let alone modifying, true underlying predispositions to sexual offending.

In summary, DRFs may be much less "dynamic" and mutable than they were originally conceived to be and, in fact, reflect relatively static and persisting predisposing conditions (in contexts) to offending. As Harris and Hanson (2010) pointed out: "To date, there has been little evidence that changes on STABLE factors are associated with changes in recidivism risk" (p. 11). While they may represent one means of measuring predispositions, a person's actual behavioral history (e.g., static risk factors) appears to capture much more of the predictive validity with regard to sexual offending behavior as opposed to more global psychosocial characteristics. Nonetheless, the available evidence indicates that DRFs do appear to contribute relatively small but statistically significant incremental additions to predictive validity of sexual offense recidivism. In addition, even currently as psychologically meaningful risk factors, they provide some empirically based means of individual case formulation and treatment planning, albeit with the possibility of improvement as Ward and Beech have suggested. However, as Seto and Fernandez (2010) pointed out, the extent to which DRF items assess theoretically meaningful risk factors that can be targeted in treatment and supervision targets is constrained by the extent to which the items accurately—reliably and validly—measure the underlying psychosocial factors. However, increased research investigating the nature, means, and degree to which the convergent domains identified as DRFs can be modified via sexual offender treatment or other forms of management is an effort that continues to be worth pursuing. While limited research indicates that change in DRFs may be associated with some degree of diminished risk of sexual offense recidivism, more robust demonstrations of such temporal variability of DRFs (particularly in response to objectively determined changes in context or action) and improved methods of measuring such DRFs remain to be accomplished. In addition, it seems timely to begin to work more iteratively with the available empirical evidence regarding sexual offending and currently available etiological theories of sexual offending. Available models of these processes remain relatively crude or at least general in nature and would benefit from attempts to consider the interaction static/stable risk factors and/or DRFs/dispositional risk factors over time and in context to attempt to elucidate increasingly refined and comprehensive models of the heterogeneity of sexual offending. Whether DRFs can or do change, certainly it appears that they represent manifestations of long-term vulnerabilities of psychologically meaningful risk factors and that some or many of them are causal in some capacity. A challenge now is to theoretically conceptualize the possible varied and cumulative interactions over time of such multiple predispositions and to systematically and empirically test those processes that best describe the heterogeneity of trajectories of sexual offending and the possibility that those conditions may be changeable and/or changed and through what mechanisms.

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Assessing Sexual Violence Risk and Evaluating Change with the Violence Risk Scale-Sexual Offender Version

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The assessment of sex offender risk, in particular the identification of those at high risk for sexual reoffending, has important policy, public health, and criminal justice implications. The past 15 years have witnessed a rapid advance of sex offender risk assessment research, the result of which has been translated into improved decision-making on risk management and treatment of sex offenders. Of note is that research has identified salient static and dynamic predictors of sexual offending, and these variables have been formulated into valid and reliable risk assessment instruments and guides that can be used to assess sex offender risk (Hanson, Bourgon, Helmus, & Hodgson, 2009). The development of sexual offending risk assessment technologies has paid some handsome dividends in terms of informing sentencing, treatment planning to reduce risk, making release decisions, and community monitoring of high-risk sex offenders, all with the goal of reducing sex offending and victims of such offending.

While accurate risk prediction is certainly important, if not essential, the overriding purpose of violence risk assessment should be violence prevention (Douglas & Kropp, 2002), that is, identifying high-risk individuals and taking steps through treatment and various risk management strategies to prevent future sexual violence. In addition, policy developments in North America, such as the sexually violent predator (SVP) statute in the USA and dangerous offender (DO) designation in Canada, speak to the need for risk assessment technologies to not only be accurate in the appraisal of risk but also to inform special sentencing provisions such as SVP and release decisions. We argue that one of the key responses to this challenge is to be able to capture changes in risk. The present chapter is a review of a sex offender risk assessment, risk management, and treatment planning tool that is designed to inform treatment planning and to capture possible changes in risk, the violence risk scale-sexual offender version (VRS-SO) (Wong, Olver, Nicholaichuk, & Gordon, 2003).

The chapter begins with a detailed description of the VRS-SO and then proceeds with a discussion about evaluating changes in sexually deviant behaviors, in particular, in custodial settings through paying attention to offense analogue and offense replacement behaviors. We then discuss clinical applications of the VRS-SO and offer guidelines in interpreting and reporting risk-related information gathered from pretreatment and posttreatment assessments. Finally, we discuss possible use of the VRS-SO within the context of DO and SVP evaluations and provide a detailed case examination involving the clinical application of the VRS-SO with an SVP-adjudicated offender.

The Violence Risk Scale-Sexual Offender Version

The VRS-SO was developed to assist service providers who work with high-risk/high-need sexual offenders to integrate risk assessment/prediction/management and treatment (see Olver, Wong, Nicholaichuk, & Gordon, 2007; Wong, Gordon, & Gu, 2007). Results of VRS-SO assessments can inform service providers of *who* to treat by identifying high-risk/high-need treatment candidates, *what* to treat by identifying treatment targets—that is, dynamic factors linked to violence—and *how* to treat by identifying appropriate therapeutic approaches using a modified stages of change model (Prochaska, DiClimente, & Norcross, 1992). The VRS-SO is also designed, using the modified stages of change model, to

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measure *how much* changes in risks have occurred as a result of treatment. The theoretical basis of the VRS-SO is predicated on the theory of the Psychology of Criminal Conduct (PCC; see Andrews & Bonta, 2006, 2010), the principles of effective correctional treatment, relapse prevention (RP) theory (Pithers, 1993; Ward & Hudson, 1998), and the transtheoretical model of change (TTM).

The VRS-SO Static and Dynamic Items

The VRS-SO (Wong et al., 2003) was developed to assess sex offender risk using dynamic and static variables linked to sexual recidivism. The VRS-SO has 7 static and 17 dynamic variables (see Table 1 for a listing of items with brief item descriptions), and each variable is rated on a 4-point scale (0, 1, 2, 3). In general, higher ratings indicate that the variable is more closely linked to inappropriate sexual or nonsexual behaviors.

The static items were selected and operationalized through purely statistical procedures. A set of potential static variables were culled from the literature, and then each correlated with outcome; the strongest predictors were retained and rescaled on a 4-point scale. The dynamic items were first identified after a detailed review of the risk literature (e.g., Hanson & Bussière, 1998; Hanson & Harris, 2000; Proulx et al., 1997), including contributions from the relapse prevention theory (Pithers, 1993; Ward & Hudson, 1998) and the PCC model (Andrews & Bonta, 2006). Scale variables were then chosen statistically to maximize the content validity of the scale. A dynamic variable rated 2 means the item is *quite closely* or 3 *very closely* linked to sexual offending; that is, the dynamic variable is criminogenic and hence should be a treatment target. For example, if Offense Planning, one of the dynamic variables, is rated 2 or 3, then Offense Planning has been determined by the assessor, following guidelines given in the VRS-SO manual, to be quite or very closely associated with sexual offending in the person's overall functioning. Dynamic variables identified as treatment targets (i.e., rated 2 or 3) are also rated to determine the stage of change (readiness for treatment) evidenced by the client.

A factor analysis of the dynamic items suggested the presence of three broad factors labeled: Sexual Deviance (*sexually deviant lifestyle, sexual compulsivity, offense planning, sexual offending cycle, deviant sexual preference*), Criminality (*criminal personality, interpersonal aggression, substance abuse, community support, impulsivity, compliance with community supervision*), and Treatment Responsivity (*cognitive distortions, insight, release to high-risk situations, treatment compliance*); two of the items (Emotional Control and Intimacy Deficits) did not load (Olver et al., 2007). The factor structure of the instrument is consistent with the major risk factor domains identified in the literature (i.e., sexual deviance, antisociality, pro-offense attitudes, and cognitions). There is evidence that different types of sex offenders have differential scores on the three factors. For instance, research on the VRS-SO found that

Table 1 VRS-SO static and dynamic items and brief item descriptions

Static items
S1 Age at release: <age 25; 25–34; 35–44; 45 years and up
S2 Age at first sex offense: <age 20; 20–24; 25–34; 35 and up
S3 Sex offender type: mixed offender; child molester; rapist; incest offender
S4 Prior sex offenses: 4 or more prior sexual charges/convictions; 2–3 prior; 1 prior; 0 prior
S5 Unrelated victims: 4 or more unrelated victims; 2–3 unrelated; 1 unrelated; 0 unrelated (all related)
S6 Victim gender: 2+ male victims; 1 male and 1 female/or 2+ female; 1 male victim only; 1 female victim only
S7 Prior sentencing dates: 11+ prior sentencing dates; 5–10 prior; 2–4 prior; 0–1 prior
Dynamic items
D1 Sexually deviant lifestyle: lifestyle hobbies, interests, work, or relationships involve sexually deviant behaviors
D2 Sexual compulsivity: strong sex drive and high frequency of sexual behavior and cognitions
D3 Offense planning: victim grooming and premeditation involved in sexual offending
D4 Criminal personality: interpersonal and emotional attributes conducive to criminal behavior (e.g., lack of remorse)
D5 Cognitive distortions: attitudes and distorted thinking supportive of sexual offending
D6 Interpersonal aggression: physically and/or verbally aggressive behavior in interpersonal interactions
D7 Emotional control: tendency to overcontrol or undercontrol emotions linked to sexual offending
D8 Insight: poor understanding of causes of sexual offending and unwillingness to discuss/explore sexual offending
D9 Substance abuse: substance use problems linked specifically to sexual offending
D10 Community support: lack of positive support people, services, or plans in community (or unwilling to use)
D11 Released to HRS: offender seems likely or has shown pattern of returning to situations linked to sex offending
D12 Sexual offending cycle: pattern of interpersonal, situational, and personal factors linked to sexual offending
D13 Impulsivity: behavior displays tendency to "act first, think later" and lacks reflection or forethought
D14 Compliance with community supervision: poor attitude and/or cooperation with community supervision
D15 Treatment compliance: poor attitude and/or cooperation with sex offender treatment
D16 Deviant sexual preference: interests or preferences for deviant sexual stimuli or behaviors (e.g., children, violence)
D17 Intimacy deficits: incapacity to form or maintain adult romantic relationships

Adapted from Olver et al. (2007) with permission

[a]All items are rated on a four-point (3, 2, 1, 0) scale. Item descriptions are abbreviated examples of the originals and are not intended to be used for clinical or research purposes. Please consult the VRS-SO rating manual (Wong, Olver, Nicholaichuk, & Gordon, 2003) for more detailed item descriptions, stages of change ratings, and scoring instructions

child molesters tended to score higher on Sexual Deviance and lower on Criminality compared to rapists, who had the reverse pattern (higher on Criminality and lower on Sexual Deviance), and mixed offenders, who had quite high scores on both (Olver et al., 2007).

Scores on each of the three factors provide general indications of where the risk of sexual recidivism primarily resides. Further inspection of the items comprising the factors can be used to highlight more specific problem areas for treatment. For instance, some rapists show patterns of deviant arousal (e.g., preference for underage victims or sex involving violence and humiliation) and thus may require arousal modification interventions. However, for those with no such preference, the focus of intervention may be elsewhere, such as aggressiveness, impulsivity, and lack of community support. Assessment and treatment have to be integrated; assessment should inform treatment such that it is focused and prescriptive.

The Theoretical Underpinnings of Measuring Treatment Readiness and Change in the VRS-SO

To assess the individual's readiness for treatment and treatment change, the VRS-SO uses a scheme based on a modified transtheoretical model (TTM) which, as its core construct, is a stage of change (SOC) conceptualization of treatment change (Prochaska & DiClemente, 1984; Prochaska et al., 1992). The model proposed that individuals, in making changes to their behaviors, progress through five stages—Precontemplation, Contemplation, Preparation, Action, and Maintenance—characterized by various levels of motivation and commitment, behavioral engagement, and change. Interventions that are matched to the individual's stage are presumed to be more effective than if they are not (outlined in more detail below). The transtheoretical model's conceptualization of treatment change has been applied to a number of forensic populations, including domestic batterers (Levesque, Gelles, & Velicer, 2000), violent nonsexual offenders (Lewis, 2004; Wong & Gordon, 2006; Wong et al., 2007; Polaschek, Anstiss, & Wilson, 2010), young offenders (Hemphill & Howell, 2000; Willoughby & Perry, 2002), and sexual offenders (Tierney & McCabe, 2005).

The VRS-SO is the first attempt to incorporate the SOC model into a risk/need assessment tool for sexual offenders. The five stages of change used in the VRS-SO are based on the SOC model as identified above. However, the descriptions and meanings of the stages as used in the VRS-SO (and the VRS as well) presented below were modified for use in forensic populations. The two key modifications involve making the forward transition through the stage (i.e., criteria for crediting treatment improvement) more demanding and using an assessor-rated scheme rather than a self-report questionnaire to assess and locate the individual's SOC. Since release and other significant forensic mental health and criminal justice decisions are often made based on whether or not the individual has improved through treatment as a proxy for risk reduction, false positives (i.e., giving treatment improvement credits when none are warranted) obviously could have very serious consequences. Raising the bar for crediting treatment improvement should reduce false positives. Similarly, using an assessor-rated scheme instead of self-report should increase the veracity of the assessment. Briefly, those in the Precontemplation stage have neither insight nor intention to change in the foreseeable future. They are often in denial and externalize blame. Consciousness-raising activities, for example, would be an appropriate approach for those in this stage. Those in the Contemplation stage are fence-sitters; they acknowledge their problems but have shown no relevant behavioral change: all talk, no walk. Cost-benefit analyses approaches, for example, likely would be suitable for those in this stage. Those in the Preparation stage combine intentions to change with relevant behavioral changes to address problems; however, changes tend to be recent and/or quite unstable. Those in the Action stage actively and consistently modify their behaviors, attitudes, and environment to address their problems; overt behavioral changes are made, commitments followed through, and energies expended to change. In the Maintenance stage, relapse prevention techniques are used to consolidate, strengthen, and generalize the gains made in the Action stage. Conceptually and psychometrically, the client can be assessed as having made progress, remaining unchanged, or having deteriorated, that is, transitioning forward or backward or making no movement through the stage.

The SOC model, the central organizing construct of the TTM, has come under a number of criticisms that we first highlight and then discuss based on evidence in the literature and our own research findings. Space limitations preclude us from giving a full discourse of the responses to the various criticisms other than a brief outline of the criticisms and our views on them.

The criticisms of the SOC as applied to forensic populations can be organized into the following five general areas. First, critics of SOC have asserted that the stages of change should be, but often were found not to be, discrete from each other. As well, other than the Precontemplation stage, quite often people can be in more than one stage at a time, can reverse their progression through the stages, or can even skip stages (Bandura, 1998; Burrowes & Needs, 2009; Elder et al., 1990; Sutton, 2001). There continues to be much debate on the level of separation or even the existence of the stages and their utility (see Brug et al., 2004 and also Prochaska & Velicer, 1997). In our view, the stages should best be conceptualized as constructs that can be used to assist in conceptualizing or partitioning one or more underlying dimensions, often referred to generally as the change

process(es). The utilities and predictive validity of these constructs should be subject to empirical verifications. Human problems are seldom simple and unidimensional, despite our often simplistic attempts to label them as such, for example, smoking/tobacco use, weight control, and, among forensic clients, violence or sexual deviance problems. None of these problems are unidimensional, despite their labels; invariably many sub-problems exist within each label. It should come as no surprise that people can progress to different stages in different sub-problem areas and, thus, may appear to be in more than one stage at a time. As well, being in more than one stage at a time can be, in part, a function of the measurement tool. Whether or not people are seen to be reversing their progression may depend on the *width* of the window of observation and measurement. Taking two steps forward and one step back may appear erratic or even as sliding backward in the short term, but can be deemed to be making progress in the longer term. Taking measurements with a blunt measuring tool or taking measurements at inappropriate times may create the impression that stages were skipped.

Second, the tools that have been developed to measure the stages might not have adequately captured the treatment progress of offenders, in particular those in custodial settings. For example, the assessment of the Maintenance stage cannot be undertaken when the individual does not have the opportunity to practice the behavior. Assessment using different scales can produce different results, and, as we indicated above, an individual can be assessed as being in more than one stage at any one time (Burrowes & Needs, 2009, pp. 41–42). There have been several instruments developed over the years to assess stages of change. These have been largely self-report inventories and have been designed to assess an individual's stage of change broadly (e.g., University of Rhode Island Change Assessment, URICA; DiClemente & Hughes, 1990) or with respect to changing specific syndromes or problem behaviors such as alcoholism (e.g., Stages of Change Readiness and Treatment Engagement Scale, SOCRATES; Miller & Tonigan, 1996), chronic pain management (Pain Stages of Change Questionnaire; Kerns, Rosenberg, Jamison, Caudill, & Haythornthwaite, 1997), exercise behavior (Stages of Exercise Change Questionnaire; Dannecker, Hausenblas, Connaughton, & Lovins, 2003), and recovery from anorexia nervosa (Anorexia Nervosa Stages of Change Questionnaire; Reiger, Touyz, & Beumont, 2002), among others. We recognize the limitations of self-report tools when applied to forensic populations, and, as such, we have opted instead to develop a staff-rated metric to assess the stage of change. The VRS-SO SOC rating metric and the corresponding supporting research evidence are discussed in considerable detail in the next section under the heading Measurement of the Stages of Change in the VRS-SO and under point (5) below, respectively. Ultimately, empirical evidence should be the arbiter of the validity of any psychological measurement tool. That it is not possible for offenders to reach the Maintenance stage because of the lack of opportunity to practice the behavior could be due to limitations of the environment rather than deficiencies of the SOC model. While we acknowledge that it would be almost impossible for a child molester to advance to the Maintenance stage in a custodial environment, we would argue that someone with serious problems with authority figures would be severely tested on a daily basis while in custody and could conceivably progress to the Maintenance stage. The VRS-SO SOC metric recognizes and can accommodate these contingencies. The issue of individuals being assessed as being in more than one stage simultaneously was discussed earlier.

Third, the SOC has also been criticized for the lack of explanatory value of why people are at different stages; it can be used merely to identify at what stage an individual is (Drieschner, Lammers, & van Der Staak, 2004). There can be many different reasons why people end up in a different SOC. The value of the SOC model, in our view, is not in trying to explain how people get to a certain stage but, rather, to identify what stage they are at, thus informing what needs to be done to facilitate their progression from that stage. The SOC model authors have suggested various interventions (obviously not an exhaustive list) that may facilitate forward transition through the stages (see Prochaska et al., 1992). No doubt, understanding how people get to a certain stage should also contribute to helping them progress.

Fourth, it has been argued that offending behaviors are too complex and multidimensional to be assessed using the SOC model (McMurran et al., 1998). We agree that offenders' problem behaviors (or for that matter, human problems in general) are often multidimensional, as evidenced by the many dynamic risk factors identified in risk assessment tools such as the Level of Service Inventory-Revised (LSI-R; Andrews & Bonta, 1995) and the Violence Risk Scale (VRS; Wong & Gordon, 1999–2003), which are primarily used with nonsexual offenders, as well as the VRS-SO, the Stable-2000/Stable-2007 (Hanson, Harris, Scott, & Helmus, 2007), and the Sexual Violence Risk-20 (Boer, Hart, Kropp, & Webster, 1997) for sexual offenders. A single SOC may not be adequate to capture the change processes for the individual's many problem areas. For example, willingness to acknowledge and work on a substance abuse problem does not mean similar commitment to work on a sexual deviance problem. Similarly, a Swiss study also concluded that individuals can be in different stages of change depending on whether moderate or vigorous physical activity was the focus (Martin-Diener, Thuring, Melges, & Martin, 2004). The VRS-SO recognizes the multidimensional nature of offender problem areas and thus provides an SOC rating for each identified problem area.

Fifth, one of the key tests of the SOC model is its ability to predict outcome based on the stage rubric; results of

predictive studies of the SOC model, however, seemed to have produced inconsistent results (Littell & Girvin, 2002; Wilson & Schlam, 2004). Taken individually, studies can provide evidence both for and against most theories and propositions and may produce seemingly inconsistent results. Meta-reviews can quantitatively summarize an extant body of research and can provide a more objective assessment of the aggregated evidence. A recent meta-analysis of 47 studies by Webb and Sheeran (2006) examined the *causal* rather than the correlational relationship of behavioral intentions to subsequent behavior change, a much stronger test of the cause-and-effect relationship than correlational or cross-sectional studies. The authors asserted that "behavioural intentions are assumed to capture the motivational factors that influence a behavior" (Webb & Sheeran, 2006, p. 249) and highlighted considerable similarities between increasing intentions and forward transitioning in the SOC, in particular, the first three stages where, according to the TTM, there should be clear increases in motivation and commitment to change in transitioning forward. The authors found "that a medium-to-large change in intention ($d=0.66$) leads to a small-to-medium change in behavior ($d=0.36$)" (p. 249) when a number of different theoretical positions were examined using meta-analyses. The different stage theories, including the TTM (SOC), showed similar associations of intention with behavioral change. The results of this meta-analytic study provide support not only for the validity of the SOC model in predicting expected behavioral changes but also the causal relationship of movement through the stages and subsequent behavioral improvement.

The literature examining the SOC model and behavior changes in offenders is currently too small to be subjected to meta-analysis, but the individual study results are encouraging. Lewis (2004) examined treatment change using the TTM in a treated sample of 191 high-risk violent offenders. While most offenders were assessed, using the VRS, as being in the Contemplation stage at pretreatment, the majority were assessed as being in the Preparation stage (i.e., having forward transitioned one stage) at posttreatment (also see Wong et al., 2007). A follow-up study (Lewis, Olver, & Wong, 2013) on this sample has since found that treatment changes were significantly associated with reductions in violent recidivism. Similar findings have been obtained with the VRS-SO's assessments of change with respect to reductions in sexual recidivism (discussed in greater detail later in this chapter).

In all, the SOC conceptualization of treatment change within the TTM has been widely applied to a variety of health concerns, including entrenched and challenging clinical problems (e.g., chronic pain, eating disorders) and within offender populations. Meta-analytic results provide evidence in support for both the predictive validity of the SOC model and the casual links between stage transition and subsequent behavioral improvements in the general context of health-related changes in community samples. Within the forensic area, results of individual studies using the assessor-rated SOC metric developed for the VRS and VRS-SO also support the predictive validity of the SOC model using both nonsexual and sexual offender samples. Like any theory, challenges to the TTM (SOC) and the need for modifications and adjustments when the theory is applied to the forensic populations are not unexpected, and more research is required without a doubt. However, we would argue that the wider literature supports the validity and applicability of the general TTM (SOC) model, and the results of the smaller but growing literature of the application of the model to forensic populations are also encouraging.

Measurement of the Stages of Change in the VRS-SO

The operationalizations of the stages of change are designed to measure the extent to which the positive coping skills and strategies that the client has learned are stable, sustainable, and generalizable. All treatment targets, that is, dynamic items rated 2 or 3, are given the stages of change baseline rating at pretreatment or Time 1 to assess the individual's motivation and readiness for change. Dynamic items that are not treatment targets, that is, those rated 0 or 1, generally require no stages of change rating. The stages of change are then re-rated at posttreatment or Time 2 on all dynamic items identified as treatment targets. Change is quantified by comparing the stages of change rating for each dynamic item at pretreatment to that at posttreatment. Advancing from one stage of change to the next on a given item is an indication of positive change and, hence, risk reduction. Progression from one stage to the next stage is scored as a 0.5 point reduction in the pretreatment rating of the item, progression in two stages, 1.0 point reduction, and so on with the exception in progressing from precontemplation to contemplation when no change credit is given because the offender only verbalized change without any evidence of behavioral change. This is repeated for each dynamic item identified as a treatment target. The total point deductions for each dynamic item at posttreatment are summed across all 17 dynamic items to arrive at a total change score reflecting the total amount of change. The total change score is subtracted from the total pretreatment dynamic ratings to obtain the total posttreatment dynamic ratings.

For instance, a rapist entering sex offender treatment may receive a 3-point rating on the item *Cognitive Distortions* and be assessed as being in the Contemplation stage of change for this item. Following treatment, during which the offender learns how to challenge and modify various rationalizations for offending and objectifying attitudes toward women, major gains are observed and progress is made to

the Action stage of change. The individual has progressed two stages (i.e., Contemplation to Preparation to Action), resulting in 2 × 0.5 = 1.0 points of change, the change score. The change score is deducted from the pretreatment rating of this item, resulting in a posttreatment rating of 3–1 = 2. The total change score is the sum of the change scores for all the dynamic items. The total VRS-SO pre- and posttreatment scores represent the offender's overall risk level for sexual recidivism at two points in time. Higher scores indicate higher risk.

Assessing the Presence and Change of Sexually Deviant Behaviors in Custodial Settings: Offense Analogue and Offense Replacement Behaviors

Sexually deviant behaviors clearly observable in the community, such as deviant sexual arousal or victim grooming, may not be as easily observable in a custodial setting. Such behaviors may be transformed and assume a different complexion in artificial and highly controlled settings, such as in forensic hospitals or prisons, where there is no easy access to potential victims, close monitoring, and imposition of severe sanctions for these behaviors. In such settings, the *repackaging* of sexually deviant behaviors into some proxies of such behaviors may make them less obvious and may even allow them to remain undetected by less experienced or less observant staff. These offense analogue or proxy behaviors observable within custodial settings are good indications that the root problems underlying such behaviors have remained intact and the individual risks to recidivate likely have not been reduced.

The term *offense analogue behaviors* (OABs) has been used specifically to describe the day-to-day behavioral manifestations of an individual's criminogenic problems in controlled or closely monitored situations wherein the individual does not have the total freedom to engage in their usual activities nor unfettered access to victims and tools to commit crimes (Gordon & Wong, 2010). The underlying deviance may still be alive and well, but the behavioral expressions of such deviance may have been "repackaged" to adapt to the demands of the situation. For example, an incarcerated child molester, whose modus operandi has been to use the Internet to lure and groom victims, may resort to watching children in TV programs and secretly viewing and masturbating to images of children in newspapers and magazines when access to the Internet is not available. Usually, OABs are somewhat more socially acceptable proxies of the individual's criminogenic needs when the open expression of the deviant behaviors will likely attract heavy sanctions. The notion of analyzing analogues of offending behaviors to facilitate risk assessment, treatment, and case formulation has attracted considerable attention recently (see Daffern, Jones, & Shine, 2010). Much research is still required to provide clear support for the reliability and validity of the construct (e.g., see Daffern, Howells, Manion, & Tonkin, 2009). We introduce the notion of offense analogue and offense replacement behavior for sex offenders within the framework of the PCC theory and the RNR principles.

It is important to clearly identify an individual's OABs in custodial settings for a number of reasons (see Gordon & Wong, 2010). First, individuals who repackaged or temporarily redirected their deviant behaviors while in custody are by no means problem-free or have their risk significantly reduced, and they should not be misconstrued by staff as having been rehabilitated. The potential for staff to be manipulated and conned into a false sense of comfort under such conditions by highly psychopathic offenders has been repeatedly documented (e.g., see Wong & Burt, 2007, pp. 477–478). In the community, psychopaths can behave like chameleons, changing their colors to suit the moment, just as much can be expected when they are in custody. Treatment and custodial staff must be trained and experienced in observing, documenting, and reporting these OABs. Some OABs are easier to observe than others. Certain OABs, such as deviant sexual fantasies and urges, can be challenging to measure and document. Ultimately, the treatment staff's knowledge of such OABs is, in part, based on the offenders' self-report. Given the frequent tendency for offenders to downplay personal concerns and attempt to present themselves in a positive light (e.g., denying deviant fantasies and reporting exclusively "healthy" fantasies), for obvious reasons, it is important for treatment staff to be vigilant to other proxies that do not rely exclusively on offender self-report (e.g., television viewing patterns, PPG testing, polygraph).

Second, since OABs are closely linked to the individual's criminogenic needs, they can be considered as the person's here-and-now targets for risk-reduction treatment. Criminogenic needs are the individual's higher-level or *macro* treatment targets, such as deviant sexual arousal, whereas OABs are the individual's idiosyncratic treatment targets, such as "fantasizing about sexual contact with male children" or "masturbating to age-inappropriate images in books and magazines." The OABs are clearly linked to the individual's macro criminogenic needs and are observable and tangible in the here-and-now custodial or treatment environments. As such, staff can work with offenders on their OABs and monitor the frequency of their occurrences. Also, recognizing and addressing OABs swiftly may avert problems from spiraling out of control, thus resulting in improved risk management in custodial settings.

Third, reduction in the intensity and frequency of OABs for those participating in risk-reduction treatment could be considered as important indicators of treatment improvement and risk reduction. Despite having participated or

completed risk-reduction treatment, those who continue to demonstrate significant OABs are likely the ones who have not been responsive to treatment and correspondingly show little or no risk reduction. All too often, in treatment reports and in other communications of treatment performance, references to the participants' improvements or lack thereof are limited to statements such as "successfully completed treatment," "participated in groups and programs," "completed homework assignments," and so forth, which may not have much bearing in assessing if criminogenic needs have been addressed and recidivism risks reduced. The conceptual and practical links between the individual's OABs and criminogenic needs allow for the assessment of relevant risk-related changes in treatment.

From a theoretical standpoint, the concept of OAB is explicitly linked to the principles of effective correctional treatment, that is, the risk, need, and responsivity principles (RNR; Andrews & Bonta, 2006), which are themselves derived from the theory of the psychology of criminal conduct (PCC). In brief, the PCC is based on a combination of social learning, cognitive-behavioral, and social cognition theories. The PCC attributes the cause of antisocial behaviors to a combination of "personal control through antisocial attitudes, interpersonal control through social support for crime provided by antisocial associates, non-mediated control established by a history of reinforcement of criminal behavior, and/or personal predispositions" (Andrews & Bonta, 2003, p. 10). The use of RNR principles in designing and delivering correctional intervention has received considerable empirical support. RNR-based interventions have been found to be more effective in reducing recidivism than those that are not (see Andrews & Bonta, 2003, 2006, 2010; Andrews et al., 1990; Harland, 1996; McGuire, 1995; Motiuk & Serin, 2001). Recent writings, including meta-analytic and other reviews, have identified the "risk-need-responsivity framework (Andrews, Bonta, & Wormith, 2006) [as] … currently the best validated model" (McGuire, 2008, p. 2591) for reducing aggression and violence.

The PCC essentially provides a theoretical basis for the identification of common criminogenic factors that can be targeted for treatment. According to this theoretical framework, effective correctional treatment should lead to positive changes in the criminogenic needs, resulting in risk reduction. Interventions directed at areas unrelated to recidivism (i.e., not criminogenically related) will not reduce the individual's recidivism risk. The validity of the PCC and RNR in the treatment of sexual offenders has received recent support (Hanson et al., 2009).

The OAB concept has the closest link with the risk and need principles. We define OABs as the here-and-now manifestation of the criminogenic needs of the individual in controlled settings. It follows that OABs are the logical theoretical extensions of criminogenic needs, from within the RNR framework. Similarly, the more OABs the person possesses, the higher the risk (risk principle). A key corollary of this conceptual link is that effective treatment directed at OABs, theoretically speaking at least, should result in the reduction of the risk of sexual recidivism for sex offenders. On account of these theoretical and empirical linkages, OABs can be used, in particular, in custodial settings to guide the identification of the sexual offender's treatment targets linked to sexual violence and criminality and to assess treatment changes and risk reduction. As treatment progresses and improvements are made by the participant, the number and frequency of occurrences of OABs are expected to decrease. However, there is an important caveat.

The caveat is that the reduction of OABs is a necessary but not *always* a sufficient condition for assessing risk reduction. For instance, for various reasons, triggers or challenges that usually precipitate the antisocial behaviors may not be present. A rapist who is highly controlling toward women may appear to be quite well behaved in the absence of interactions with female staff. A man who had many problems with his peers may seem to be managing well when left alone or restricted to solitary confinement.

We similarly posit that a more complete depiction of treatment progress should be represented by both an increase in positive or offense replacement behaviors (ORBs) and a decrease in OABs. In short, not doing the wrong things (fewer OABs) is good, but one has to do more of the right things instead (more ORBs). We define ORBs as the appropriate skills, usually newly acquired ones, an individual uses to manage past problems or situations that had culminated in criminality or violence. Observations of ORBs are particularly critical in controlled settings because of the many artificial situations that an individual may be subjected to that may inhibit and reduce problem behaviors.

Like OABs, ORBs should also be linked to the individual's criminogenic need areas, and one size does not fit all. For example, what are often considered by custodial staff to be positive and constructive pursuits while incarcerated (and rightfully so), such as striving to improve one's education and work skills, may be risk reducing for someone whose antisocial behaviors were related to a lack of steady employment because of poor education and job skills, but may be totally irrelevant for someone else who did not have such problems. Similarly, for someone with a passive-aggressive problem who tended to suppress his anger and then act out violently, behaving assertively and standing his ground are his relevant ORBs, but not so for a psychopath who revels in showing off his verbal skills and having the last word. In fact, for the psychopath, the same behavior may be his OAB! For some sex offenders, the lack of interpersonal skills to socially interact with women may be criminogenic, but not for others who may be highly interpersonally skilled in luring unsuspecting women into short-term relationships in order to abuse them.

Since treatment and change take time, we suggest that in most cases the gradual decrease in OABs (negative behaviors), together with a corresponding gradual increase in ORBs (positive behaviors), should indicate positive treatment progress leading to risk reduction. Recent data suggest that an increase in ORBs together with reductions in OABs, as measured by the progression through the stages of change (as in the transtheoretical model of change (Prochaska & DiClemente, 1984; Prochaska et al., 1992), is linked to reductions in violent recidivism (Lewis et al., 2013; Olver & Wong, 2009) also see Mooney and Deffern (2011). A structured guide to assess OABs and ORBs has been developed for non-sexual offenders (see Gordon and Wong, 2015) and a similar one for sexual offenders is under development.

How Real Are the Observed Changes in Treatment?

Meta-analytic reviews have demonstrated the effectiveness of treatment adhering to the principles of RNR for reducing sexual and other forms of recidivism (Hanson et al., 2009), including some support that correctional programs involving some mild to moderate coercion can be effective, albeit smaller compared to voluntary programs (Parhar, Wormith, Derkzen, & Beauregard, 2008). However, one of the major challenges in trying to effect changes through treatment of high-risk offenders is to discriminate real treatment changes that should lead to reductions in risk of recidivism from, for the lack of a better word, faked changes. Talking the talk is often confused with walking the walk, in particular for those with significant psychopathic personality traits. Theoretically speaking at least, real changes are changes linked to the individual's relevant criminogenic factors, and fake changes are changes that are unrelated to their criminogenic factors. Again, by definition, changes in OABs and ORBs should be linked to the individual's relevant criminogenic factors and, therefore, should be indicators of real changes. One has to walk the walk before changes in OABs and ORBs are registered and used to indicate risk reduction. Moreover, the individual has to demonstrate the reduction in OABs and increase in ORBs not just in formal treatment sessions such as groups and individual therapy sessions but in their daily living and in different environments under challenges. In essence, they have to demonstrate the reduction in OABs and increase in ORBs and be able to generalize such positive changes to different high-risk situations.

All too often, treatment staff may assess change by paying attention to inappropriate or potentially irrelevant indicators of changes so much so that putative positive treatment changes are sometimes linked to increases in recidivism (Seto & Barbaree, 1999; but see also Barbaree, 2005, and Langton, Barbaree, Harkins, & Peacock, 2006). Some examples of potentially irrelevant indicators of changes include the following:

1. Attendance of treatment sessions. This may be used as a proxy indicator of engagement in and integration of treatment information, but such links may be tenuous at best. This is one of those "tick box" indicators that require minimal effort to collect and document and are favored by some treatment providers or managers. Such information can be collected but should be supplemented by more relevant and focused indicators of change such as OAB reductions.
2. Successful completion of programs, similar to (1) above. Attending all treatment sessions or complying with group requirements may or may not be a useful indicator of change. Few would disagree that change is better indicated by implementing what has been learned in the treatment sessions, that is, walking the walk. Even then, whether one could generalize what is practiced in an institutional setting to the community is still unknown unless one has been tested under situations that simulate the community.

A related issue is that assessing treatment change has been shown to be easily open to subjectivity and biases when such assessments are carried out by the same treatment provider. Obviously, the treatment provider has many vested interests in the case and that may compromise the objectivity of such assessments (see Weiss, Rabinowitz, & Spiro, 1996). Having an independent third-party carryout, the treatment outcome assessment and obtaining a reliable second opinion are highly desirable. However, such is not always possible due to logistical, financial, or other reasons. We would argue that the subjectivity should be substantially reduced if the change assessments are done with the structured guidance of constructs and tools such as OAB and ORB and the use of the guide discussed below. An analogy can be drawn with respect to risk assessment and prediction. Risk prediction based on the clinical opinion of a health professional alone is much more open to subjectivity and biases compared to similar assessments done with the aid of a structured risk prediction tool such as one of the many so-called second- or third-generation risk tools (Bonta, 1996). Similarly, assessment of treatment change may be less biased when a similar structured tool is used; however, this is very much an empirical question, and research is required to assess such assertions.

Measurement of OABs and ORBs for Sex Offenders

OABs and ORBs may not be immediately obvious and easily observable. As such, we have developed guidelines that we hope could help service providers and assessors to identify and document them. Since OABs and ORBs are derived from criminogenic factors for sex offenders, we start by

using the dynamic (criminogenic) risk factors of the VRS-SO. The following is an example of the steps in identifying OABs and ORBs.

1. Assess the individual using the VRS-SO and identify all his/her dynamic factors rated 2 or 3. These are the individual's risk factors with significant links to sexual deviancy and/or violence and, as such, treatment targets. For illustration, say "Deviant Sexual Preference" is one of them.
2. Assess how Deviant Sexual Preference is manifested by the individual in the community and while he/she is in custody. This will require a fairly in-depth interview and review of collateral information, ideally including third-party information, to focus on the idiosyncrasies of the individual in question. The earlier example (see p. 15) of the child molester who used the Internet to lure victims is a case in point. Since the client's willingness to disclose is often very helpful in identifying OABs, the list of OABs may have to be revised with the progress in treatment when better working and more trusting relationships with staff may prompt further disclosure of OABs.
3. Identify the frequency of occurrence or base rate of each of the OABs. Increases or decreases in the base rate of the OAB are indicative of deterioration or improvement with treatment, respectively
4. ORBs are more easily identifiable when the individual is, at least, in the Contemplation or, better, the Preparation stage of change when he/she acknowledges problems and tries to make changes. Needless to say, staff assistance is necessary to help offenders identify both OABs and ORBs.
5. The information captured by identifying the rates of OABs and ORBs is indicative of progress or lack thereof during treatment and can be used to indicate movement along the stage of change continuum, that is, movement from Precontemplation to Contemplation to Preparation, Action, and Maintenance.

The OAB/ORB Guide that accompanies the VRS-SO provides a structured way of capturing OAB and ORB information. We provide examples of OABs and ORBs from the Sexual Deviance, Criminality, and Treatment Responsivity factor domains. Examples of OABs consistent with Deviant Sexual Preference (Dynamic Item 16) would include deviant masturbatory fantasies (e.g., underage individuals, masturbating to past offenses, rape fantasies), deviant arousal (e.g., as assessed by PPG, self-report, or the VRS-SO sexual deviance factor—see Canales, Olver, & Wong, 2009), and use of materials that can fuel deviant interests (e.g., observing child photos in catalogues, drawing pictures of children, watching inappropriate television shows featuring children, or accessing other triggering stimuli). These OABs, in turn, would be rated by their frequency (i.e., *never, seldom, somewhat frequent, frequent*) and applicability to the client. By contrast, relevant ORBs would include appropriate fantasies (i.e., consenting partner, appropriateness with respect to age, relatedness [i.e., not family, staff member, past victim] to the client), avoidance of triggering stimuli, and capacity to control deviant arousal (e.g., via PPG testing). Relevant ORBs, in turn, would also be assessed in terms of their frequency and appropriately documented.

Examples of OABs consistent with Interpersonal Aggression (Dynamic Item 6) would include verbal aggression (e.g., swearing and shouting) and/or physical aggression directed at others, aggression directed toward things (e.g., slamming doors, throwing, punching, or kicking things), engaging in nonsexually violent fantasies, or using aggression to control or intimidate others. In turn, relevant ORBs for this item would include using problem-solving approaches to deal with interpersonal issues with staff and peers, attempting to see and understand another person's point of view, or using time-outs, perception checking, consequential thinking, and so forth to manage interpersonal problems.

Finally, examples of OABs consistent with Cognitive Distortions (Dynamic Item 5) would include rationalizations, justifications, and minimization of past sexual offenses (or other sexual offending behavior) in treatment, verbalizations, or other behaviors that suggest at least a tacit acceptance of sex offender attitudes (e.g., objectifying statements about women or children) and so forth. By contrast, alternative ORBs for sex offender cognitive distortions would include espousing prosocial sexual attitudes and beliefs and actively rejecting or challenging distorted sex offender cognitions in group, personal, and other circumstances.

Issues in Conceptualizing and Measuring Treatment Changes

There are a number of commonly raised questions regarding the issue of treatment-related changes for sex offenders. First, what constitutes long-term *real* treatment changes, for example, if a treated sex offender with a history of repeat sexual offending appears to be doing well on all counts after treatment was released to the community and did well but recidivated once many years later, has *real* change actually occurred? Second, what program or clinical information does one need to support the assessments of risk-related treatment change? Third, what quantitative research evidence is required to support the dynamic or changeable nature of sexual offender risk?

The answer to the first question pertains to how long-term treatment change should be conceptualized and measured. If one expects that treatment changes should result in the complete desistance of all sexual offending for the treatment

participant, then zero sexual recidivism in the person's lifetime is the only acceptable indication of the expected treatment change. Using this criterion, the offender in the example has not changed. There are valid reasons why such an expectation is unrealistic. Entrenched behavioral patterns, habits for short, such as repeat sexually abusive behaviors, are established over time, and they take time to undo. Treatment, no matter how effective, does not have a 100 % remission rate for all on the completion of formal programming; the treatment outcome literature has repeatedly demonstrated this point. Treatment change conceptualized as harm reduction is probably a more accurate approximation of the research evidence. More recently, in the crime desistance literature, desistance has been viewed as a process of "gradual decline toward zero or a very low rate of offending" (Laub, Nagin, & Sampson, 1998, p. 227). Loeber and Le Blanc (1990) further specified four components of desistance as (1) reduction in the frequency of offending (deceleration), (2) reduction in the variety of offending (less criminal versatility), (3) reduction in the seriousness of offending (de-escalation), or (4) no increase in the seriousness of offending (reaching a ceiling). In all, desistance, when conceptualized as a process of gradual positive change that leads to desistance instead of a step function of moving from no desistance to desistance in a single step, is consistent with the harm reduction approach. Within the context of sex offender treatment, risk management and relapse prevention are also predicated on the notion that treatment is not a cure but a lifetime management or the reduction of the risk of relapse, also a harm reduction model. Taking on board the harm reduction model, the indicators of positive treatment change should be broadened to include reduction in the frequency (number of offenses per unit time) and seriousness of offending (level of harm) as well as the increase in the latency of offending (time to first offense) in addition to complete desistance. We would argue that these three additional measures of recidivism are more realistic and sensitive measures of change and should be used over and above total desistance (yes/no reoffending) as the sole indicator of change. Applying these suggested measures within a harm reduction model shows that the sex offender in the example has made changes.

Still others may argue that treatment change should not be limited to risk-related changes but should entail changes in the underlying personality or other comorbid disorders, interpersonal style, social adjustments, mental and/or physical health status, and so forth. All of the above can be argued as possible objectives for sex offender treatment programs depending on how the treatment program is designed and conceptualized. However, the onus is on the proponent of the treatment program to stipulate and justify the objectives of the treatment based on available scientific evidence and then measure how well the objectives are fulfilled. Given that the overwhelming need to treat sex offenders is to reduce their risk to reoffend, program designers, regardless of their theoretical persuasion, should address the risk-reduction issue nonetheless.

If sexually abusive behaviors are akin to an ingrained habit refractive to change, can a relatively brief, albeit intensive treatment of a few months or even a year serve to undo such habits and produce real and enduring changes? Similar to most psychologically based intervention, treatment programs for sexual offenders should be seen as a period in which changes can be started, supported, and practiced and participants gradually move forward to more enduring changes that are self-supporting: becoming internally rather than externally motivated, building on a good foundation, and gathering momentum as the changes become more firmly rooted. Treatment simply starts people on a trajectory of cognitive and behavioral change. The end of the program should be viewed as the end of a formal and intensive learning period rather the end of the learning and change process. For instance, if an individual is in the Preparation stage at the completion of a treatment program, he or she, with the appropriate support, may continue to progress positively, moving eventually into Action stage and thereafter. Similarly, most do not cease learning when they finish formal education in schools or universities provided that there is sufficient motivation and reward to continue to learn and self-improve. As such, posttreatment support, maintenance, and supervision are essential to sustain any improvement started in formal programming. The SOC rubric in the VRS-SO is simply one approach to conceptualize and measure changes that can occur in treatment programs for sex offenders. Sex offenders with different levels of risk obviously will require treatment with different levels of intensity, that is, the risk principle.

Another question that is often raised related to sex offender treatment is what program or file information can systematically and reliably show that real treatment change has occurred, vis-à-vis our second question. We argued earlier that if risk reduction is the ultimate objective of the treatment program, then changes in proxies of past offending behaviors observable in treatment programs (our so-called OABs and ORBs) should be the appropriate indicator of risk-related treatment changes. Unfortunately, such information is not always captured and documented by treatment staff, in part, because of differences in program objectives and, perhaps, the theoretical or professional orientations of the treatment providers. If changing personality, interpersonal style, and anger control are the objectives of the program, then information pertaining to such objectives will be documented regardless of their relationship to offending behaviors. Valid and reliable change information that can be used to make VRS-SO change ratings can be obtained from records, and providing there is a suitable volume of information upon which to base the changes, staff members are trained to recognize and document OABs and ORBs, and

that participants were exposed to a credible change agent (e.g., risk-reduction treatment). For better information quality, multiple sources of information, including interview and multidisciplinary reports including observations of the offender's day-to-day behaviors to detect any selective or deceptive behaving, should be used. If the individual has not participated in a treatment program (no credible change agent) or if mainly irrelevant and inappropriate pieces of information unrelated to risk change are documented, it will be challenging to rate SOC and detect movement along the stages of change. When staff are trained to recognize relevant OABs and ORBs linked to the individual's criminogenic needs and document this information as part of their routine treatment duties, the files become a much richer source of information from which to code SOC.

Our third question highlights the continued debate on what can be considered a definitive (if there is ever one) indication of the dynamic nature of risk. We refer the readers to the seminal and widely cited paper by Kraemer et al. (1997). Kraemer et al. (1997) provided various definitions of dynamic risk and discussed them at length. In a subsequent paper, Douglas and Skeem (2005) reiterated a similar definition of dynamic risk. In essence, the necessary and sufficient condition for risk to be deemed dynamic is when risk is measured at least at two points in time to assess change, which can then be linked to recidivism changes in the predicted direction; that is, is risk reduction linked to subsequent reductions in recidivism (see also the discussion of causal risk factors in a later section of this chapter)? Linking risk assessment at a single time point to recidivism does not adequately address the question of whether or not risk is changeable. We suggest that a further caveat must be noted and that is the baseline level of risk must be controlled in order to assess change. For example, a higher-risk offender, despite having undergone more change after treatment than a lower-risk offender, may still be at higher risk to reoffend when compared to his lower-risk counterpart since treatment change began at a much higher baseline. When linking risk changes to recidivism, controlling for baseline risk level should eliminate this potential confound. This methodology has been used to assess the hypothesis that risk is dynamic, and an increasing number of publications have reported evidence to support the hypothesis, as will be discussed in more detail below (Olver et al., 2007; Olver & Wong, 2009, 2011; Beggs, 2008; Beggs & Grace, 2010; Lewis et al., 2013, for nonsexual offenders). The methodologies or change measures used to test the dynamic nature of risk should assess risk at two or more time points and control for the baseline measure of risk at a minimum. It is possible that, if not reliably assessed, treatment changes can become a source of noise and may even increase errors in measuring posttreatment risk such that, paradoxically, pretreatment risk measures can be better predictors of outcome than posttreatment risk measures (e.g., Barbaree, Seto, Langton, & Peacock, 2001; Rice, Harris, & Quinsey, 2002).

Guidelines for Interpreting a VRS-SO Assessment

The VRS-SO is designed not only as a risk assessment tool for sex offenders, but it can also guide risk management, identify treatment targets, and measure treatment change. The guidelines for interpreting a VRS-SO assessment are available in detail in a companion technical manual for the tool; a summary of the information is provided here.

Risk Assessment and Prediction

One important issue in risk prediction is the selection of risk cutoffs to designate a level of risk for offenders assessed with the tool. Using Hanson's and Morton-Bourgon's (2009) rubric from their meta-analysis of sex offender risk assessment instruments, the VRS-SO total scores can be arranged into four risk bins with associated cutoff scores and percentage sexual recidivism in a manner similar to research with the Static-99: Low Risk (0–20), Moderate-Low Risk (21–30), Moderate-High Risk (31–40), and High Risk (41–72). The norms for the VRS-SO represent posttreatment total (i.e., combined static and dynamic) scores and were found to be the strongest predictors of subsequent sexual recidivism in our normative sample.

The base rate of sexual recidivism also varies with the length of follow-up and type of outcome (e.g., charges versus convictions). The current norms available and reported here are from the original sample of 321 treated and federally incarcerated sex offenders followed up on an average of 10.0 years post-release. The recidivism rates for the four risk bins are presented in Figs. 1 and 2. Figure 1 presents simple recidivism rates (any new sexual charge or conviction) irrespective of follow-up. Figure 2 reports sexual recidivism rates for the four risk categories at 3-, 5-, and 7-year follow-up. In this figure, a simple cap was placed on the length of follow-up for each time interval while retaining the total offender sample at each follow-up point. As most (71 %) of the sample had at least 7 years of total follow-up time, the sexual recidivism base rates were likely more realistic and stable than the 10-year reconviction rates reported in Olver et al. (2007), although the 3- and 5-year recidivism rates between Olver et al. and Fig. 2 are almost identical. The base rates in Figure 2 also represent any new sexual charge or conviction, a somewhat more liberal criterion that can yield higher base rate estimates (Doren, 1998).

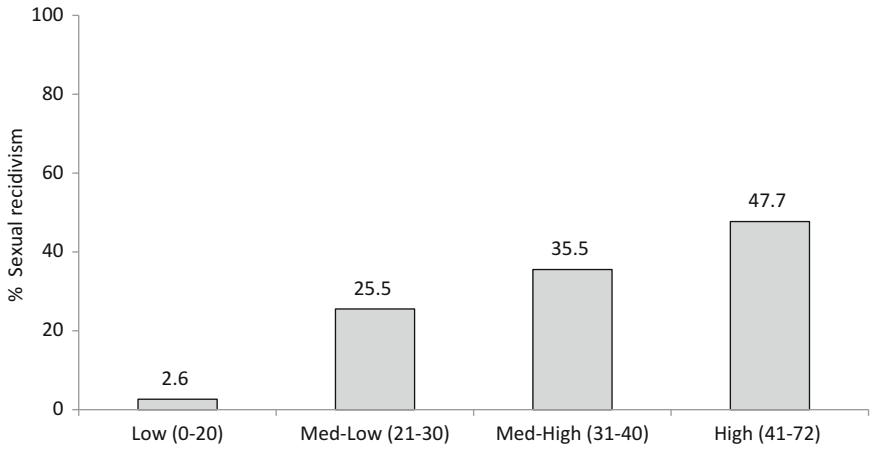

Fig. 1 Rates of sexual offense recidivism for the four VRS-SO risk categories, no cap placed on length of follow-up (mean follow-up = 10 years; *N* = 321)

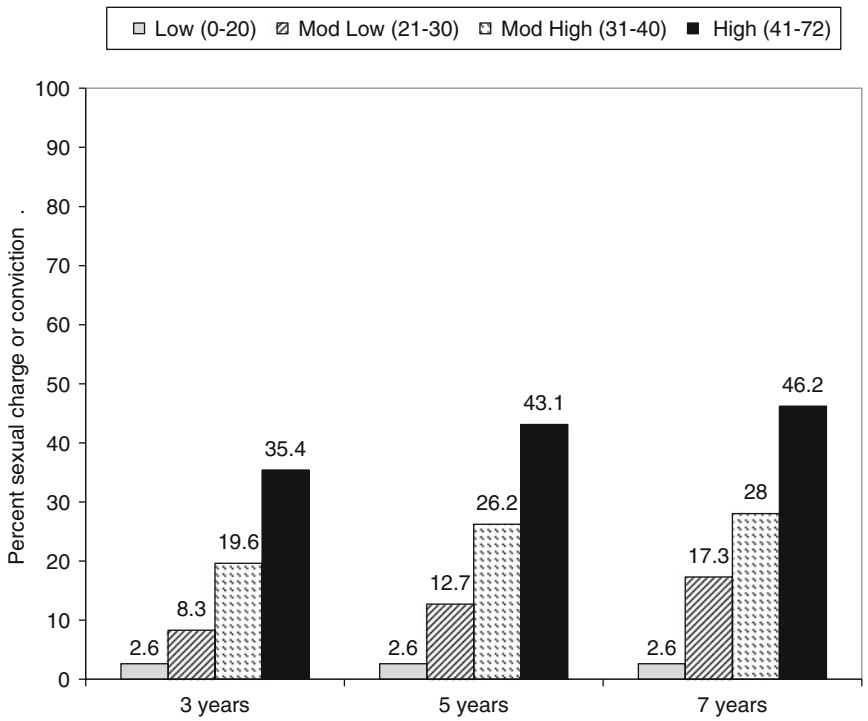

Fig. 2 VRS-SO recidivism norms: base rates of any new sexual charge or conviction at 3-, 5-, and 7-year follow-up (*Note* Group bin sizes (Total *N* = 321): Low = 39, Moderate–Low = 110; Moderate–High = 107; High = 65)

In addition to risk cutoffs and recidivism probabilities, percentile ranks also can be reported. A percentile refers to the percentage of scores that is below the score in question; if a certain score is at the 90th percentile, then 90 % of all the scores in a certain sample are below that score. Percentile ranks provide another appraisal of the individual's risk and an additional piece of information for decision-making by comparing an individual's score with that of a cohort, in this case, the scores of other incarcerated sex offenders in the normative sample. Whereas dividing the sample into the four risk bins essentially ranks the individual by way of one of the four groups, the percentile scores give a more precise ranking of the individual within the entire cohort, although small differences in percentile ranking may not be very meaningful. The percentile ranks for the VRS-SO posttreatment total and the three dynamic factor scores are available in the technical manual.

Assessing Criminogenic Needs and Identifying Treatment Targets

The percentile ranks of the three VRS-SO factor scores give an indication of the relative significance of three broadly defined criminogenic need domains of the individual. The items within each of the factors that are scored 2 or 3 are the more specific criminogenic needs within each factor. For instance, the items Sexually Deviant Lifestyle, Offense Planning, and Deviant Sexual Preference might be identified as criminogenic (scored 2 or 3) within the Sexual Deviance factors and are thus specific treatment targets for service providers to focus on.

The scoresheet has been structured so that factor scores corresponding to the three broad dynamic factors can be computed to derive a risk profile, and individual items and their scores (0, 1, 2, or 3) within each factor can also be identified and displayed. The VRS-SO scoresheet thus provides a graphic and numerical summary of the pattern(s) of criminogenic needs, at both the factor and the item level, that contribute to sexual offending risk for each individual case. The individual's OABs and ORBs identified for each of the criminogenic items would take the specification of the individual's criminogenic behavior to levels that are observable by treatment and service providers in the day-to-day interactions with the individual. As indicated before, changes or lack thereof in the OABs and ORBs would indicate corresponding changes in sexual recidivism risk, thus closing the loop, so to speak.

Stage of Change Assessments

Each dynamic item identified as a treatment target should be given a stage of change rating to indicate the individual's degree of readiness to work on his/her problem areas and to assess treatment progress by monitoring progress in the stages. These ratings are particularly informative for treatment and service providers tasked with assisting the individual to make changes to reduce risk. Treatment and therapeutic approaches obviously have to be adjusted to fit the stage of change of the individual. The stage of change can also indicate the level of motivation indicated by the individual to change: those with many criminogenic needs and with most or all of them rated in the Precontemplation stage are expected to be highly recalcitrant and resistant to attempts at risk-reduction intervention; as such, their risks are not expected to be easily reduced. Evaluators would likely take such assessment information into account in decision-making.

While offender self-report is an important source of information, it is only one source. Given the potential for impression management, exaggerated self-reports of improvement, and patient demand characteristics, offender self-report information should not form the sole or necessarily even the primary basis for evaluating treatment changes. Evaluators are recommended to attend closely to the stage of change criteria and to note the relevant OABs and ORBs for a given dynamic risk factor. Collateral information sources are particularly important, including assessments from other criminal justice personnel (e.g., parole or probation officers), results of PPG testing or polygraph, and observations made from other treatment or institution staff who have the opportunity to observe the individual in contexts outside of treatment.

Similarities and Differences Between the VRS-SO and Other Risk Assessment Tools

Most sex offender risk assessment tools are developed for the prediction of sexual recidivism, and there are a number of them available for use. Hanson and Morton-Bourgon (2009) have demonstrated that there does not appear to be an appreciable amount to be gained in predictive accuracy by using one tool over another. A recent meta-analysis also found highly similar predictive efficacies among tools used to predict nonsexual violence (Yang, Wong, & Coid, 2010). In essence, many of the available sexual risk assessment tools that incorporate static or both static and *dynamic* factors, including the VRS-SO, have similar and acceptable predictive accuracy. However, if one goes beyond risk prediction to risk reduction through treatment and rehabilitation, then one has to use tools with causal risk factors (CRFs; Kraemer et al., 1997). Other than being putatively changeable, that is, being conceptually dynamic, such as attitudes and beliefs, changes in these CRFs must be empirically shown to be linked to corresponding changes in future sexual recidivism, that is, decreases in CRFs have to be shown to result in decreases in sexual recidivism by way of an appropriately designed empirical study. The latter is a key requirement for the appropriate use of CRFs in treatment planning and delivery, since treatment providers then can have a certain level of confidence that improvement in these CRFs in treatment would likely lead to reductions in sexual recidivism. Kraemer et al. (1997) discussed in detail the necessary and sufficient conditions for a risk factor to be deemed a CRF. In the literature, the term *dynamic risk predictors* is often used to indicate, in a general way, conceptually changeable risk factors without making the clear distinction of whether or not evidence is available to show that the requirements of a CRF have been met.

There are several risk assessment tools with dynamic or putatively changeable risk factors, using Kraemer's terminology, aside from the VRS-SO. Some examples of these tools include the Stable-2000 (Hanson & Harris, 2001) and

Stable-2007 (Hanson et al., 2007), Sexual Violence Risk-20 (SVR-20; Boer et al., 1997), Risk for Sexual Violence Protocol (RSVP; Hart, Kropp, & Laws, 2003), and the Sex Offender Assessment of Risk and Need framework (SARN; Thornton, 2002; see also Craig, Thornton, Beech, & Browne, 2007). In our recent review of the literature on risk assessment (Wong, Olver, & Stockdale, 2009), only the VRS-SO, to this point, appeared to have presented empirical evidence that satisfies the requirements of CRF, and the original validation work is one of few studies that have examined the dynamic nature of putatively dynamic variables. A recent paper examining predictive efficacy research of the VRAG with intellectually disabled sexual and violent offenders made a similar observation (Camilleri & Quinsey, 2010). Much more research is required in this area.

The family of sex offender risk assessment instruments that incorporates putative dynamic variables is an important contribution in promoting an evidence-based and clinically sound integration of sex offender risk assessment and treatment in order to reduce and manage risk and prevent future occurrences of sexual violence. The VRS-SO, for instance, fits well within the risk-need-responsivity framework. Risk scores and cutoffs can inform the appropriate intensity of intervention (e.g., high risk would suggest prescribing a high-intensity program), as per the risk principle. A risk-need profile of criminogenic items can be created, as per the need principle, to identify where (and where not) to intervene. As outlined in the instrument description near the beginning of this chapter, treatment resources, often in scarce supply, should be directed toward high-priority areas but not toward low-risk or non-criminogenic areas. Consistent with the responsivity principle, the stages of change rating also speak to an individual's readiness, motivation for change, and the necessity for stage-matched interventions. For instance, interventions such as consciousness raising, environmental reevaluation, dramatic relief, and gentle efforts to engage the offender may facilitate movement from Precontemplation to Contemplation (Tierney & McCabe, 2005).

The VRS-SO's modified application of the TM also enables the documentation and quantification of changes in sex offender risk. In the initial validation of the VRS-SO using a sample of 321 treated sex offenders with a mean 10-year follow-up, it was found that changes in risk were associated with reductions in sexual and violent recidivism after controlling for baseline risk level (Olver et al., 2007; Olver & Wong, 2009); VRS-SO pre- and posttreatment change scores were significantly associated with reductions in sexual recidivism after controlling for multiple indicators of baseline risk, including the use of both the VRS-SO total static factor score and pretreatment total (static plus dynamic) score. Change scores were also significantly negatively correlated with sexual recidivism ($r = -0.15$) among offenders scoring as high risk on the Static-99, another way of accounting for baseline risk level. These results indicate that risk is dynamic in that changes in participants' risk after attending a high-intensity treatment program (the Clearwater Program in CSC) were associated with reductions in sexual recidivism.

In a subsequent study based on this dataset and sample, Olver and Wong (2011) dichotomized offenders scoring moderate-high or high on the Static 99 into high (n = 104) and low (n = 100) change groups. Both groups had nearly identical Static-99 scores (high risk/high change $M = 5.7$, $SD = 1.3$; high risk/low change $M = 5.6$, $SD = 1.4$), but compared to the low-change group, the high-change group had significantly lower rates of sexual recidivism. Even more compelling was that, after treatment, the sexual recidivism rate of the high-risk/high-change group was now statistically indistinguishable from that of the actuarially low-risk groups. The results of the two studies are consistent with the conclusions that sexual offending risk is dynamic and changeable through treatment; that static tools, such as the Static-99, cannot accurately measure and reflect such changes in risk; that the dynamic risk predictors in the VRS-SO are causal risk factors based on criteria set forth by Kraemer et al. (1997); and that the tool can be used to assess risk changes. These tentative conclusions need to be further tested empirically.

In their independent cross-validation of the VRS-SO on a sample of 218 child molesters who received sex offender treatment from the Kia Marama program in New Zealand, Beggs and Grace (2010) obtained strong support for the predictive accuracy of the VRS-SO for sexual recidivism, obtaining AUC values of 0.79 and 0.80 for pre- and posttreatment total scores, respectively. In the original dissertation (Study 2) of this body of work, Beggs (2008) examined the relationship of pre- and posttreatment change scores to outcome. Change scores were also found to be significantly negatively correlated with sexual recidivism across the entire sample ($r = -0.15$) and were associated with reductions in recidivism after controlling for the Static-99 measure of baseline pretreatment risk ($e^B = 0.76$, $p < 0.06$). Changes made on the Sexual Deviance factor specifically were significantly associated with reductions in sexual recidivism, which were also retained after controlling for the Static-99 ($e^B = 0.57$, $p < 0.05$). This body of work provides further supports for the dynamic nature of sex offender risk and the use of dynamic risk tools to assess such changes.

Future work on the VRS-SO is to extend and further validate the use of the VRS-SO in risk management and treatment, such as identifying and refining offense-linked proxy or analogue behaviors (OABs) which may represent manifestations of the offending behaviors in custodial settings. The normative base of the VRS-SO, in turn, may lend itself to possible use in SVP and DO assessment contexts given that these tend to involve incarcerated or hospitalized clients.

Possible Use of the VRS-SO in the Preventive Detention of Sex Offenders

Many developed countries such as the USA, UK, Canada, and Australia have enacted preventive detention legislations for the management of particularly high-risk offenders (Calkins Mercado & Ogloff, 2007). Some of the legislation applies to high-risk offenders in general, such as the dangerous offender designation (Sec. 753, CCC) in Canada; others are specific for sex offenders, such as the sexual violent predator law now in place in a number of states (see Schlank & Cohen, 1999; for a recent review see Prentky, Janus, Barbaree, Schwartz, & Kafka, 2006). Reviewing the range of preventive detention legislations, their merits, practicality, and legitimacy are beyond the scope of this chapter. From time to time, validated risk assessment tools will be used by practitioners in their work, including preventive detention assessments. We wish to comment on the possible use of the VRS-SO in addressing some of the requirements of these legislations. Our comments should *not* be interpreted as an endorsement of using the VRS-SO for preventive detention assessments; every clinician has to make such a determination for her/himself. Instead, such comments should be seen as a discourse of possible contributions, limitations, and, in particular, caveats in using the VRS-SO in such assessments.

Assessing the need for preventive detention usually involves determining the presence of a mental disorder, the presence of a history of violent and/or sexually violent criminal acts, the likelihood of future violence including sexual violence, and, in some cases, the potential for rehabilitation. As well, there is a provision for treatment and rehabilitation services to reduce the risk of future violence, in particular, sexual violence, to those detained under these laws. As such, there is a need to assess treatment changes and the corresponding change in violence or sexual offending risk. Other than the presence of a mental disorder, an assessment using the VRS-SO can provide information to address some of the other requirements of these laws.

Past Violence and Likelihood of Future Violence

The VRS-SO static factors are selected to provide a measure, both conceptually and quantitatively, of the extent of the individual's track record of sexual violence, including the type of sexual offenses, the extensiveness of past criminality, types of victims, age of first sexual offense, and so forth. Inspection of the scoring of the static factors can provide information about the individual's history of sexually inappropriate behaviors. Additional dynamic factors such as the Deviant Sexual Lifestyle and Sexual Offending Cycle can provide further information on the persistence of sexually inappropriate behaviors. The prediction of future sexual and nonsexual violence, as discussed in some detail earlier, is provided by the total score of the VRS-SO and will not be discussed further here.

Potential for Rehabilitation, Treatment Progress, and Risk Changes

The stage of change ratings of the VRS-SO dynamic items that are identified as treatment targets can provide an indication of the individual's readiness for change item by item. Generally, one can observe a predominant stage of change for an individual, that is, a stage of change that applies to the majority of the treatment targets, and this would indicate the individual's overall willingness or readiness to make changes or, at that moment in time, his/her potential for engagement in rehabilitation work. Since motivation and readiness can change over time, such potential can also change and must be reassessed, reviewed, and revised as appropriate: readiness is a state rather than a trait.

Before assessing treatment progress, one needs to assess and determine what to treat, that is, to identify treatment targets. As discussed earlier, the rating of the VRS-SO dynamic factors can assist in the identification of treatment targets, that is, risk factors that are linked to sexual offending or inappropriate sexual behaviors. Identifying the corresponding OABs and ORBs for the treatment target can determine, at an individualized level, the day-to-day behaviors that treatment staff should attend to closely in the delivery of treatment to sex offenders. Treatment progress and the corresponding risk reduction are best assessed within the VRS-SO using the modified stage of change rubric discussed earlier. Progress through the stage of change suggests that problem areas are being addressed and positive skills are used to manage high-risk factors leading to risk reduction. Research evidence suggests that progress in the stage of change is linked to reduction in sexual recidivism in the community (Beggs, 2008; Olver et al., 2007). However, it should be noted that for some sex offenders, such as child molesters, progress to the Maintenance stage on some dynamic factors such as Offense Planning may not be possible within an institutional environment such as a prison or hospital setting. Such environments do not provide sufficient opportunity to practice or generalize treatment gains to a variety of contexts that may tax an individual's coping resources through exposure to high-risk situations (e.g., access to victims).

While the VRS-SO evaluations have been used by expert witnesses and admitted to evidence in Canadian courts, including DO hearings, and we think that the VRS-SO can provide useful information for preventive detention evaluations, we would *not* suggest that it be used as a stand-alone tool for such evaluations. Rather, it may provide one source of risk- and

treatment-related information that can be used in the overall evaluation. As well, risk prediction is not an exact science, inferences of individual performance (e.g., individual risk level) from group and normative research data (e.g., group recidivism data) should be interpreted with due caution similar to the interpretation of any psychological test results. Needless to say, assessments for preventive detention must be carried out with extreme caution since any false-positive or false-negative errors would exact very high human and resource costs.

Clinical Case Example of the VRS-SO with a Treated SVP-Adjudicated Rapist[1, 2]

Mr. Brown is a 33-year-old male, recently adjudicated a sexually violent predator (SVP) assessment as per the state legislation in his jurisdiction after serving an 8.5-year sentence for sexual assault and assault causing bodily harm. Mr. Brown has two previous convictions for sexual assault, as well as a prior conviction for a nonsexual assault and a miscellany of property crimes. Although Mr. Brown completed a sex offender treatment program as he approached the end of his sentence, he was referred for an evaluation pursuant to the sexually violent predator legislation at the request of his parent institution. The VRS-SO was completed on Mr. Brown as one component of appraising his risk which was part of the overall SVP evaluation. The circumstances surrounding his offenses and synopsis of information to rate his static risk variables on the VRS-SO are outlined below.

Offense History and Information to Rate Static Items

Mr. Brown's first criminal charge for a sexual offense involved an attempted rape of a 40-year-old female real estate agent when he was 18 years old. According to official documentation, Mr. Brown approached the victim, a stranger who was taking photographs of a house (his residence), and invited her in for a tour. He engaged her in some topical conversation about the home and, when the agent turned her back, grabbed her, wrestled her to the floor, and attempted to disrobe her. As the front door was open, the agent struggled and screamed for help, and Mr. Brown fled. Mr. Brown's second criminal charge for a sexual offense occurred when he was 22 years of age. He reported that he had just gotten off work and was walking home when he came across the victim, a 19-year-old woman walking through a park. Mr. Brown was cutting through a park when he saw the victim (also a stranger) and ran up behind her to catch up with her. He engaged her in casual conversation; the victim quickened her pace and responded tersely, stating that her boyfriend expected her home. Mr. Brown then grabbed the victim and tried to kiss her. She resisted, and both fell to the ground. Pinning her down, Mr. Brown forced off the victim's lower clothing and forced vaginal intercourse. After a few minutes, he got up and asked her if she was interested in dating him; when he let his guard down, the victim ran to safety and later reported the incident to the police. Mr. Brown received a 4-year sentence for this matter and was paroled after serving 3 years.

Mr. Brown's most recent sex offense occurred against a 63-year-old woman from whom he was renting a basement suite. According to official documentation, the victim went downstairs to retrieve an item and came across Mr. Brown, who was wearing one of her dresses. Mr. Brown grabbed the victim and punched her in the face and stuffed a shirt in her mouth, covering her face so that she could not scream. A 64-year-old male acquaintance of the victim was upstairs watching television during the assault. Mr. Brown forced the victim on the bed, smothering her, and forced off her top layer of underclothing. The victim managed to gasp out a scream, and, alerted by the commotion, the male acquaintance came downstairs to the victim's aid. Mr. Brown attacked the man, punching him several times in the face. During the commotion the victim fled to safety and contacted the police. The police apprehended Mr. Brown shortly thereafter nearby the residence.

Mr. Brown received a score of 14 on the VRS-SO static items given that he has three unrelated victims (all adult females), two prior sexual convictions, and six total prior sentencing occasions (including his prior nonsexual assault and property crimes). He was under 20 years of age when he was charged for his first sex offense and would be 33 years old if released at the expiration of his sentence.

Pretreatment Dynamic Item Ratings and Relevant Case-Related Information

A detailed assessment was completed on Mr. Brown, which included two 3-h clinical interviews and drew on past treatment reports, psychological assessments, and other collateral documentation (e.g., victim impact statements, court transcripts, police reports).

[1]The following are Canadian Court cases in which the VRS-SO has been explicitly mentioned in the judicial disposition as an instrument used by an expert witness to complete a psychological risk assessment that was accepted as part of expert testimony in court. These are Dangerous Offender or Long-Term Offender hearings held in Court of Queen's Bench for Saskatchewan (SKQB):

R. v. Brass, 2009 SKQB 360 (CanLII) Par. 290–292

R. v. E.D., 2006 SKQB 498 (CanLII) Par. 34, 64

R. v. I.N.H., 2004 SKQB 402 (CanLII) Par. 7

R. v. C. (G.), 2001 SKQB 2 (CanLII) Par. 70

[2]Although based on an actual case, essential identifying characteristics have been changed to preserve anonymity.

In terms of relevant historical information, Mr. Brown reported that his parents divorced when he was very young; although he lived with his mother during his early childhood, he was placed in foster care at age 10. Mr. Brown reported that his mother worked late nights in a bar and at times brought home strange men. He also reported having been fondled by an uncle when he was age 8 and having witnessed his mother engaging in sexual activity with her various partners at home. He reported that he began to masturbate in his mid-teens to fantasies of female peers as well as pornography.

Mr. Brown stated that he got mixed up with the "wrong crowd" in school, smoking marijuana and drinking on weekends, and was involved in minor property crimes. He reported that his first consenting sexual encounter occurred at the age of 16 with a 17-year-old girl he knew from school who hung out with his peer group. His school record was patchy at best, and he quit school in grade 10. Most of his jobs were unskilled labor in fast-food restaurants, and he had experienced bouts of unemployment. Mr. Brown continued to associate with negative peers and, estranged from his family, became increasingly involved in the drug culture of his city of residence.

Mr. Brown has never been married and reported having mostly short-term relationships that were sexual in nature. Although he denied being physically violent in these relationships, from his descriptions, they were often dominated by interpersonal dynamics that included emotional abuse, jealousy, and possessiveness. Mr. Brown reported that his longest relationship was a live-in relationship that lasted approximately 1 year; however, it ended when his girlfriend informed him she had become pregnant from an affair she was having and left him to be with the other man. It should be noted that Mr. Brown committed his index sexual assault less than a week after the breakup.

Mr. Brown had a rather lengthy history of sexual maladjustment, and near the end of his sex offender treatment at his parent institution, it came to light that he committed at least five more sexual assaults for which he had not been charged. He had also stalked and fantasized about raping other women. He reported that these women were unaware of being stalked, and he simply lacked the opportunity to rape them. These incidents, which are detailed in collateral documents, were largely opportunistic in nature and contained several common elements outlined below.

Mr. Brown reported that he is very easily sexually aroused by heavyset women with buxom builds, and he frequently targeted this type of victim in his offenses. He reported that he experimented a little bit with cross-dressing and, in the past, had stolen women's underwear, which he would use to masturbate. Mr. Brown reported that his most common type of fantasy was engaging in intercourse from behind with a large Black woman wearing stirrups, whom he would slap on the buttocks and make denigrating remarks to. He reported having engaged in sexual activities with approximately 20 prostitutes and had about 15 other consenting sexual relationships prior to his index incarceration. He reported currently masturbating about four or five times a week. He admitted having indulged in fantasies of past victims as well as consenting fantasies involving some female staff, although he stated that more than half of his fantasies were consenting encounters with past partners or with females he saw on television. In contrast, he reported that about 90 % of his fantasies in the community were deviant.

In addition to having deviant sexual interests and preoccupations, very strong indications of compulsive sexual activity, and a lifestyle congruent with sexual deviance, Mr. Brown has a distinct offending cycle. The sexual assaults were typically clumsy, partially premeditated, and frequently opportunistic offenses that occurred in the midst of sexual arousal and emotional dysregulation (e.g., anger, frustration, or feelings of humiliation, perceived rejection, or inadequacy) and were exacerbated by intoxicants. At times, emotional triggers, such as feelings of rejection or frustration, would co-occur with sexual arousal triggered by an accessible and preferred victim with a certain body type. Mr. Brown would resort to whatever means necessary to meet his sexual needs with little concern for the welfare of the victim. At times, he would engage in denigrating remarks to the victim (e.g., calling her "bitch" or "whore") and then, strangely, engage in conciliatory gestures afterward toward the victim.

Prior to his current incarceration, Mr. Brown lived a marginalized and dysfunctional lifestyle, with nonexistent prosocial associates and support and in the presence of substance abuse, unstable relationships, and unhealthy sexual outlets. He held disparaging views toward women and had pervasive attitudes of sexual entitlement. For Mr. Brown, the philosophy of his sexuality seemed to be one of "I want, I take," irrespective of others' well-being.

As mentioned above, Mr. Brown completed an 8-month treatment program. However, his continued masturbatory fantasy life and what seemed to be occasional preoccupations with female staff suggested the presence of important offense analogue behaviors that suggested he had made little change and was largely still in the Precontemplation stage of change on most of his criminogenic needs. According to collateral reports from his parent institution, Mr. Brown became jealous of the attention that one female therapist would provide to other patients, eventually accosting her and saying accusatorily, "You women are all alike." Staff expressed concerns that Mr. Brown's preoccupation with, and jealousy around, certain female staff was a quasi-stalking behavior akin to that displayed with his victims in the community. Reports indicate that he was exquisitely sensitive to perceived rejection and that Mr. Brown struggled with emotional dysregulation, being easily triggered and having few resources to self-soothe or otherwise mollify the intensity of negative emotion. Mr. Brown's engagement in the past sex offender programming was inconsistent and marginal at best.

Mr. Brown received a pretreatment VRS-SO dynamic score of 45, with Item 11 (Released to High-Risk Situations) omitted, given that he was now serving a period of civil commitment and his release timeline was very uncertain. He was rated as being in the Precontemplation stage of change on all of his criminogenic needs, given his reluctance to fully engage in programming and to make substantive changes on criminogenic domains. Overall, Mr. Brown received a total prorated score of 61.6, placing him in the high-risk range at the 99th percentile compared against a sample of over 300 federally incarcerated sex offenders on which the instrument was developed. In the normative sample, 43 % of offenders scoring in the high-risk range were charged or convicted for a new sex offense within 5 years of their release. In terms of the factor domains, Mr. Brown scored at the 100th percentile on Sexual Deviance, 99.7th percentile on Criminality, and 97.8th percentile on Treatment Responsivity.

Posttreatment VRS-SO Ratings and Case-Relevant Information

Mr. Brown was adjudicated an SVP subsequent to his evaluation. Several months following his adjudication, he completed three phases of a high-intensity sex offender treatment program (SOTP) for SVP-adjudicated offenders over the course of 18 months. In addition to SOTP, Mr. Brown also participated in a DBT skills group and substance abuse treatment and routinely worked with various therapists in individual counseling. Mr. Brown also held some institutional employment working in the hospital kitchen. His attitudes, behavior, emotional functioning, and ultimately risk-related treatment progress are briefly documented, including his VRS-SO risk rating posttreatment.

In terms of targeting his sexual deviance, Mr. Brown participated in group and individual treatment that targeted deviant fantasies and interests. This also included phallometric testing and a polygraph sexual history examination. Mr. Brown disclosed the extent of his sexual offending, both adjudicated and unreported, and completed a detailed sexual autobiography that outlined his deviancy. Mr. Brown kept a masturbation log, monitoring the frequency of deviant and appropriate fantasies as well as the frequency of masturbation. Over the course of treatment, Mr. Brown's reports indicated a decrease in the frequency of deviant fantasies (especially rape fantasies); however, he admitted to occasionally fantasizing about female staff members' "body parts." Mr. Brown has also developed a comprehensive offense cycle detailing the cognitive, behavioral, emotional, and situational dynamics of his sexual offending, namely, his pattern of unstable relationships, deviant sexual preoccupations, response to emotional triggers (e.g., frustration), substance abuse, extreme self-centeredness, and tendency to use sex as coping.

Mr. Brown has done some work in this regard with his distorted thinking. His perceptions of women and sex were highly self-centered and distorted; Mr. Brown has done well to complete group exercises to challenge and confront distorted thinking and to accept responsibility for his sexual assaults. Mr. Brown has begun to develop some understanding of the distorted nature of his thinking around women and his hypersensitivity to perceived rejection, although his encounters with some female staff suggest this is still an area needing continued remediation for Mr. Brown.

Specifically, Mr. Brown has had his ups and downs in treatment. The DBT skills group has enabled him to develop some skills to self-soothe, manage negative affect, and respond appropriately to interpersonal triggers. However, Mr. Brown has struggled with modulating negative affect. According to treatment reports, Mr. Brown has made snide or inappropriate comments to female staff when he feels "sloughed off" or rejected. At other times, he has pushed boundaries with female staff, for instance, asking them personal questions or commenting on their appearance. Mr. Brown reported that he attempts to avoid encounters with female staff to whom he is attracted, but this is difficult to verify nor is it a viable long-term risk management solution.

Some of Mr. Brown's aggressive interpersonal tendencies have decreased, and he was able to manage some important interpersonal triggers. For instance, he became involved in an altercation with another patient in group, and, although this patient also insulted Mr. Brown, he took a time-out and journaled the incident. Other times, however, he was not as positive. For instance, Mr. Brown was caught taking food from the kitchen where he worked; when confronted by a female staff member, he swore and yelled at her. Mr. Brown subsequently lost his job and, rather than taking responsibility for his mistakes, was mired in self-pity. After a successful period as an institutional cleaner, Mr. Brown reacquired his kitchen job in the past 2 months and, recently, received a positive work appraisal.

Mr. Brown had also developed a romantic relationship with a woman he met over the Internet but had never met in person. He had been maintaining telephone contact with her, a prosocial, college-educated young woman who believes that sex offenders can be rehabilitated. The staff voiced some concerns about this arrangement, given Mr. Brown's history of unstable relationships and the unusual manner in which he met this woman. Although the hospital does not allow conjugal visits, they have maintained contact. Mr. Brown stated that it is the best relationship that he has ever had. Specifically, he reported that he has maintained open and respectful communication, was able to disclose and manage his feelings, and has provided his partner with positive emotional support.

Finally, Mr. Brown has been engaging in some release planning and has been working to secure community supports. Specifically, Mr. Brown applied for housing at a community residential treatment facility. The facility is run by a Christian

organization and includes a combination of attending religious services and receiving supportive counseling. The facility is drug- and alcohol-free, and no conjugal visits are allowed. Approved visitors (including romantic partners) can come to attend religious services but then must leave immediately afterward. Mr. Brown has also reportedly rekindled some contact with a sister, who resides in a neighboring county approximately 30 miles from his planned release destination.

Mr. Brown received a posttreatment VRS-SO dynamic score of 39.5. Item 11 (Released to High-Risk Situations) was rated since he had engaged in release planning and would be undergoing an evaluation of his progress for possible conditional release within the next year. Being released to high-risk situations has been a significant criminogenic factor for him in the past, but because he has begun to make changes in this area with the support of his treatment and case management teams, he was given a 2 rating and evaluated to be in the Preparation stage on this item. Mr. Brown's global progress could be construed as one in which he takes two steps forward and one step back. Most of the criminogenic factors are in the Preparation stage of change, which is his predominant stage at this point in his treatment program (see his scoresheet). Although he has made tangible behavioral gains, including the increased use of cognitive and behavioral skills to manage his risk factors, Mr. Brown has also encountered many lapses along the way. He has yet to maintain these positive changes, use his skills over a sustained period of time, and withstand a greater number of challenges and setbacks without lapsing, which are the prerequisites for his further progression along the VRS-SO stage of change metric. His progress, as such, is the hallmark of the Preparation stage of change. As a result, he was rated as being in Preparation on most criminogenic items. Having reduced his overall score to 52.5, Mr. Brown still scores in the high-risk range on the VRS-SO at around the 97th percentile. His scores on the broad factor domains, although lower, are still quite high: Sexual Deviance (94.1 percentile), Criminality (97.8 percentile), and Treatment Responsivity (82.6 percentile). The amount of change that Mr. Brown has made is not trivial, but he still has a long way to go. However, it should be emphasized that Mr. Brown should be able to continue to advance in his treatment, and the trajectory of progress is positive and points toward further risk reduction in the future. Reassessment with the VRS-SO in about 12–18 months is advisable when progress along the stage of change could be further evaluated.

Credentials Required in Using the VRS-SO

We concur with the recommendations by Hare (2003) regarding the appropriate use of assessment tools such as the Psychopathy Checklist-Revised. Questions regarding who is qualified to administer and use an assessment tool "are issues more properly addressed by test publisher, professional organizations and other regulatory bodies, and by informed and competent evaluation in the courts" (Hare, 2003, p. 16). It should be noted that the following are our recommended guidelines for the non-research use of the VRS-SO; special conditions should be assessed by consultation with a knowledgeable professional:

There are two levels of usage for the VRS-SO.

First-Level Usage
Rate the VRS-SO static and dynamic variables using interview and file information, sum the scores, calculate prorated scores, and identify treatment targets, strengths, and treatment readiness using the VRS-SO dynamic variable scores.
First-Level Usage Qualifications:
Possess a post-secondary degree or diploma in an area of social or human services or healthcare studies, such as psychiatric nursing, or other equivalent post-secondary education, plus appropriate training in the use of the VRS-SO. In the absence of such academic background or training, supervision by someone with the appropriate first- or second-level qualifications and experience is required for first-level usage.
Second-Level Usage:
First-level usage plus interpretation of the total VRS-SO pre- and/or posttreatment scores in terms of level of risk in relationship to normative samples, interpretation of any changes in risk, and provision of treatment or other recommendations for decision-making purposes incorporating VRS-SO ratings.
Second-Level Usage Qualifications:
Possess an advanced academic degree in the social, medical, or behavioral sciences such as an M.A., M.Ed., M.S.W., Ph.D., Psy.D., D.Ed., or M.D., and/or have appropriate professional credentials such as registration with the local state or provincial registration body that regulates the assessment and diagnosis of mental disorder, plus appropriate training in the use of the VRS-SO. In the absence of such credentials, supervision by someone with the appropriate second-level qualifications and experience is required for second-level usage.

A qualified person who supervises the assessment should take responsibility for users who do not meet all the above qualifications.

Conclusion

Readers who manage to get to this point (and are still awake!) might already have concluded, without further prompting, that the VRS-SO is a not a simple or cookbook-type risk assessment and management tool that professional or even clerical staff can complete without too much training. This is our view as well, and we do not feel the need to be apologetic

about it. The tool attempts to incorporate under one roof, so to speak, some of the key tasks necessitated by the theory of the psychology of criminal conduct and the principle of effective correctional treatment (vis-à-vis the risk, need, and responsivity principles) with the often elusive and difficult tasks of assessing and quantifying treatment changes and their impact on risk predicated on the stage of change model, all of which are linked to empirical evidence in research. These clinical and risk management tasks are seldom simple and straightforward and require a certain level of clinical skill to navigate. Given that the VRS-SO attempts to capture and quantify the gist of these rather complex and, at times, difficult tasks, a certain level of complexity in the tool is to be expected. It follows that appropriate training in using the tool is also called for.

The tool is theory based as well as empirically driven and validated; it is not a tool that was totally empirically derived and thus devoid of any overarching theoretical framework. The theory of the psychology of criminal conduct, the RNR principles, the TTM-SOC model for assessing treatment change, the cognitive-behavioral and relapse prevention approaches in intervention, and acceptable practices in risk assessment developed over the last few decades are all subsumed within the tool. Validation of the tool through research is progressing. Those who subscribe to the above theoretical premises should find the conceptual framework of the VRS-SO quite familiar, whereas those who subscribe to different theoretical models to guide their approaches to correctional assessments and interventions, or those who prefer an atheoretical approach to risk assessment, may find the tool less relevant to their practice. This is not unexpected. We do not try to be all things to all people but would rather be guided by our reckoning of what the theoretical and empirical literature deems to be effective and efficient practice in this line of work.

VRS:SO Score Sheet ©

Name: Mr. K. Brown
Client #: _____
Pre-Treatment Rater: Dr. B. Johnson
Pre-Treatment Rating Date: 2007/03/24
Post-Treatment Rater: Dr. R. Jones
Post-Treatment Rating Date: 2009/10/18

Static Factors

Risk Factor[1]		Codes	Score	I or N
S1	Age at Time of Release	Under 25 years 25 to 34 years 35 to 44 years 45 years or older	3 (2) 1 0	
S2	Age at First Sexual Offense	Under 20 years 20 to 24 years 25 to 34 years 35 years or older	(3) 2 1 0	
S3	Sex Offender Type	Mixed (both adult and child victims) Child molester (child victims only) Rapist (adult victims only) Incest (related victims predominantly)	3 2 (1) 0	
S4	Prior Sexual Offenses	4-4+ prior arrests/charges/convictions for a sexual offense 2-3 prior arrests/charges/convictions for a sexual offense 1 prior arrests/charge/conviction for a sexual offense No prior arrests/charges/convictions for a sexual offense	3 (2) 1 0	
S5	Unrelated Victims	4 or more unrelated victims 2-3 unrelated victims 1 unrelated victim No unrelated victims (related victims only)	3 (2) 1 0	
S6	Number and Gender of Victims	2 or more male victims & any number of female victims 2 or more female victims ***or*** 1 female and 1 male victim 1 male victim only 1 female victim only	3 (2) 1 0	
S7	Prior Sentencing Dates	11 or more prior sentencing occasions 5-10 prior sentencing occasions 2-4 prior sentencing occasions 0-1 prior sentencing occasions	3 (2) 1 0	
Total Static Factor Score		**Before Treatment**	14	
		After Treatment	13	

1 If it is necessary to omit a Static or Dynamic Factor, the rater should indicate whether the omission is because there is insufficient information (I) or because the item is not applicable (N).

For Stage Of Change:
P/C = PreContemplation/Contemplation
P = Preparation
A = Action
M = Maintenance

Use these symbols to indicate the Stage of Change:
O = Pre-treatment
X = Post-treatment

# of Stages changed:
no change = 0
1 stage = .5
2 stages = 1.0
3 stages = 1.5

DYNAMIC FACTORS AND TOTAL SCORES

	RATINGS										
	Pre-Tx *(a)*	**F 1**†	**F 2**	**F 3**	**Stage of Change**††	**# of Stages changed x .5** *(b)*	**Post-Tx** *(a-b)*†††	**F 1**	**F 2**	**F 3**	**I or N**
D1 Sexually Deviant Lifestyle	0 1 2 (3)	3			(P)/C X A M	1.5 1 (.5) 0	2.5	2.5			
D2 Sexual Compulsivity	0 1 2 (3)	3			(P)/C X A M	1.5 1 (.5) 0	2.5	2.5			
D3 Offence Planning	0 1 2 (3)	3			(P)/C X A M	1.5 1 (.5) 0	2.5	2.5			
D4 Criminal Personality	0 1 2 (3)		3		(P) X P A M	1.5 1 .5 (0)	3		3		
D5 Cognitive Distortions	0 1 2 (3)			3	(P)/C X A M	1.5 1 (.5) 0	2.5			2.5	
D6 Interpersonal Aggression	0 1 2 (3)		3		(P)/C X A M	1.5 1 (.5) 0	2.5		2.5		
D7 Emotional Control	0 1 2 (3)				(P)/C X A M	1.5 1 (.5) 0	2.5				
D8 Insight	0 1 (2) 3			2	(P)/C X A M	1.5 1 (.5) 0	1.5			1.5	
D9 Substance Abuse	0 1 2 (3)		3		(P)/C X A M	1.5 1 (.5) 0	2.5		2.5		
D10 Community Support	0 1 2 (3)		3		(P)/C X A M	1.5 1 (.5) 0	2.5		2.5		
D11 Release to High Risk Situations	0 1 X 3			N	(P/C X A M)	(1.5 1 .5 0)	2			2	N
D12 Sexual Offending Cycle	0 1 2 (3)	3			(P)/C X A M	1.5 1 (.5) 0	2.5	2.5			
D13 Impulsivity	0 1 2 (3)		3		(P)/C X A M	1.5 1 (.5) 0	2.5		2.5		
D14 Compliance with Community Supervision	0 1 (2) 3		2		(P)/C X A M	1.5 1 (.5) 0	1.5		1.5		
D15 Treatment Compliance	0 1 (2) 3			2	(P)/C X A M	1.5 1 (.5) 0	1.5			1.5	
D16 Deviant Sexual Preference	0 1 2 (3)	3			(P)/C X A M	1.5 1 (.5) 0	2.5	2.5			
D17 Intimacy Deficits	0 1 2 (3)				(P)/C X A M	1.5 1 (.5) 0	2.5				
Total Dynamic Factor Score →	Pre-Tx: 45	Factors: 1	2	3	**Total Dynamic Factor Score →**		Post-Tx: 39.5	Factors: 1	2	3	
		15	17	10.7 (pro)				12.5	14	7.5	
Total Static Factor Score From Previous Page →	14				**Total Static Factor Score From Previous Page →**		13				
Total Static + Total Dynamic Factor Score →	61.6 (prorated) High Risk				**Total Static + Total Dynamic Factor Score →**		52.5 High Risk				

Indicate if Clinical Override was used: **Yes** ❑ **No X**

† To calculate scores for Factors 1 (Sexual Deviancy), 2 (Criminality), & 3 (Treatment Responsivity): Place Pre-Tx score in the corresponding shaded box to the right (Note: D7 is excluded). Tally each column (F1, F2, F3) and enter total score in appropriate box.

†† For treatment purposes, specify whether the client is in PreContemplation or Contemplation stage by circling (O) or marking (X) the 'P' **or** 'C' stage for pre- and post treatment, respectively.

††† If there is a deterioration during treatment, 'b' score is added to 'a' score for the corresponding Dynamic Factor.

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Structured Professional Judgment: Applications to Sexual Offender Risk Assessment and Management

Caroline Logan

Introduction

The ultimate purpose of risk assessment is to prevent future harmful conduct such as sexual violence in those with a history of such conduct, i.e., convicted sexual offenders. Whether the risk assessment process involves the quantification of harm potential or the generation of structured professional judgments about the risks posed, the objective is to take action informed by the assessment—risk management strategies, collectively referred to as a risk management plan—which will ensure that the feared outcome does not happen. The ultimate goal of prevention is not disputed. However, the methods used to prepare assessments of sexual violence risk have been the subject of much and sometimes heated debate in the last 10–20 years. Risk assessment and the means by which assessment findings can inform risk management planning in continuous action towards harm prevention are the focus of this chapter. Several different approaches to risk assessment will be mentioned, but the emphasis of this chapter is on the Structured Professional Judgment (SPJ) approach specifically. This approach lends itself to the needs of practitioners working directly with clients who are at risk of sexually harmful conduct (Hart & Boer, 2010). It is to this group of professionals whose engagement with their clients can be long-term and focused on risk management that this chapter is primarily directed.

The chapter will begin with a brief overview of the task of clinical risk assessment and management. As will become clear, the SPJ approach emphasizes the importance of *understanding* the risks posed by individual clients. Therefore, the chapter will go on to describe the SPJ approach to risk formulation, an essential process that links risk assessment with risk management via an understanding of the function or purpose of sexual violence for the individual. The structured professional judgment approach will then be illustrated through a description of the development and application of the *Sexual Violence Risk-20* professional guidelines (SVR-20; Boer, Hart, Kropp, & Webster, 1997) and the more recent structured professional guidelines known as the *Risk for Sexual Violence Protocol* (RSVP; Hart et al., 2003). A case study will be provided to illustrate the main features of the SPJ approach to working with sexual offenders. The chapter will end with a set of practice recommendations and suggestions for future research into sexual violence risk assessment and management using the SPJ approach.

Risk Assessment and Management in a Nutshell

In the last 20 years, since the development of a number of standardized measurement guides, the practice of clinical risk assessment has advanced a great deal. Such guides—also known as risk assessment instruments or tools—are based on research identifying the variables most frequently or strongly associated with the harmful outcome of interest (Otto & Douglas, 2010). For example, a history of deviant sexual arousal is very strongly associated with sexual violence recidivism (e.g., Hanson & Morton-Bourgon, 2009). Consequently, deviant sexual arousal is a risk factor for sexual violence recidivism in several sexual violence risk assessment guides (e.g., the SVR-20 and the RSVP). Essentially, risk assessment guides provide lists of risk factors that the relevant research has suggested are associated with the specific outcome to be prevented. Guides vary in content based on the outcome they are intended to prevent (e.g., violence, stalking, domestic violence, sexual violence, suicide, and so on) and on the research selected to justify the inclusion of individual risk factors and, if applicable, the weight given to each. Practitioners are required to examine their client in relation to all the risk factors listed in the risk

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assessment guide they have elected to use and to denote through a rating whether the factor is present or not, and if present, the extent to which it is present (e.g., partially, definitely).

Once all risk factors have been examined, some form of risk estimate or judgment—generally an indication of level of risk, expressed as high, medium/moderate, or low risk—is then derived. This risk estimate may be based on the number of risk factors present in the client's past or recent history; scores given to present risk factors are summed and the total score related to a level of risk derived from data from similar others (e.g., recidivist sexual offenders) measured on the same risk factors. Thus, clients who have many risk factors that the research suggests are also present in recidivist sexual offenders are regarded as more likely to reoffend (their risk estimate may be medium or high) compared to those who have only a small number of risk factors in common with recidivist offenders (their risk estimate may therefore be low).

An alternative way of deriving a risk estimate or judgment is to make a structured professional judgment about the individual's potential to be harmful in the future based on an appraisal of all the present factors. This judgment may be structured very simply by the professional appraisal of the risk factors that are present—the judgment of high, medium, or low risk is deduced from the pattern of risk factors identified and the significance given to them by the practitioner undertaking the assessment (Douglas, Webster, Hart, Eaves, & Ogloff, 2001; see also Pedersen, Rasmussen, & Elsass, 2010). However, the risk judgment can be more substantially structured by involving a formal process of formulation (Hart & Logan, 2011; Logan, 2014), which organizes the information derived about prior harmful conduct into an explanation for why it happened as it did and when, therefore identifying the circumstances in which it could potentially happen again. In such structured formulations, risk estimates or judgments (high, medium, or low risk) are in fact obsolete because what is prepared is a plan of action for continuously monitoring risk and adjusting risk management. This latter process is structured professional judgment at its most refined.

As stated above, the ultimate goal of risk assessment is the prevention of harmful outcomes. The very act of doing a risk assessment heightens the awareness of practitioners about the possible risks posed by an individual client. It also demonstrates to others that risk has been considered; it forms evidence of attention to risk in the event that disaster does happen and the post-incident review or subsequent litigation proceedings search for oversights and omissions on which to blame the un-prevented offense. However, risk assessments that produce risk judgments based on summed scores or an appraisal based on the risk factors that are present have at least a broad link to risk management. Assessments generating conclusions about level of risk—high, medium, or low—imply a volume of risk management, although not necessarily its focus. Therefore, sexual offenders judged to be at a high risk of reoffending are likely to receive more restrictive risk management interventions (e.g., imprisonment) than those rated with a low risk of sexual reoffending.

In many circumstances, this blunt matching of risk assessment findings to risk management interventions is all that is required, such as where a practitioner is asked to offer an opinion to the Court about level of risk in order to inform sentencing. However, there are many circumstances where a closer link between risk assessment findings and risk management interventions is required; for example, where a practitioner in a prison or forensic mental health facility is required to engage with a convicted sexual offender to understand and address specific relevant risk factors as a condition of the offender's release from detention and subsequent monitoring in the community. The latter form, which produces a formulation of past harmful conduct and future potential to harm, requires a detailed evaluation in which assessment findings are linked directly to often long-term prevention strategies, namely risk management. This is structured professional judgment, and it is to this topic that we will now turn.

Structured Professional Judgment

SPJ risk assessment and management is a form of evidence-based practice that has its roots in clinical medicine. Evidence-based practice is defined as "the conscientious, explicit, and judicious use of current best evidence in making decisions about the care of individual patients" (Sackett, Rosenberg, Muir Gray, Haynes, & Richardson, 1996, p. 71). This is now a very popular form of practice, which has been likened to a "revolution … [asserting] the supremacy of data over authority and tradition" (Patterson, 2002, p. 71). Evidence-based practice in health services is generally exemplified by the production of clinical guidelines which synthesize evidence relevant to specific topics for practitioners to refer to in order to ensure their practice is informed by the most recent research findings and techniques (Logan, Nedopil, & Wolf, 2011). Evidence-based practice carries a great deal of moral authority (Tanenbaum, 2005); Why would one wish to practice in a way other than that recommended by the evidence and reproduced by our peers in the form of guidelines? However, while the supremacy of evidence-based practice is not disputed, the form of the clinical guidelines into which it is translated is.

Evidence-based practice in risk assessment and management may be defined as "the process of gathering information about people in a way that is consistent with and guided by the best available scientific and professional knowledge to

(a) understand their potential for engaging in violence against others in the future and (b) determine what should be done to prevent this violence from occurring" (page 85, Hart & Logan, 2011). SPJ tools, such as the RSVP, are a form of guided professional judgment (Hart & Logan, 2011). SPJ risk assessment guides are the translation of relevant evidence into a practice instrument, a tool for understanding the harmful potential of an individual client in order to prevent that potential from being realized. A number of tools have been produced to support this practice, the most well known of which is the HCR-20 (Douglas et al. 2013; Webster, Douglas, Eaves, & Hart, 1997). However, the RSVP and SVR-20 are also SPJ tools as are the *Spousal Assault Risk Assessment Guide* (SARA, Kropp, Hart, Webster, & Eaves, 2001), the *Structured Assessment of Violence Risk in Youth* (Borum, Bartel, & Forth, 2002), and the *Stalking Assessment and Management Guide* (Kropp, Hart, & Lyon, 2008). These guides have been available for some time—the SPJ process underpinning them has only more recently been exemplified (Douglas et al., 2013; Hart et al., 2003).

Operationalizing SPJ in Risk Assessment and Management

The application of SPJ guidelines for risk assessment and management involves six discrete steps. In the first step, information is gathered from a variety of sources, including the client, if he or she chooses to collaborate in the assessment. The information gathered pertains to the past offending behavior and lifestyle of the client; its identification is prompted and its interpretation is framed by the risk factors described in the guidelines. In the second step, practitioners determine the extent to which each of the risk factors identified in the guidance being used are present in the client. In the third step, practitioners determine the extent to which, in their opinion, those risk factors that are present are also *relevant* to the client's potential to be harmful again in the future. For example, one client may only have committed his or her offenses in the context of substance abuse, making substance abuse both present and potentially relevant to any future offending. However, another client may have a history of substance abuse, but his or her offending post-dates that experience and is not relevant to future potential. A risk factor can, therefore, be present in a client's history but not be relevant to offending behavior. This critical judgment of relevance is what is required at this step.

In the fourth step, the risk factors identified as relevant are supplemented by clinical judgments about potential protective factors (e.g., positive attitudes toward treatment and risk management), and all are woven together into a formulation—an understanding—about future potential for harm. This critical step, which directly links risk assessment with risk management, will be described in more detail below. In the fifth step, risk management strategies are identified. Strategies—covering the main areas of treatment, supervision, monitoring, and victim safety planning—are linked directly to the risk formulation derived from the identification of the most relevant risk and protective factors. These strategies—hypotheses for ensuring the prevention of future harmful conduct by the client—are intended to influence the operation of relevant risk and protective factors on overall risk potential, diminishing it in the short-term. Finally, in the last step, summary judgments are made regarding the urgency of action or case prioritization, risks in other areas (e.g., self-harm or suicide, nonsexual violence), any immediate action required, and the date for next case review including reassessment of risk. This is the SPJ process in a nutshell and is illustrated in Fig. 1.

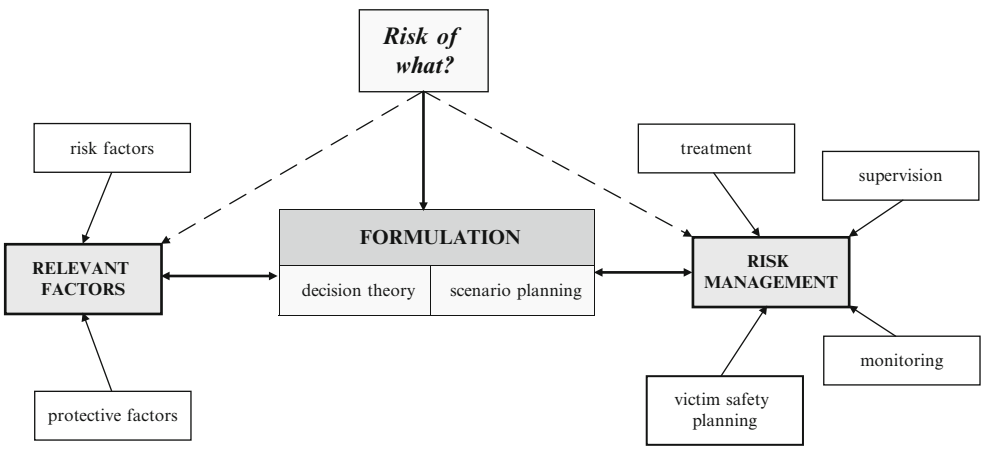

Fig. 1 Structured professional judgement in a nutshell

Risk Formulation

The critical fourth step identified above is that of risk formulation. Clinical formulation is an organizational framework based on theory and evidence used to produce a narrative description that explains the underlying mechanism involved in the development of the presenting problem, which is in turn used to generate hypotheses regarding action to facilitate change (e.g., Bruch & Bond, 1998; Johnstone & Dallos, 2006; Persons, 1989; Tarrier, 2006). Risk formulation is very similar. Risk formulation is an organizational framework for producing a narrative description that explains the underlying mechanism involved in the generation of harmful behavior—in this instance, sexual offending—and for proposing hypotheses regarding action to facilitate change (that is, harm prevention or managed risk). The evidence base for risk formulation is provided by the list of carefully selected risk factors (e.g., deviant sexual arousal) examined in the earlier steps of the SPJ process (Logan & Hird, 2014). The theory underpinning risk formulation is decision theory (Hart & Logan, 2011) supported by scenario planning (Chermack & Lynham, 2002; van der Heijden, 1994), which ensures that the risk formulation is relevant to future harm potential rather than just an explanation for past harm.

What does risk formulation involve exactly? Its starting point is clarity about what is to be prevented—an answer to the question: "Risk of what?" Answering this question is an essential first step because many clients present multiple risks that can have multiple antecedents—offenses against children *and* offenses against adults or sexual violence towards intimate partners *and* sexual violence towards stranger females. Identifying several answers to this question informs the practitioner undertaking the assessment that multiple scenarios will have to be plotted and risk management plans prepared to take all into account. The answer to the question "Risk of what?" is equivalent to identifying the presenting problem(s) or chief complaint that characterizes clinical formulation.

Next, information is collected about risk—and protective—factors, using risk tools as a guide. Those factors thought to be most relevant to a specific client's potential to be sexually harmful again in the future are identified, and the formulation process proceeds in the following way. First, a decision theory framework is used to interrogate the information collected about relevant risk and protective factors in order to determine why the individual made the choice to be sexually violent in the past. The use of decision theory is based on the assumption that individuals make a choice to be harmful, however rapidly that decision is made, that harmful conduct is purposive behavior intended to achieve a goal or goals (Hart & Logan, 2011). The process of making such a choice includes a number of key stages: (1) the idea of being harmful towards another person is experienced consciously and not dismissed; (2) one or more possible positive consequences of being harmful are identified; (3) possible negative consequences are considered and the costs judged to be acceptable or affordable; and (4) options for being harmful are considered and one or more are regarded as feasible and achievable. Finally, a course of considered action is implemented when it is judged that the conditions are right. Therefore, the first part of the risk formulation process is to use the information collected about relevant risk and protective factors to determine *how and why this person made the decision to be sexually harmful before* and to understand the specific roles of factors as motivators or drivers, destabilizers, and (dis) inhibitors in relation to specific harmful acts.

In the second stage, scenario planning is used to project this decision-making process into the future to answer the question: *Under what circumstances could this person decide to be sexually harmful again in the future?* (Hart & Logan, 2011). Scenario planning "is a process of positing several informed, plausible and imagined alternative future environments in which decisions about the future may be played out, for the purpose of changing current thinking, improving decision-making, enhancing human and organization learning and improving performance" (Chermack & Lynham, 2002, p. 366). It is a particularly useful technique to use in situations where there is uncertainty and also a strong need to prepare for all or the most serious eventualities (van der Heijden, 1994), such as in a military operation where the consequences of inadequate preparation and anticipation of problems could be measured in lives lost and serious injuries sustained. Scenarios are descriptions of possible futures; in the case of sexual violence, possible ways in which a particular client might be sexually harmful again in the future given what is known about his (or her) past and current situation and decision-making processes. Therefore, scenarios are not predictions. Instead, they are forecasts based on an understanding of why the client has acted in a similar way in the past. As a consequence of their uniqueness to the client's personal circumstances, preferences, and decision-making, only a limited number of scenarios are likely to be plausible. And it is these scenarios, with their origins laid bare by the evidence-based risk assessment and formulation process, which underpin risk management; treatment, supervision, and monitoring strategies, and victim safety plans are designed to prevent the identified future scenarios from occurring.

Risk Management

Risk management is the action that is taken to prevent potentially harmful outcomes where the nature of those potential outcomes has been speculated about through the

scenario planning process. Risk management strategies for sexual offenders should include direct treatment interventions for offending behavior and conditions linked to offending (e.g., substance misuse), supervision strategies like restricted contact with potential victims and imprisonment, the active monitoring of risk factors through surveillance in the course of supervisory contacts, and victim safety planning in the event that a previous victim could be re-victimized (e.g., the offender's own child) or the offender may come into contact with new potential victims (e.g., a new partner or a female supervising officer). Risk management per se has not been subject to a great deal of research (Heilbrin, 2001); certainly nothing commensurate with the research carried out into risk assessment. This is unfortunate—while it is the case that on the whole, interventions with sexual offenders have had a positive impact on the frequency and severity of offending, it is not yet clear what works best for whom under what circumstances to prevent reoffending. The potential for risk management to exceed the risks presented by the individual is significant, something that is certainly not tolerated in Europe in the age of the European Convention on Human Rights and proportionate legal sanctioning. This situation as regards evidence is only likely to change when the link between risk assessment and risk management processes is better conceptualized. In SPJ, risk management consists of three necessary components—treatment interventions, supervision, and monitoring—and an additional optional component of victim safety planning, which is required when a potential victim of the client can be identified (Hart et al., 2003). Each of these options will now be discussed in turn.

Treatment

Treatment strategies for risk management are those active interventions that are intended to repair or restore deficits in functioning linked to risk. Therefore, treatment strategies are intended to diminish the potency of risk factors linked to harmful conduct and include, but are not limited to, medication for the symptoms of the mental health problems that disinhibit the client, treatment for the substance misuse problem that causes the client overwhelming problems with achieving and appropriately maintaining intimacy, and treatment for the range of interpersonal, cognitive, emotional, and social deficits experienced by many sexual offenders and encapsulated in a sexual offender treatment program. In addition, treatment strategies are intended to enhance the power of protective factors, such as couple therapy to improve the client's capacity to utilize and benefit from social support, and interventions to compensate for cognitive or learning difficulties that limit the effectiveness of other treatments. Broadly, treatment strategies for sexual offenders include psychopharmacological interventions (e.g., anti-psychotic medication, mood stabilizers, anti-libidinals), psychological therapies (e.g., cognitive-behavior therapy for mood problems, cognitive-behavioral interventions for criminogenic needs), and psychosocial interventions (e.g., detention in a therapeutic community or in a setting offering neurocognitive rehabilitation or compensation).

Supervision

In risk management terms, supervision targets the environment or the setting in which the client is currently based or likely to be based in the future in order to limit the potency of risk factors and enhance the effectiveness of protective factors to diminish risk potential. Supervision refers to two types of intervention. First, supervision refers to those restrictions imposed on the client's activities, movements, associations, or communications that are intended to limit his or her access or exposure to the circumstances that could trigger one (or more) of the hypothesized scenarios (Hart et al., 2003). Examples of supervisory risk management strategies include denial of unsupervised access to specific victim groups such as children, a ban on drinking alcohol or drug-taking, residency curfews, restriction orders, non-association lists as part of conditional release requirements, and of course imprisonment, which serves the joint purpose of punishment and restricting access to potential victims. Second, supervisory strategies can also refer to those adjustments—enhancements—to the individual's lifestyle that are intended to improve the effectiveness of protective strategies. Examples of this kind of supervisory strategy include support to secure and maintain suitable paid employment that offers routine, purpose, financial reward, and a social role, as well as regular contact with an understanding person, such as involvement with Circles of Support and Accountability.

Monitoring

Monitoring as a risk management activity is the identification of early warning signs of a relapse to sexual harm, ideally derived from the client through their engagement with treatment and supervision. Monitoring also refers to the preparation and implementation of plans to be vigilant in looking for evidence of the presence of these early warning signs. Such plans would include the actions to be taken to prevent early warning signs from evolving into new offenses like the ones mapped out in the scenario-planning stage. Plans might include recall to prison or an increase in the frequency of meetings with a supervisor. Monitoring strategies are intended to be implemented by the client and by others

(e.g., probation officers, managers of approved premises, etc.), where others will be relied upon more if the client's insight into his or her offending behavior is limited or their motivation to engage is only partial. Monitoring in risk management terms differs from supervision because monitoring focuses on surveillance rather than controlling or managing the client's activities, making monitoring much less intrusive although just as essential.

Victim Safety Planning

Finally, victim safety planning refers to the action that might be recommended to a past or possible future victim of the client in order to keep them safe. The client may have victimized a potential victim in the past but future contact is nonetheless possible or desired by both parties (e.g., an abusing parent and an abused child) or required (e.g., between former intimate partners who have to stay in some kind of contact with one another because they have children together). A potential victim could also be an as yet unknown partner (e.g., a future girlfriend or boyfriend) or provider of treatment or supervision (e.g., a psychologist, social worker or probation officer) who may become victimized when, for example, they make emotional demands on the individual or endeavor to enforce the limitations that were an agreed requirement of conditional release. Victim safety plans could include provision of emergency safety procedures or personal alarms, prohibition of unaccompanied meetings, and so on.

Concluding Comments

SPJ is a guideline for risk assessment and risk management tailored to the needs of individual clients and the practices of the practitioners who work with them, anchored by evidence about the harmful conduct to be prevented. SPJ approaches to risk assessment and management lend themselves to particular kinds of practice settings, such as those in which convicted sexual offenders are subject to treatment and supervision, in institutions or in the community, and to legal settings where risk management is a primary consideration (e.g., Parole Board hearings). Specific risk assessment guides are available that exemplify the SPJ process as described, and it is to those tools that we will now turn.

The SVR-20 and the RSVP

The SVR-20 (Boer et al., 1997) was one of the first of the SPJ clinical risk assessment tools to be published. This instrument was designed to support forensic and clinical practitioners concerned about their sexually harmful clients and intent upon preventing them from being harmful again in the future. In brief, the SVR-20 manual guides practitioners through their evaluation of 20 possible risk factors for sexual violence. The 20 risk factors are listed in Table 1. On the basis of those risk factors that are deemed to be present, especially if they are present currently or recently, the practitioner makes a risk judgment (high, medium, or low risk). This risk judgment, in addition to the risk factors identified as present, is then used to plan and implement action intended to reduce risk or to maintain it at its lowest possible level.

Table 1 Risk factors in the SVR-20 risk assessment guidelines (from Boer et al., 1997)

Number	Risk factor title
Psychosocial adjustment	
1	Sexual deviance
2	Victim of child abuse
3	Psychopathy
4	Major mental illness
5	Substance use problems
6	Suicidal/homicidal ideation
7	Relationship problems
8	Employment problems
9	Past nonsexual violent offenses
10	Past nonviolent offenses
11	Past supervision failure
History of sexual offenses	
12	High density sex offenses
13	Multiple sex offenses
14	Physical harm to victim(s) in sex offenses
15	Uses weapons or threats of death in sex offenses
16	Escalation in frequency or severity of sex offenses
17	Extreme minimization or denial of sex offenses
18	Attitudes that support or condone sex offenses
Future plans	
19	Lacks realistic long-term goals
20	Negative attitude toward intervention

Risk Assessment Using the SVR-20

The SVR-20 defines sexual violence as the "actual, attempted, or threatened sexual contact with a person who is non-consenting or unable to give consent" (Boer et al., 1997, p. 9). This definition allows practitioners to include and prepare to prevent acts of sexual violence that would not necessarily result in a criminal conviction (e.g., a sexual assault by a patient on another patient in a secure hospital facility, which may not result in criminal conviction or even charges). Using the SVR-20, and keeping this definition in mind, practitioners are required to collect information about their client and then to rate him (or her) against descriptions of the individual risk factors identified from the literature by the authors of the tool as of potential relevance to those who engage in repeated acts

of sexually harmful conduct. Individual risk factors are rated on the basis of the extent to which they are *present* in the client, where ratings are either N not present or does not apply, ? is possibly present or present to only a limited extent, or Y the risk factor is definitely present. Practitioners have the option of omitting ratings on individual risk factors if there is a total lack of information to permit a decision concerning presence or absence of a risk factor (Boer et al., 1997). Practitioners are also required to identify whether there has been a *change* in any of the risk factors during the recent past (e.g., 6 or 12 months) where rating options are + (there has been an exacerbation or deterioration in the risk factor), 0 (meaning there has been no change), and − (meaning there has been an amelioration or improvement in the risk factor).

After all the risk factors have been rated, practitioners have the option of adding additional risk factors that they think are important to understanding and managing risk in the individual case. Finally, a summary risk rating is made where the client's risk of being sexually harmful again in the future—high, moderate, or low—is determined on the basis of the number and range of the risk factors deemed to be present. In the SVR-20, high risk is defined as "the individual is at high or very elevated risk for sexual violence" and in urgent need of a risk management plan; moderate risk is defined as indicating that the practitioner thinks the client is at "somewhat elevated risk for sexual violence" and in need of risk management planning; and low risk means the client is "at no risk or very low risk for sexual violence" and not in need of any special intervention or supervision strategies (Boer et al., 1997, pp. 34–35). The summary risk rating is not linked directly to the number of risk factors present or to the sum of numerical values associated with degree of their presence. Indeed, Boer and colleagues acknowledge that the correlation between present risk factors and the summary risk rating may not be linear and depends on specific risk factors or specific combinations among them. Professional experience and judgment are to be utilized to derive the summary risk rating using the range of present (and recently changed) risk factors as a guide.

As regards risk management—what happens next?—communication about the findings of the risk assessment are expected to answer the following questions (from Boer et al., 1997, pp. 20–2):

1. What is the likelihood that the individual will engage in sexual violence if no efforts are made to manage risk?
2. What are the probable nature, frequency, and severity of any future sexual violence?
3. Who are the likely victims of any future violence?
4. What steps should be taken to manage the individual's risk for sexual violence?
5. What circumstances might exacerbate the individual's risk for sexual violence?

Given that risk is dynamic and likely to change as circumstances change, written communications describing the results of SVR-20 assessments are also expected to provide an indication of when reassessments should take place.

The SVR-20 is recommended for use in pretrial and presentence assessments to aid in decisions pertaining to indeterminate detention or risk management, at correctional and forensic mental health intake and discharge, especially if that discharge—or release—is conditional, in family cases where custody or access are an issue, in relation to duty to warn cases, and in critical incident reviews and quality assurance exercises. Practitioners responsible for SVR-20 assessments should have experience conducting individual assessments and expertise in the study of sexual violence. They may use the SVR-20 with males aged 18 years of age or above with a known or suspected history of sexual violence and, with some considerations (Logan, 2008), with adult females.

This is the SVR-20. It is an example of SPJ, but it is a comparatively lightweight representation of SPJ compared with some of the tools that have followed it. For example, there is no consideration given in the SVR-20 to the *relevance* of risk factors—just their presence—or to protective factors, and formulation does not feature at all. Risk management is guided only by the questions listed above, and there is no direct link between risk assessment and any action taken towards risk management. The RSVP was intended to make up that shortfall and to develop the science—and art—of SPJ.

The RSVP

The SVR-20 was developed in the mid-1990s for practitioners involved in the care and management of sexual offenders. Work began on the RSVP only a few years after the publication of the SVR-20 because it was recognized quite quickly that specialists in the assessment and management of those who are sexually harmful may benefit from additional guidance in understanding the risks posed by their clients and in the management of those risks in a transparent, fair, proportionate, and demonstrably effective way. What are the main differences between the two approaches? What is the added value of the RSVP?

First, the RSVP offers additional guidance in the process of assessing and formulating a client with a known or suspected history of sexually harmful conduct and preparing risk management plans linked directly to an understanding of the motivation for his or her previous and possible future sexual violence (Logan & Hird, 2014). This guidance is supported by a 12-page worksheet that steps the practitioner through the entire assessment process (as described above), from information gathering in step 1 to summary judgments

in step 6, the core part of which is illustrated in Fig. 1. Therefore, the RSVP is intended not only to record that a risk assessment has been carried out on a client but to make the practitioner explicit about the process they have engaged in to obtain relevant evidence, derive a formulation based on that evidence including scenarios, and prepare a risk management plan. This makes the RSVP an explicit decision-making aid, which the SVR-20, with its brief one-page worksheet of risk factors, which are just checked and not explained, does less well.

Second, the SVR-20 makes provision for summary risk ratings at the end of the worksheet. These summary risk ratings—of high, moderate, or low risk—are made on the basis of professional experience and judgment and amount to a recommendation of the degree of effort or level of intervention required in the individual case (Hart & Boer, 2010). In the RSVP, summary risk ratings are not made—concerns about the risks posed by a client are not encapsulated by a single word describing a briefly defined level of required intervention. Instead, individual risk is understood through the process of formulation grounded on evidence-based assessment, which in turn structures the risk management plan to follow. This means the RSVP requires more effort to complete—time spent interviewing the client and thinking about the formulation and risk management plan. However, the level of detail in the finished product pays off the effort expended. This makes the RSVP more suitable for clients with whom that degree of effort is both required and available to be exercised. Consequently, the SVR-20 is more suitable for clients with whom more rapid and superficial evaluations are necessary.

Third, the RSVP contains a small number of risk factors that do not feature in the original SVR-20. These risk factors are chronicity and diversity of sexual violence, which add more to understanding about the length, depth, and breadth of sexual violence, psychological coercion or grooming, problems with self-awareness or insight, problems with stress or coping, and problems with non-intimate relationships. Therefore, the RSVP broadens the range of psychological characteristics practitioners are asked to consider, leading to a more comprehensive assessment. A full list of the 22 risk factors described in the RSVP is provided in Table 2.

Fourth, the system for rating risk factors in the SVR-20 and the RSVP is similar in terms of ratings of presence (Y, ?, and N) and recent change (there has been a slight change in these ratings, from +, 0, and − to Y, ?, and N again). However, the RSVP requires additional ratings of *relevance* to be made for each risk factor (Y, ?, and N). The relevance of a risk factor is determined on the basis of its relevance to the cause of future sexually harmful conduct. For example, if a convicted child sexual offender definitely presents with evidence of deviant sexual interest (pedophilia) and there has been recent evidence of his sexual interest in children (e.g., through internet activity or recorded attempts to groom a young child), this risk factor is likely to be highly relevant to this client's risk of future sexually harmful activity towards children. Additionally, the relevance of a risk factor may be judged in terms of its relevance to risk management. For example, if a convicted sexual offender has pronounced psychopathic personality traits, these are likely to be very relevant to the amount of optimism practitioners should have—or not have—about treatment outcomes and the amount of effort they will have to invest instead in supervising the client given that he may be reluctant to tolerate or comply with restrictions on his movements or associations.

Finally, most risk assessments suggest attention be paid to protective factors but have been unclear about how and when this should happen in the assessment process. Throughout formulation and risk management planning, the importance of identifying, understanding, and supporting the role of protective factors (e.g., positive attitudes towards intervention) is emphasized. The RSVP promoted this broadening of attention and later SPJ instruments, such as the *Short-term Assessment of Risk and Treatability* (START, Webster,

Table 2 Risk factors in the RSVP risk assessment guidelines (from Hart et al., 2003)

Number	Risk factor title
Sexual violence history	
1	Chronicity of sexual violence
2	Diversity of sexual violence
3	Escalation of sexual violence
4	Physical coercion in sexual violence
5	Psychological coercion in sexual violence
Psychological adjustment	
6	Extreme minimization or denial of sexual violence
7	Attitudes that support or condone sexual violence
8	Problems with self-awareness
9	Problems with stress or coping
10	Problems resulting from child abuse
Mental disorder	
11	Sexual deviance
12	Psychopathic personality disorder
13	Major mental illness
14	Problems with substance abuse
15	Violent or suicidal ideation
Social adjustment	
16	Problems with intimate relationships
17	Problems with non-intimate relationships
18	Problems with employment
19	Nonsexual criminality
Manageability	
20	Problems with planning
21	Problems with treatment
22	Problems with supervision

Martin, Brink, Nicholls, & Middleton, 2004) and the *Structured Assessment of Protective Factors* (SAPROF, de Vogel, de Ruiter, Bouman, & de Vries Robbé, 2009), have embraced protective factors or strengths with energy and purpose, making them a key component of their assessment procedure.

Do the SVR-20 and the RSVP Work?

There are a number of ways of determining whether the SVR-20 and the RSVP achieve the outcome of managed risk of sexual violence. This section examines the extent to which the two instruments can be used reliably and with validity to assess sexual violence risk and ultimately to manage and prevent it. Note that the facility within the SVR-20 to make summary judgments about risk means there is data available on its predictive validity, and this data will be examined. However, the RSVP is not intended to be used to predict risk in the individual case; therefore, no such data can be summarized. More detail about the nature and findings of studies looking at the reliability and validity of the two instruments can be found in Hart and Boer (2010).

Can the SVR-20 and the RSVP be Used Consistently by Practitioners?

Studies examining the inter-rater reliability of the SVR-20 and the RSVP—a combination of published papers, unpublished research, and conference presentations—report relevant samples (convicted offenders in correctional and forensic psychiatric facilities and in the community, treated, and yet to be treated) of good size—from a sample of 10 reported by Rettenberger and Eher (2007) in Austria and 15 reported by Sjöstedt and Långström (2003) in Sweden to $n=90$ in Watt and Jackson (2008) in a Canadian study and $n=166$ in Hill, Habermann, Klusmann, Berner, and Briken (2008) in Germany.

Single-rater intra-class correlation coefficients (ICC1) for individual items of the SVR-20, rated on the basis of file information only, were reported to be poor (<0.39) to fair (between 0.40 and 0.59) in some studies (e.g., Sjöstedt & Långström, 2003) but good (0.50 to 0.74) to excellent (>0.75) in others (e.g., Pérez Ramírez, Redondo Illescas, Martínez García, Carcía Forero, and Andrés Pueyo (2008). ICC1 values were best for SVR-20 assessments when raters were more experienced or better trained (Sjöstedt & Långström, 2003; De Vogel, de Ruiter, van Beek, & Mead, 2004) or when items were recoded and summed to create section and total SVR-20 scores (Barbaree, Langton, Blanchard, & Boer, 2008; Hill et al., 2008; Rettenberger & Eher, 2007; De Vogel et al., 2004; Watt & Jackson, 2008; Zanatta, 2005).

Data on the inter-rater reliability of the RSVP is more limited and for the present, restricted to as yet unpublished studies. For example, Hart (2003), Watt and Jackson (2008) and Watt, Hart, Wilson, Guy, and Douglas (2006) reported that the inter-rater reliability of RSVP ratings for the presence and relevance of individual items were between "good" (ICC1 reported between 0.50 and 0.74) and "excellent" (ICC1 greater than 0.74), with the majority "excellent." Ratings of domains—clusters of items measuring sexual violence history, psychological adjustment, mental disorder, etc. (see Table 2)—and ratings of case prioritization were also demonstrated to have "good" or "excellent" inter-rater reliability in these studies. However, Sutherland et al. (2012) report less positive findings. In their UK study, inter-rater reliability was "fair" overall with ICC2 values ranging from "poor" to "excellent;" only 30% of items in this study achieved ICC2 values that were "good" or "excellent" (including attitudes that support or condone sexual offending, problems resulting from child abuse, major mental illness, and problems with treatment). In contrast, items with poor reliability were psychological coercion, problems with stress and coping, and problems with planning. The authors were unclear why some items achieved greater levels of inter-rater reliability than did other items, but training (specifically, RSVP training) and professional experience were thought likely causes, as well as the fact that the study utilized comparatively brief case vignettes.

The limited evidence there points to the broadly reliable administration of both instruments with reliability increasing in more experienced raters, and when, for research purposes, items are recoded and summed to create domain and total scores for each instrument. More research is required, however; the more reliable both instruments are—the more that is understood about how to achieve and demonstrate a high level of reliability in the administration of all SPJ guidelines—the more opportunities will become available to demonstrate their validity.

Do the SVR-20 and the RSVP Require Practitioners to Evaluate the most Important Risk Factors for Sexual Violence?

Content validity is the extent to which a measure represents all relevant facets of a given construct. Do the SVR-20 and the RSVP measure all that a sexual violence risk assessment instrument ought to? The two instruments originated in comprehensive reviews of the literature on sexual violence and sexual violence recidivism (Boer et al., 1997; Hart et al., 2003). The reviews were carried out on the scientific, professional, and relevant legal literatures in order to obtain the most comprehensive range of potential risk factors possible that would be of assistance to practitioners undertaking a

range of tasks with the sexual offenders in their care. Items were identified as risk factors if they were associated with various facets of sexual violence and not just risk prediction (e.g., those associated with the nature, severity, frequency or duration, imminence of reoffending, and with risk management, such as more dynamic risk factors). That is, the predictive validity of a characteristic identified as a risk factor was very important but not the only basis upon which a risk factor was identified. This enabled the inclusion of characteristics that are relevant to some but not most sexual offenders (e.g., extreme minimization or denial of sexual violence) and that are relevant to managing risk as well as its assessment (e.g., problems with treatment, problems with management). In addition, existing sexual violence guidelines and risk assessment procedures were reviewed, as were those in other areas of risk assessment (e.g., nonsexual violence risk assessment). It is appreciated that the broad range of items included in the RSVP, and to a lesser extent in the SVR-20, may make the defense of its use problematic in some adversarial settings where risk *assessment* only is the focus. However, the inclusion of such a range of items with relevance to sexual offender risk assessment and management is valuable and indeed essential when they are used in settings where risk *management* is a primary concern.

A preliminary list of risk factors was derived for the SVR-20, a process repeated and extended several years later for the RSVP. Provisional lists were then discussed with professional and academic colleagues and subjected to extensive field-testing. The final contents of the instruments were compared to other professional guidelines for assessing sexual violence risk and other tests, mainly actuarial tests, of sexual violence risk (see Tables 4 and 5 in Hart et al., 2003 for comparisons between the RSVP and other guidelines and tests). The overlap between the SPJ and the actuarial instruments found to be good in terms of item content—many items in actuarial scales feature in the SVR-20 and the RSVP—and the RSVP contained more items besides. Finally, content validity is also evidenced by empirical research that demonstrates the capacity of the SVR-20 and the RSVP to distinguish between groups of sexual offenders, such as recidivists and non-recidivists (e.g., Dempster & Hart, 2002 using the SVR-20; Hart & Jackson, 2008 using the RSVP) and contact versus non-contact reoffenders (McPherson, 2003 using the SVR-20).

Do the SVR-20 and the RSVP Predict Sexual Offending?

There is significant overlap between the SVR-20 and the RSVP and the contents of many other risk assessment guides, and they share a common purpose in trying to prevent future harm. Consequently, correlations among the SPJ guides and between them and the other risk guides available for use with sexual offenders are expected and indeed usually found to be present (see Hart & Boer, 2010). Independently rated SVR-20 and RSVP assessments on the same participants are highly correlated (e.g., Jackson & Healey, 2008), suggesting they are tapping the same constructs. Further, the SVR-20 correlates well with actuarial measures of sexual violence risk and nonsexual violence (Langton, 2003; Rettenberger & Eher, 2007; Zanatta, 2005) and with other SPJ measures of risk (e.g., the HCR-20, reported in Dietiker, Dittmann, & Graf, 2007). Likewise, the RSVP demonstrates good concurrent validity in significant correlations with actuarial sexual offender risk assessment instruments (e.g., Hart, 2003; Jackson & Healey, 2008; Klaver, Watt, Kropp, & Hart, 2002; Kropp, 2001; Watt et al., 2006) (See Hart and Boer (2010) for more details).

While a common purpose is shared between SPJ tools like the SVR-20 and the RSVP and actuarial and other risk assessment instruments, like the Static-99, the *Sexual Offender Risk Assessment Guide*, and the *Violence Risk Scale-Sexual Offender Version* (VRS-SO), they differ in their outcome, making comparisons between the approaches problematic (Douglas & Kropp, 2002; Litwack, 2001). The outcome of the administration of actuarial risk assessment tools is a statement of probability—a guide on the similarity of the individual client to a group of people with a known rate of sexual violence reoffending. Actuarial instruments do not provide predictions of *individual* risk (Hart, Michie, & Cooke, 2007), just comparisons between individuals and groups on the basis of which judgments of individual potential for sexual reoffending might be made. Expert tools like the VRS-SO provide the basis for a more comprehensive evaluation of a client and offer the opportunity to monitor change over time in response to intervention. However, formulation doesn't feature in the use of the VRS-SO, and risk is measured rather than understood. In contrast, the outcome of the administration of an SPJ tool is an improved understanding of the reasons for the individual client's past sexual violence, an acquired understanding about the circumstances in which the same individual may choose to be sexually harmful again in the future, and on the basis of that understanding, the interventions required to encourage the client to make different and less harmful decisions. Therefore, the approaches differ in what they are used for, and direct comparisons of tools in terms of predictive validity are problematic.

Nonetheless, evidence for the predictive validity of the SVR-20 has been reported to be good in some studies (e.g., Hanson & Morton-Bourgon, 2009; Pérez Ramírez et al., 2008; De Vogel et al., 2004) although not all (e.g., Craig, Browne, Beech, & Stringer, 2006; Sjöstedt & Långström, 2003), but generally equivalent to actuarial risk assessments if not better for summary risk ratings (high, moderate, or low risk) and summed total scores (e.g., Dempster, 1998; Hanson

& Morton-Bourgon, 2009)—although substantial variability is evident across the as yet limited number of studies examining this issue. As regards the RSVP, little research has looked at predictive validity because this is not the purpose of this instrument. However, Kropp (2001) and Hart and Jackson (2008) reported final case prioritization to be significantly correlated with sexual violence recidivism, although not with summed RSVP item scores measuring presence-past or presence-recent.

Are the SVR-20 and the RSVP Effective in Preventing Sexual Offending?

In 2002, Douglas and Kropp wrote the following: "Risk assessment can be considered successful when we can demonstrate reduced rates of violence *in connection with risk assessment procedures*" (p.623; emphasis added). Despite empirical and professional support for the SVR-20 and the RSVP as risk assessment guides, it is not yet clear that the use of these tools contributes to reduced rates of sexual violence. However, it is also not clear that the use of any of the established risk assessment tools can demonstrate reduced rates of harm. It is the case that harmful conduct is being prevented every day by the actions of careful practitioners working in correctional, mental health, and community services to moderate risk factors and enhance protective factors with their interventions and support. But what role does the time-consuming and usually compulsory process of risk assessment play in this prevention process? Given that prevention is the ultimate goal and that the vast industry of risk assessment was established to this end, why are we still unable to demonstrate unequivocally that it works, that the effort put into risk assessment makes a difference in and of itself to the frequency and the severity of harmful behavior?

The answer to both these questions would appear to lie in part in the nature and the volume of research carried out into risk assessment linked to risk management—it appears that there is not enough of the right kind of research to demonstrate that risk assessment itself is a valuable process in the enduring task of harm prevention (Douglas & Kropp, 2002). Indeed, Heilbrin (2001) commented that risk management science was around 10 years behind risk assessment science. It appears that little has changed in the years since Heilbrun's observation was published—research into the success of treatment or supervision interventions for offenders, while invaluable, rarely links change to an overarching model of risk assessment and management or comments on the role played by risk assessment per se. (For an exception in the general criminality literature, see Andrews, Bonta, & Wormith, 2006). However, the answer may also lie in the disagreement that persists in the field internationally about which approach to risk assessment is best and the predominance of risk prediction research. Creative research evaluating treatment interventions for offenders alongside models of risk assessment and risk management remains a rarity (see Douglas & Kropp, 2002).

An Illustrative Case

The RSVP advocates the use of clinical skills in assessment and formulation to derive a risk management plan for those at risk of sexual violence. The following fictional case study illustrates the use of the RSVP in order to demonstrate its potential. (See also Logan & Hird, 2014).

The illustrative case describes Mr. Green, who is a 51-year-old gentleman detained in a secure forensic psychiatric hospital. Mr. Green is applying through the mental health courts for permission to be discharged to live in the community. He has been a resident in a forensic hospital for most of the last 23 years. He was transferred to hospital from prison following his fourth conviction for a sexual offense, which happened when he was 28 years of age. All his offenses were committed against adult females, two in their 60s, and two of the victims were known to him previously. His convictions on these occasions were for two counts of rape and two counts of indecent assault. He committed his first sexual offense when he was 15 years of age. In hospital, Mr. Green was diagnosed with a severe personality disorder (his score on the Psychopathy Checklist-Revised is in excess of 25 and he has a clinical diagnosis of antisocial personality disorder), which subsequent treatment was designed to address. He was released from hospital after 14 years of treatment, and he remained in the community for just under 2 years, offense-free. However, in rapid succession, he was accused of two offenses of indecent assault on a girl aged 8 years of age and a boy aged 11 years of age, and, on arrest, he was recalled to hospital. Mr. Green has been in forensic mental health facilities ever since. He denies having committed both of the latter offenses; he says people he owed money to falsely accused him. Mr. Green also continues to grossly minimize the preceding four offenses, which he regards as just misunderstandings between himself and the women involved. He has undertaken minimal structured treatment while in care and no interventions for sexual offending because he denies being a sexual offender. The objective of the present assessment was to assess the risks posed by Mr. Green if he was to be discharged into the community.

Relevant Risk and Protective Factors

The overall framework used for the assessment of Mr. Green's future risk of harm and the preparation of a risk management plan for him was that of structured professional

judgment. More specifically, the *Risk for Sexual Violence Protocol* risk assessment guide (RSVP, Hart et al., 2003) was used to formulate Mr. Green's risk of harm to others. The RSVP requires assessors to gather information from their client and his or her records regarding 22 characteristics that the research indicates are important to consider in individuals with a history of sexual violence. The risk and protective factors identified as most relevant to the client are then woven into a risk formulation, which is an explanation for why and how he or she may choose to be sexually violent in the future.

There follows an account of those factors that appear to *predispose* Mr. Green to violence, those factors that we understand *trigger* individual acts of harm (also known as precipitating factors) and those that *maintain* harm as a potential outcome in this gentleman (also known as perpetuating or maintenance factors). A small number of *protective* factors, characteristics or circumstances that appear to moderate risk, are then described.

Predisposing Factors

A critical risk factor for future sexual offending is Mr. Green's long-standing (*chronic*) and *diverse* history of sexual offending. He has a total of six convictions for sexual offenses stretching from when he was 15 years of age through when he was 43 years of age. He has sexually offended against a pubescent (or pre-pubescent) boy and girl, two adult females, and two older adult females (aged 66 and 72 years), two of whom were known to him while two were strangers, attacking them in their homes (one) and in his home (one), as well as in public places. He has sexually offended very quickly upon release from prison following punishment for his previous sexual offense. All his sexual offenses have involved some degree of *physical coercion*; he has taken what he wanted or needed from his victims when he needed it or thought it was available to him without regard for any effort at psychological coercion or grooming, or for the feelings and safety of his victims. Offending behavior analysis, on the basis of what is known about Mr. Green's offending behavior, suggests at the very least a powerful sexual drive that appears to have been disinhibited by opportunity and possibly also alcohol. Such a long and diverse history of sexual offending raises serious questions about the presence of *deviant sexual arousal*. Deviant sexual arousal can be assessed a number of ways—by an analysis of offending behavior, self-report assessment, and objective assessment. Mr. Green has been subjected to a number of assessments of his sexual interests, none of which have been especially clear in their findings. He denies deviant sexual arousal; examination of witness statements, which might have been helpful, has been restricted because of their unavailability. This is most unfortunate, but the facts of his offending behavior are indisputable, even if the latter two offenses, which Mr. Green denies, were set to one side. Mr. Green's history of sexual offending is significant and relevant to future sexual offending because it creates a precedent that may be hard to alter, despite Mr. Green's many years in institutions, because his insight into his conduct appears minimal, and his tendency to blame others for his misfortune is substantial.

On the matter of Mr. Green's attitude towards his offending behavior, he has a long-standing pattern of *minimizing his sexual offenses if not denying them entirely*. This is a problem because Mr. Green's denial of the latter two offenses against the children means that he is *unsuitable for sex offender treatment*, despite his partial admission of responsibility for two of his previous offenses. Even on the occasions when Mr. Green admitted some responsibility for the sexual offenses of which he was later convicted, he suggested the contact he had with his victims was accidental or exaggerated by them and therefore not his responsibility. Thus, Mr. Green's offending behavior remains unaddressed. Mr. Green's failure to take responsibility is a risk factor, alongside a more general *problem with self-awareness* and *antisocial/psychopathic personality traits* characterized by impulsive and irresponsible behavior as well as a difficulty experiencing guilt because it suggests he is neither motivated to change nor to prevent himself from being harmful towards others in the future. Further, Mr. Green has experienced problems *complying with the conditions of supervision* in the past. This fact supports the presence of a more pervasive problem with rule adherence, which means risk management will require extra safeguards to ensure compliance and therefore managed risk.

Mr. Green denies planning his offenses; he is adamant that they occurred on the spur of the moment or *impulsively*. This emphasizes the point that his awareness of his risk cycle and, therefore, his capacity to intervene to prevent future offenses from occurring is minimal and that he requires assistance to manage his risk of reoffending.

While at liberty, Mr. Green had a *problem with his use of alcohol*. Alcohol has accompanied almost all of his sexual offenses, and he has additional—separate—convictions for alcohol-related crimes. However, Mr. Green denies that alcohol played a role in his sexual offenses or that his drinking was severe—he suggested instead that arrests would follow the detection by a police officer of any scent of alcohol on the breath of a member of the public, in other words, that they were an over-reaction and therefore not serious. This is unlikely to be the case. However, a lack of clarity about the exact role of alcohol in Mr. Green's offending behavior means that it is problematic to be exact about its role as a risk factor.

Finally, Mr. Green has *very limited experience of intimacy*. He has experience of only one relationship in his life,

which was of 3 weeks duration. His ex-partner was a victim of one of his sexual offenses. Problems with achieving, maintaining, and gaining satisfaction from intimacy may be a motivation for sexual offending—difficulties with intimacy may have led to sex being over-valued and to the development of an inadequate range of skills with which to achieve and sustain intimacy. Problems with intimacy—linked to sexual violence—point to more general problems with understanding and meeting his own needs.

Precipitating Factors or Triggers

What appears to trigger a harmful act in Mr. Green? The answer to this question is not at all clear. Mr. Green is unable to state what might have been a trigger to past acts of sexual violence. He denied alcohol was a trigger. He denied any intent to commit sexual assault on any of the occasions on which he was accused. He denied that anything at all might trigger an act of sexual violence in the future—he denied that any such act could possibly occur again. He was unable to tell me why he could be so sure, except that he had decided that it would be so. Mr. Green was unable to tell me what he would do to ensure that he would never offend again. The absence of any clarity about precipitating factors or triggers for past offending behavior, on the basis of which the risk of any future offenses could be managed and such incidents prevented, is a problem because it limits attempts to formulate or understand risk and means risk management will have to be more restrictive in order to try to cover all possible offending eventualities.

Protective Factors

There are several protective factors that appear to be acting to mitigate the risk factors identified above. Mr. Green's involuntary detention in prison and in hospitals has resulted in a comparatively settled lifestyle where he has been able to form stable bonds with peers, engage in pleasurable activities (mainly art), and be given opportunities for treatment. A regular, routine lifestyle has in all likelihood also had something of a stabilizing effect.

Risk Formulation

The following risk formulation is more speculative than is preferable because of the absence of good information about potential triggers to sexual violence; a good enough understanding of Mr. Green's past sexually violent acts does not exist and therefore it is difficult to be confident as an assessor about his future potential to act in a similar way. However, the following tentative formulation may still be proposed.

Sexual violence has been the outcome of Mr. Green spending time in the community since he was in adolescence. Consequently, he has spent very little time at liberty since this formative time of his life. For reasons that are unclear to him—and/or deliberately withheld by him—he becomes reckless with the safety of some of the vulnerable people he encounters either by accident or by design. He is sexually aggressive towards them without regard for their comfort, safety, or their wishes—and he has been persistently so over a 26-year period despite repeated punishment and opportunities for treatment and change. A pro-criminal orientation, a very long-standing reluctance to take responsibility for what he has done or to acknowledge the consequences for himself as well as for others, and more general problems with planning and impulse control (possibly exacerbated by drink) and in achieving and maintaining intimacy with others appear to be the broad drivers of this history. What triggers individual instances of sexual violence—why he chooses to offend against a particular victim at a particular time—appears to be linked in part to alcohol and opportunity. However, other factors are very likely to be relevant—lots of men (and women) have antisocial personality disorder, a history of substance abuse and poor impulse control, but do not sexually offend. Deviant sexual arousal is likely to play an important role then in both creating opportunities and in directing Mr Green's behavior when opportunities arise. The identity of other factors remains unclear, and therefore this formulation is incomplete. Such an incomplete understanding of sexual violence potential has to mean more restrictive risk management in order that responsible authorities can be reassured that risk is being managed.

Future Risk Scenarios

The most likely scenarios for sexual violence in the future could involve Mr. Green being alone in the community (unsupervised) and able to suit himself in terms of lifestyle (including alcohol consumption). Limited insight or concern about risk means he will not be aware of what he needs to do to keep himself safe and others safe from him. An inadequate or incompetent approach to an adult female—possibly because he is seeking comfort or intimacy or sex—could result in conflict because of the victim's fear of his intentions, Mr. Green's fear of being reported, or because of direct harm caused. An accusation of threat or actual sexual assault could arise. An alternative scenario may arise were Mr. Green to make an approach to a child—male or female—possibly because he is seeking sex. This scenario could result in actual harm to the victim or accusations arising from fear

that harm may have been threatened. Such scenarios are likely to be activated when Mr. Green's lifestyle is unstable and he is unsupervised; that is, others are not present to monitor risk on Mr. Green's behalf. While Mr. Green is detained in his current secure facility and in receipt of only escorted leave, he is at very low risk of being harmful towards others—his access to potential victims is limited and his lifestyle subject to close and supportive monitoring.

Treatment Needs

In terms of risk management, treatment needs are defined as treatment (or rehabilitation) strategies designed to moderate risk factors or enhance protective factors; that is, interventions intended to repair or restore deficits in adjustment and functioning that have been linked to sexual violence in the past. Mr. Green has received or been given opportunities to access a great deal of treatment in the last two decades. This treatment may have been effective, but it is disappointing that obvious evidence of successful treatment—increased self-awareness, increased knowledge of risk factors and risk management requirements, the retaining of information about what is effective and what is not—is absent. Mr. Green stated the treatment received has been interesting, but he was unable to recall what lessons he had learned or insights gained and what he had to do differently in the future as a result of these interventions. Thus, treatment needs can be identified, but Mr. Green's capacity to respond to them may be limited. Alternative treatment modalities could be considered—for example, interventions that do not make assumptions about Mr. Green's level of understanding and are better tailored to meet his intellectual level. The following treatment needs have been identified:

- Despite his many years in detention, Mr. Green remains an untreated sexual offender. He is unlikely to engage in this form of intervention now, having been given many opportunities to do so in the past by a number of very skilled and experienced practitioners. In any case, he is consistently regarded as unsuitable for this form of intervention because of his denial of several of his convictions for sexual offenses. In the absence of this specific form of treatment for a very obvious criminogenic need and in the absence of evidence of any motivation to understand the concerns of others and to change his conduct to reduce the possibility of risk factors, especially triggers, Mr. Green has to be regarded as a gentleman who still has the potential to reoffend sexually because a critical risk factor is unchanged despite the many years that have passed since his last conviction. Mr. Green is now 51-years of age. Do his advancing years matter? It depends. Were Mr. Green to have deviant sexual interests—in rape or children—these interests will not diminish much with age despite a decreased level of sexual performance. We are uncertain of the extent to which Mr. Green retains deviant sexual interests and their role in his offending behavior. Consequently, it would be irresponsible to disregard the possibility that they are present and do play a role in offending behavior and conclude that risk is no longer an issue just by virtue of the years that have passed.
- Mr. Green has engaged in alcohol/drug use interventions in the past. However, he was unable to recall any key lessons learned from such interventions. Further work is indicated and he is likely to agree to do this particular kind of work. The target for this work would be his motivation to moderate drinking because of its potential effect on his risk of harm. However, while Mr. Green regards himself as being at no risk to others and to regard the role of alcohol in his past offenses as minimal, this work may be pointless. This intervention would only be warranted if he is to receive unescorted leave at some time in the future.

Supervision Needs

Treatment options for Mr. Green are limited. Therefore, risk management rests substantially on supervision and monitoring activities. In terms of risk management, supervision needs are defined as restrictions on activity, movement, association, or communication that are intended to control risk factors—to limit Mr. Green's opportunity to be sexually violent—as well as enhancements to his lifestyle in the form of structure, boundaries, and role expectations, intended to promote the effectiveness of protective factors. The following supervision needs have been identified.

- Mr. Green's continued detention in a secure facility and his community integration through escorted leave only are the supervision strategies currently being employed to manage his risk of future sexual harm. In the absence of evidence of the effectiveness of treatment, such supervision strategies are critical—they are the only way his clinical team can feel confident that they are managing all the risk factors they think or suspect to be relevant to his potential to be sexually harmful again in the future. Is the deployment of these particular strategies a disproportionate response to the risks posed by Mr. Green? He thinks so. However, in the absence of a clear understanding (formulation) about Mr. Green's motivation to offend in the past and about any possible desire to do so again in the future, and in the face of a significant reluctance on his part to acknowledge the concerns of others, such a comprehensive albeit restrictive response is justified.

Monitoring Needs

In terms of risk management, monitoring needs are defined as those early warning signs that are an indication of a relapse to harmful behavior or any other indicator of a change in risk. Monitoring strategies, therefore, attempt to address triggers to offending, to ensure their early detection and management. In the absence of a good understanding of what has triggered Mr. Green's sexual offending in the past and what might trigger it once again in the future, the monitoring strategies recommended below are somewhat crude and nonspecific.

- Opportunity and alcohol are possible triggers. Therefore, risk is managed if Mr. Green's opportunities to offend are limited, as with his access to alcohol. Monitoring should therefore focus on where Mr. Green spends his time when not subject to supervision if this were to happen. In the event that he continues to remain subject to supervision, as he is now, no particular monitoring strategies are required to manage risk because continued restrictions are effectively managing risk.

Concluding Comments

This section has examined the risk and protective factors that appear to be most relevant to Mr. Green—a fictional illustrative case—and his potential to be harmful again in the future, proposed a formulation—or explanation—for his sexual violence potential, and suggested some hypotheses or strategies for moderating risk, key amongst which is supervision via restrictions on unescorted leave. The recommendation in this case would be for this gentleman to remain in a secure forensic setting. The detail provided in the assessment undertaken is the basis for a justification of this recommendation both to the mental health courts and to the client himself. The process exemplified by the RSVP—structured professional judgment—underpinned this examination.

Practice Recommendations

In this chapter, SPJ has been outlined using the SVR-20 and the RSVP as examples and proposed as a useful model for risk assessment and management in clinical settings where the ultimate goal is harm prevention. SPJ holds promise as a risk assessment and risk management process that provides the level of detail required in some settings, and it is attractive to many practitioners charged with managing the risks of their sexually violent clients in the medium to long term. How can practitioners continue to improve their practice using SPJ?

First, practitioners should be clear about when an SPJ approach would be more beneficial in the risk assessment of a sexually harmful client than an alternative approach, such as the use of an actuarial tool like the Static-99. Where practitioners wish to use an assessment procedure to understand their client, where they have the time and the opportunity to access records—and the client—to ask about their harmful conduct and their decision-making processes leading to harmful conduct in the past, and where they will be required to plan and implement risk management strategies in a transparent, accountable, proportionate way, the use of an SPJ tool to structure their risk assessment is recommended. Where the practitioner requires only a very quick, "ballpark" comparison, between his or her client and a group of people with a known rate of reoffending, and where the practitioner can be confident that his or her client is comparable to that group, an actuarial tool might be helpful if the practitioner ensures that they do not assume risk is being predicted in the individual case and that anchoring bias can be prevented.

Second, ascertain the answer to the question, "Risk of what?" (see Fig. 1) as the first stage in a clinical risk assessment and management evaluation. If the answer to this question is sexual violence, then use the SVR-20 or the RSVP. The manual of the HCR-20 violence risk assessment guide suggests that all sexual assaults should be considered violent behavior (Douglas et al., 2013, p. 69). This is of course true. However, for the purpose of an evaluation specific to the risks posed, if the answer to the question, "Risk of what?" is risk of sexual assault, then a tool that draws the attention of the evaluator to variables with demonstrable relevance to sexual violence is strongly recommended. Reserve the use of the HCR-20 for those clients who pose a risk of nonsexual harm and use the SVR-20/RSVP and the HCR-20 together if the client under scrutiny is at risk of both sexual violence *and* nonsexual violence. In such a case, use the assessment and formulation process to determine what risk—and protective—factors are specific to risk of violence as opposed to risk of sexual violence and what are common to both, and determine what would appear to be the triggers for the different outcomes. Risk management plans can then be tailored to the prevention of a violent and sexually violent outcome.

Third, under what circumstances should the RSVP be used in favor of the SVR-20? The SVR-20 is a comparatively lightweight instrument that takes a somewhat superficial overview of the client and his or her future risk and is therefore valuable for those who are not sexual offender specialists or likely to be involved in sexual offender treatment (Hart & Boer, 2010). The RSVP, in contrast, is a more involved and therefore demanding and time-consuming evaluation process that emphasizes the potential role of

several psychological factors that are not considered in the SVR-20. The RSVP also demands greater attention to risk formulation and to risk management planning, and it does so in a structured way. Select the RSVP if there is time and opportunity to undertake such a detailed assessment, if the practitioner has the skills and experience to accomplish it, and when the purpose of the evaluation is to inform long-term risk management.

Finally, SPJ tools—the SVR-20 and the RSVP—were designed to help practitioners understand their clients and to make useful plans to prevent their future harm. These tools are decision-making aids, the RSVP more so than the SVR-20. The role of formulation is critical to their proper use, and this function should not be overlooked (Logan & Hird, 2014).

Pointers for Future Research

As indicated already, future research must move on from risk prediction studies to studies of risk management processes and the efficacy of treatment and supervision interventions, in particular, based on a cohesive model of risk. SPJ is one such model, but others exist (Hart & Logan, 2011)—the point is that research should test entire models, not just one relationship (e.g., the correlation between a collection of risk factors and a particular event, such as reoffending). In addition, future research has to do better at modeling the work of experienced practitioners—who read files but also interview their clients, often many times and in the course of trying to manage risk—with a view to enhancing their practice within the real clinical world and not recommending excessive or unrealistic assessment goals based on studies of files reviewed by inexperienced graduate students. However, a priority for future research in the risk field is demonstrating a change—ideally a reduction—in rates of violence in connection with risk assessment and risk management procedures. This would show that the huge effort put into risk assessment has an impact on the outcome; such an effort is intended to prevent (Douglas & Kropp, 2002; Hart & Boer, 2010). Without this research, the point of risk assessment is unclear and its future questionable.

Concluding Comments

This chapter began with a brief overview of the task of clinical risk assessment and management, emphasizing the importance of understanding the risks posed by individual clients within an SPJ approach. The SPJ approach to risk formulation was then described, the essential process that links risk assessment with risk management via an understanding of the function or purpose of sexual violence for the individual. The SPJ approach was then illustrated through a description of the development and application of the SVR-20 and the more recent RSVP professional guidelines and with the illustrative case of Mr. Green. The chapter has concluded with a set of recommendations for practice and future research in the area. It will be no mean feat to accomplish the recommendations made. However, progress is essential if the field is to move on from prediction to prevention. The future of risk assessment, its credibility and purpose, depends on it.

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Part III

Management and Public Policy Issues Regarding Sexual Offenders

Models of Sexual Offender Treatment

Pamela M. Yates

Sexual offending is a serious problem that has significant impacts on victims, their families, and society at large and continues to garner increased attention among the public, legislators, and media. This impact and increasing attention has resulted in the development and implementation of interventions designed to reduce the likelihood of re-offending. The availability of treatment programs for sexual offenders has increased dramatically with greater attention to this issue, as has empirical research designed to assess the effectiveness of these interventions. Although there is debate among researchers with regard to treatment efficacy, current best practice involves the application of cognitive-behavioral interventions that target risk and that adhere to specific correctional and clinical principles. Recent meta-analyses (Hanson et al., 2002; Lösel & Schmucker, 2005) have found cognitive-behavioral treatment to be most effective in reducing re-offending in comparison to both other types of treatment and to criminal sanctions. Furthermore, research indicates that treatment is most effective when it adheres to the principles of effective correctional intervention (Andrews & Bonta, 2010) with various types of offender groups (Andrews, Zinger, Hoge, Bonta, Gendreau, & Cullen, 1990; Dowden & Andrews, 1999a, 1999b, 2000, 2003), including sexual offenders (Hanson, Bourgon, Helmus, & Hodgson, 2009). Finally, best practice also includes the use of effective therapists and therapeutic techniques (Beech & Fordham, 1997; Marshall, Anderson, & Fernandez, 1999; Marshall et al., 2002; Shingler & Mann, 2006; Yates et al., 2000). In this chapter, I will review these principles of intervention and describe cognitive-behavioral treatment methods and targets with a focus on two treatment models—the good lives model and the self-regulation model—that have been proposed as alternatives and enhancements to traditional approaches to sexual offender treatment.

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Principles of Effective Correctional Intervention

In their original work, Andrews and Bonta (2010) proposed four principles as essential to ensuring that interventions with correctional populations are effective in reducing re-offending rates: *risk*, *need*, *responsivity*, and *professional discretion*. Although originally intended to apply to sanctions as well as treatment (Andrews & Bonta, 1998), these principles have predominantly been applied in practice to treatment implementation and are collectively referred to as the risk/need/responsivity (RNR) model.

The *risk principle* states that, in order to be maximally effective, the intensity of correctional interventions must be matched to the level of risk posed by the offender, with the most intensive levels of service, including treatment, reserved for higher-risk offenders. Lower levels of intervention, or no intervention, should be applied to lower-risk offenders. More specifically, this principle states that intervention (i.e., treatment and supervision) should be longer in duration, applied more frequently, and include a greater number of treatment hours as levels of risk increase. While there is little direct research with respect to the appropriate duration of treatment and practice varies considerably, the research on both general and sexual offenders suggests a duration of 100–200 h for moderate-risk sexual offenders and a minimum of 300 h for sexual offenders with high risk and high needs. Low risk offenders may not require specialized treatment at all (Hanson & Yates, 2013).

Research indicates that, in addition to being the best use of limited resources (Prentky & Burgess, 1990), treatment is most effective when intensity level is matched to risk (Andrews & Bonta, 2010; Gendreau & Goggin, 1996, 1997; Gendreau, Little, & Goggin, 1996; Gordon & Nicholaichuk, 1996; Nicholaichuk, 1996). Furthermore, research indicates that mismatching risk and treatment intensity can result in

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increased offending, both among higher-risk offenders who receive lower-than-required treatment intensity and among lower-risk offenders who receive higher-than-required treatment intensity (Andrews & Bonta, 2010; Lowenkamp & Latessa, 2002; Lowenkamp, Latessa, & Holsinger, 2006).

The *need principle* states that interventions should target the criminogenic needs of offenders—that is, the specific risk factors that can be changed through intervention and that are associated, both empirically and in individual cases, with risk and recidivism (Andrews & Bonta, 2007). This principle further argues that treatment should not focus on *non-criminogenic needs*—those factors not known to be associated with risk and recidivism—as such a focus is unlikely to impact re-offending. Among sexual offenders, criminogenic needs include such risk factors as sexual deviance and anti-social lifestyle, which represent the two strongest predictors of recidivism among sexual offenders (Hanson & Morton-Bourgon, 2004, 2005), with dynamic risk factors such as intimacy deficits and lack of social supports representing additional factors that have weaker relationships to recidivism (Hanson et al., 2009). Non-criminogenic factors include such areas as self-esteem and personal distress, which have not been found to be associated with recidivism (Hanson & Bussière, 1998).

The *responsivity* principle is concerned with the interaction between the individual and treatment, and it states that treatment should be delivered in a manner that is responsive to various characteristics of the individual, such as language, culture, personality style, intelligence, anxiety levels, learning styles, and cognitive abilities (Andrews & Bonta, 2010). Such factors can affect individuals' engagement with the treatment process and their ability to understand and apply information presented in treatment to their own personal circumstances. According to the responsivity principle, treatment methods should be varied and adapted to an individual's styles and abilities in order to maximize their potential effectiveness.

The principle of *professional discretion* states that clinical judgment should override the other principles if circumstances warrant and allows for flexibility and innovation in treatment under certain circumstances. Because this principle has received comparatively little attention in both research and practice, it is not discussed further, although it is suggested that recent theorizing and developments in sexual offender treatment allow for greater adherence to this principle than has traditionally been the case.

Empirical support for the application of the RNR model to offender populations is strong, clearly indicating the superiority of treatment complying with these principles over criminal sanctions, inappropriate treatment, or unspecified treatment. Specifically, in a series of meta-analyses, treatment adhering to these principles has been found to be effective for offenders in general (Andrews et al., 1990), juvenile delinquents (Dowden & Andrews, 1999a, 2003), violent offenders (Dowden & Andrews, 2000), and female offenders (Dowden & Andrews, 1999b). With respect to sexual offenders, a recent meta-analysis (Hanson et al., 2009) found that adherence to the RNR model was associated with reduced sexual re-offending, with the most significant treatment effect found among treatment programs that adhered to all three principles. Specifically, treatment effectiveness increased as a function of adherence to none, one, two, or all three principles (odds ratios of 1.17, .64, .63, and .21, respectively). Finally, adherence to the RNR principles provides a context within which increased program integrity, organizational adherence to integrity standards, and better staff practice can improve treatment outcomes (Andrews & Dowden, 2005; Dowden & Andrews, 2004).

Despite this strong empirical support, criticisms of the RNR model have been put forward regarding its underlying theory, implications for practice, and lack of scope (Ward & Brown, 2004; Ward & Gannon, 2006; Ward, Melser, & Yates, 2007; Ward & Stewart, 2003). Specifically, it has been argued that, while necessary, the focus in treatment on addressing dynamic risk factors (criminogenic needs) is not sufficient to ensure treatment effectiveness and that it is necessary to broaden the theoretical formulation of the RNR model, its application in practice, and the scope of interventions stemming from the model. In addition, it has been suggested that the RNR model, through its sole focus on risk management, is unable to provide therapists with sufficient tools to engage and work with offenders in therapy or to provide offenders with sufficient motivation to engage in the treatment process (Mann, Webster, Schofield, & Marshall, 2004; Yates, 2009). This is especially important given that sexual offenders tend not to be particularly motivated to participate in treatment (Thornton, 1997). In addition, it has been suggested that the RNR model pays insufficient attention to the importance of the therapeutic alliance in treatment, which has been shown in both general clinical practice and with sexual offenders as essential to treatment and as accounting for a significant portion of the variance in treatment outcome (Marshall et al., 2003; Yates, 2003). This research highlights the importance of attending to non-criminogenic needs such as motivation and low self-esteem, which are important to the treatment process yet not directly concerned with targeting risk. Finally, it has been suggested that the RNR model is often translated in practice in a "one size fits all" manner that fails to take individual needs into account and thus fails to fully adhere to the principles of risk, need, and responsivity (Ward & Stewart, 2003).

Cognitive-Behavioral Treatment

Cognitive-behavioral treatment is currently the most widely accepted model of intervention for individuals who have offended sexually (Barbaree & Seto, 1997; Becker & Murphy,

1998; Freeman-Longo & Knopp, 1992; Grubin & Thornton, 1994; Hall, 1995; Laws, 1989; Looman, Abracen, & Nicholaichuk, 1999; Marshall et al., 1999; Yates, 2002) and has demonstrated the greatest effectiveness in reducing recidivism (Hanson et al., 2002; Lösel & Schmucker, 2005). Treatment within this model is based on behavioral learning models such as classical (Pavlov, 1927) and operant (Skinner, 1938) conditioning, cognitive theory (Beck, 1964, 1967, 1976), and social learning theory (e.g., Bandura, 1986). Sexual offending is viewed as a behavioral and cognitive pattern that has developed and been maintained during development over time via processes such as modeling, observational learning, and reinforcement, resulting in entrenched maladaptive responses, coping mechanisms, and cognitive schema. The focus of cognitive-behavioral treatment is to alter patterns of behavior and cognition that support sexual offending, such as maladaptive or deviant responses, and replace them with pro-social beliefs, attitudes/schema, behavior, and responses. This is accomplished by targeting specific risk factors known to be linked to risk for re-offending.

Briefly, cognitive-behavioral treatment typically involves changing attitudes; altering cognitive distortions and schema; developing effective problem-solving abilities; improving sexual, intimate, and social relationships; managing affective states; reducing deviant sexual arousal; and developing adaptive thinking processes, affect, and behavior (Barbaree & Marshall, 1998; Marshall et al., 1999; Yates, 2002, 2003; Yates et al., 2000). This is typically done via group therapy in which offenders address specific deficits and develop and rehearse new skills and ways of thinking that ultimately result in reduced risk of re-offending. Common treatment targets, matched to established dynamic risk factors (e.g., Hanson, Harris, Scott, & Helmus, 2007), include attitudes supportive of sexual offending, cognitive distortions that facilitate offending, deviant sexual preference and arousal, intimacy and attachment deficits, deficits in sexual and general self-regulation, emotion regulation, and posttreatment follow-up to maintain treatment gains, monitor risk, and allow for the provision of support (Marshall, Marshall, Serran, & Fernandez, 2006; McGrath, Hoke, & Vojtisek, 1998; Wilson, 2007; Yates et al., 2000). Treatment also typically addresses factors such as empathy deficits, accountability or responsibility for offending, and denial. Despite an absence of research suggesting that such factors are associated with risk for re-offending, these areas are included, as they are often considered moderating factors in offending and may interact with other criminogenic needs related to offending. In targeting known risk factors, cognitive-behavioral treatment should incorporate extensive rehearsal because new cognitive and behavioral skills require considerable practice and repetition in order to become well entrenched in the individual's repertoire (Hanson, 1999; Hanson & Yates, 2004). Finally, cognitive-behavioral interventions may be implemented in conjunction with adjunctive therapy, such as pharmacological interventions designed to reduce levels of arousal or to address mental health concerns, or treatment targeting substance abuse problems for those offenders warranting these interventions (Wilson & Yates, 2009; Yates, 2002).

The most common cognitive-behavioral approach used in sexual offender treatment programs has been the relapse prevention (RP) model (e.g., Laws, 1989; Pithers, 1990; Pithers, Kashima, Cumming, & Beal, 1988; Pithers, Marques, Gibat, & Marlatt, 1983). Adapted to sexual offender treatment from the treatment of alcoholics, the original RP model (Marlatt, 1982, 1985) was intended as a posttreatment follow-up program for motivated patients who successfully ceased alcohol use but who experienced difficulty maintaining abstinence. RP was applied to the treatment of sexual offenders and underwent some revisions to adapt the model to this population (Laws, 1989; Marlatt & Gordon, 1985; Marques, Day, & Nelson, 1992; Pithers, 1990; Pithers et al., 1988). Because of its intuitive appeal and likely as a result of a lack of available information regarding the risk of sexual aggression, dynamics of offending, and treatment at that time, the model was unquestioningly embraced as the approach to the treatment of sexual offenders (Laws, 2003; Laws & Ward, 2006; Yates, 2005; Yates & Ward, 2007).

The goal of treatment using RP with sexual offenders is to assist them in identifying and anticipating problems and high-risk situations that could lead to a *lapse*, defined in the original model as a temporary return to the problematic behavior (Marlatt, 1982), and to a *relapse* (i.e., a return to sexual offending behavior) and to teach them a variety of skills to cope with these problems when they arise and to mitigate skill deficits (Laws & Ward, 2006; Marques et al., 1992; Pithers, 1990, 1991). Despite a lack of empirical research supporting its use and problems with the theoretical model (Hanson, 1996, 2000; Laws, 2003; Laws, Hudson, & Ward, 2000; Laws & Ward, 2006; Yates, 2003, 2005; Yates & Kingston, 2005; Yates & Ward, 2007), the RP model gained wide acceptance as a treatment approach for sexual offenders.

The RP model has been criticized for theoretical inadequacies, incoherence, inconsistencies, lack of scope, problematic definitions of its constructs, and practical limitations (Laws, 2003; Laws & Ward, 2006; Yates, 2003, 2005; Yates & Kingston, 2005; Yates & Ward, 2007). Problems with the model include: a narrow view of behavior that does not adequately address the heterogeneity of sexual offenders and the pathways they follow to offending; its reliance on a single pathway to offending; the lack of applicability of core constructs of the model to sexual offenders; an inaccurate conception of sexual offending behavior as identical to addictive behavior; its focus on negative affective states as necessary, sufficient, and essential to the offense process; an

inadequate conceptualization of offense planning; and a nearly sole focus on avoidance strategies to manage risk to re-offend. Two alternative models, the good lives model (GLM; Ward & Gannon, 2006; Ward & Stewart, 2003) and the self-regulation model (SRM; Ward & Hudson, 1998), have been proposed as alternative approaches that address problems inherent in both the traditional RP approach and the RNR model and are described later in this chapter.

Within treatment, in addition to targeting known risk factors associated with risk to re-offend, attention has been paid to the importance of the therapeutic processes and methods by which treatment is implemented (Beech & Fordham, 1997; Hanson et al., 2009; Marshall et al., 1999, 2002; Shingler & Mann, 2006; Yates, 2002; Yates et al., 2000). Research indicates that specific therapist characteristics and techniques, and establishing a positive therapeutic relationship between the client and therapist, account for a significant proportion of the variance in treatment outcome, both among sexual offenders and in general non-offender therapy for such problems as depression, mental health, and addictions (Marshall et al., 1999, 2003).

Creating a positive and therapeutic treatment atmosphere requires that clinicians avoid taking punitive, aggressive, or confrontational styles of relating to the offender, as this leads to increased resistance, argumentativeness, denial, lack of cooperation and compliance with treatment, a negative effect on treatment progress, and premature termination or dropping out of treatment (Beech & Fordham, 1997; Kear-Colwell & Pollack, 1997; Marshall et al., 1999; Miller, 1995). Since research clearly indicates that offenders who do not complete treatment re-offend at significantly higher rates than offenders who complete treatment (Hanson & Bussière, 1998; Hanson et al., 2002), the importance of treatment processes that function to retain offenders in treatment is immediately evident. A variety of therapist characteristics and behaviors have been shown to maximize treatment gains (Fernandez, 2006; Marshall et al., 1999, 2002). These include empathy, respect, warmth, friendliness, sincerity, genuineness, directness, confidence, and interest in the client. An effective therapist is also one who is a pro-social model; who communicates clearly; who is appropriately self-disclosing, reinforcing, encouraging, and non-collusive; who deals appropriately with frustration and other difficulties which offenders present in treatment; who asks open-ended questions; and who is appropriately challenging without being aggressively confrontational. Effective therapists actively listen to their clients, support their clients without being collusive, are open and interested in their clients, hold and express the belief that the client is capable of change, create opportunities for success, motivate the offender to change, and create a treatment atmosphere which is secure for the offender.

Good Lives Model of Sexual Offender Rehabilitation

As indicated above, the RNR model of sexual offender intervention has been criticized as being insufficient and narrow in scope, and it has been suggested that interventions within this model be broadened (Ward, Melser, & Yates, 2007). This broadening of scope would include taking into account the promotion of basic human goods alongside risk management as emphasized in the good lives model (Ward & Gannon, 2006; Ward & Stewart, 2003). A principal criticism of the RNR model has been that the focus on criminogenic needs is a *necessary* but not *sufficient* condition for effective treatment (Ward & Gannon, 2006, emphasis added). Specifically, the model is unable to provide clinicians with sufficient tools to engage and work with offenders in therapy as a result of (a) difficulty motivating offenders by focusing primarily on avoidance goals and risk reduction (e.g., Mann et al., 2004); (b) ignoring the importance and role of personal or narrative identity and agency (i.e., self-directed, intentional actions designed to achieve valued goals) in the change process (e.g., Maruna, 2001); (c) paying insufficient attention to the therapeutic alliance; and (d) failing to acknowledge that human beings naturally seek and require certain goods in order to live fulfilling and personally satisfying lives (e.g., Ward & Stewart, 2003).

While a comprehensive review of the GLM is beyond the purview of this chapter, briefly, the model proposes that, like other human beings, sexual offenders are goal directed and seek to acquire fundamental primary human goods—actions, experiences, and activities that are intrinsically beneficial to individual well-being and that are sought for their own sake. Examples of primary human goods include relatedness/intimacy, agency/autonomy, happiness/pleasure, and emotional equilibrium. The GLM proposes that sexual offending results not from the desire to obtain these goods but from the methods and strategies offenders use to attain these. These maladaptive strategies derive from offenders' backgrounds, developmental histories, and internal and external capabilities to attain these goods in non-offending ways. For example, an offender may desire intimacy but, as a result of discomfort and fear of adults, turns to children to meet this need. The problem, therefore, is not the desire to attain intimacy, but the manner in which the individual attempts to achieve this desire (i.e., with children rather than age-appropriate partners). Viewed this way, dynamic risk factors and criminogenic needs are seen as symptoms or markers of ineffective or inappropriate strategies employed to achieve primary goods or goals. Although this is a very cursory overview of the GLM, this model has significant implications for the treatment of sexual offenders (see below).

It is important to note that the GLM is not a treatment program itself, but represents an overarching rehabilitation framework for the treatment of sexual offenders. While the particular focus in treatment is on the promotion of goods (see below), it is essential that this is done in conjunction with risk management. It is suggested, however, that the addition of a GLM focus to the treatment of sexual offenders will contribute to further reductions in risk and that its inclusion will increase offender motivation and engagement with treatment via increased attention to responsivity needs and the creation of a stronger therapeutic alliance (Ward & Stewart, 2003; Yates, 2009). In fact, although at preliminary stages, research to date indicates that the application of the GLM to a risk-based program improves motivation to participate in treatment, treatment progress, and completion rates (Simons, McCullar, & Tyler, 2008; Yates, Simons, Kingston, & Tyler, 2009) and that good lives constructs are differentially associated with offense characteristics (Yates, Kingston, & Ward, 2009), as well as static risk to re-offend, dynamic risk factors, and sexual offense pathway (Kingston, Yates, Simons, & Tyler, 2009). Thus, initial data support the potential utility of the GLM with sexual offenders.

Finally, the GLM approach is consistent with both the responsivity principle and with effective clinical practice, as discussed above. In order to ensure the inclusion of risk factors and risk management, the GLM has recently been integrated with the self-regulation model (SRM) of the offense process as a comprehensive approach to treatment (Ward, Yates, & Long, 2006; Yates, Kingston & Ward, 2009; Yates & Ward, 2008) that is consistent with the principles of effective correctional and clinical practice with sexual offenders. The SRM is described below.

Self-Regulation Model of the Sexual Offense Process

Alongside the development of the GLM has been the application of the self-regulation model (Baumeister & Heatherton, 1996; Karoly, 1993; Thompson, 1994) to sexual offending (Ward & Hudson, 1998). The SRM began as a nine-stage model of the sexual offense process, developed specifically for sexual offenders, that explicitly takes into account variability in offense-related goals and the manner in which individuals regulate their behavior in order to achieve these goals. Within the SRM, offense-related goals include both the attainment of desired states and outcomes (appetitive or approach goals) and the avoidance of undesired states and outcomes (inhibitory or avoidance goals). The model acknowledges that some sexual offenders may attempt to refrain from offending, whereas others will actively seek out opportunities to offend. In addition, in attempting to achieve these goals, the SRM proposes that individuals demonstrate differences in self-regulation capacity, with some offenders failing to control behavior (*under-regulation/disinhibition*), others attempting to actively control behavior using strategies that are ultimately counterproductive and ineffective (*mis-regulation*), and others having intact self-regulation abilities but holding inappropriate goals, such as the explicit desire to harm others, which motivate offending in the absence of self-regulation deficits.

The original SRM delineates a nine-phase offense progression model that results in four distinct pathways that lead to sexual offending. The nine phases of the offense process are illustrated in Fig. 1 and are briefly described below. For a comprehensive description of the nine phases and four pathways, see Ward and Hudson (1998) and Ward, Bickley, Webster, Fisher, Beech, and Eldridge (2004).

In the SRM, the offense progression is triggered by a life event and resultant appraisal of this event based on individuals' cognitive schema, goals, needs, and implicit theories (Phase 1). The life event may be a major event, such as the loss of a relationship or a job, or it may be a relatively minor event, such as an argument or the presence of a child in the individual's environment. Consistent with cognitive theory, this appraisal is hypothesized to occur relatively automatically, to influence the information to which the individual attends, and to activate entrenched cognitive and behavioral scripts and emotional states (positive or negative) developed during the individuals' lives via their learning experiences and associated with previous offending history. The life event and its appraisal trigger the desire for offending or for behaviors associated with sexual offending (Phase 2). This desire may be explicitly related to sexual offending, as when deviant sexual urges or fantasies are triggered, or may represent a desire to achieve other states that are indirectly related to offending, such as the desire for intimacy, dominance, or the expression or release of anger. In our recent reconstruction of this model (Yates & Ward, 2008), these desires have also been expanded to include goals related to the attainment of primary goods.

In response to the desire to offend, the individual establishes an offense-related goal (Phase 3). As indicated above, individuals may establish an avoidance goal, in which they desire to prevent offending, or an approach goal, in which they work toward offending. At this phase, individuals also evaluate the acceptability of this goal and their ability to tolerate the affective states associated with the desire to offend. The offense-related goal determines the manner in which the individual next proceeds in the offense progression (Phase 4), in which the individual selects strategies that will achieve the goal of either avoiding offending or approaching offending. In selecting strategies, individuals with avoidance goals will implement either no strategies or strategies that they

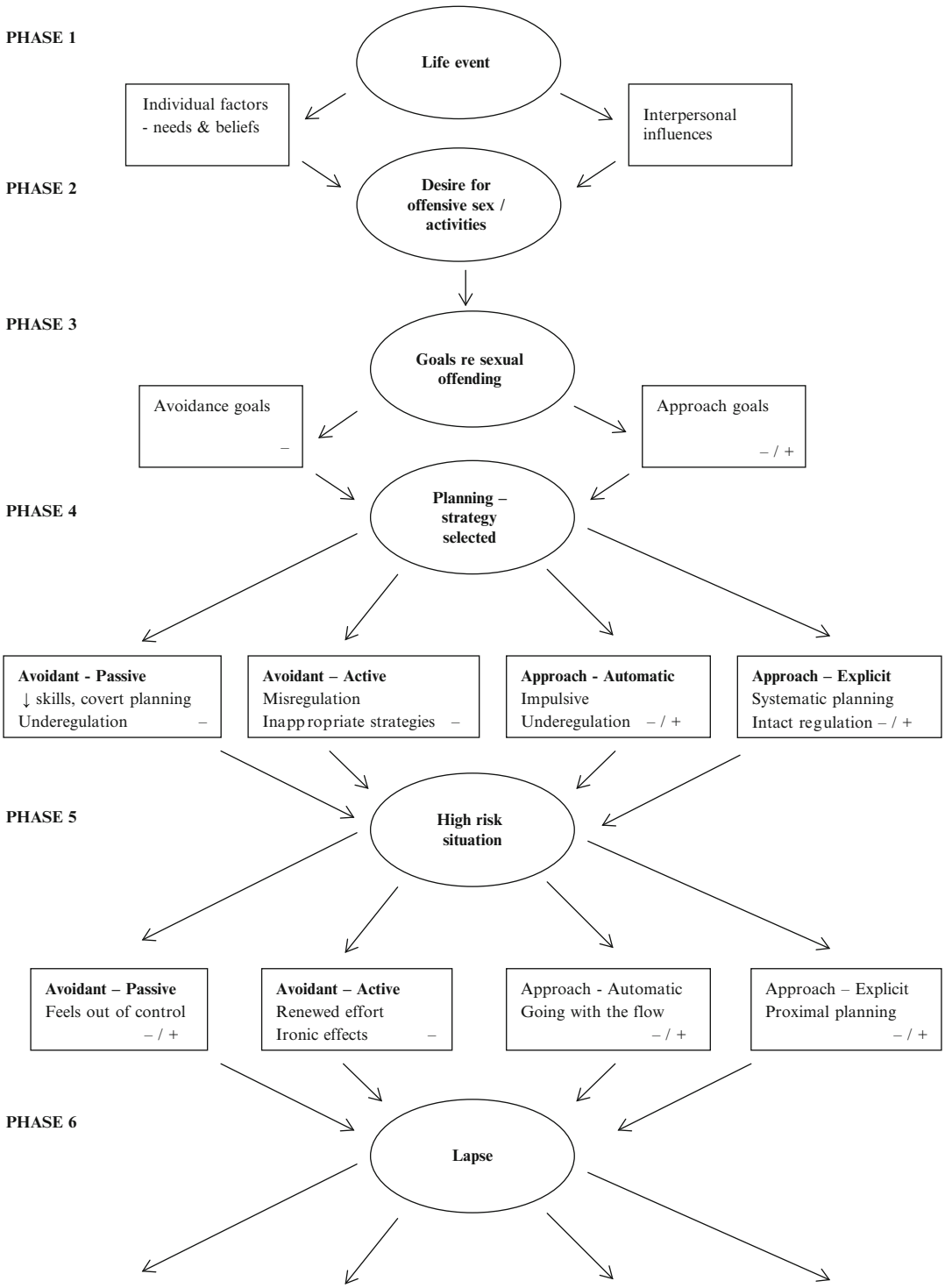

Fig. 1 A self-regulation model of the relapse process [*Note* From Ward et al. (2006), *The Self-Regulation Model of the Offense and Relapse Process. Vol. 2: Treatment* © 2006, Pacific Psychological Assessment Corp. Reprinted with permission]

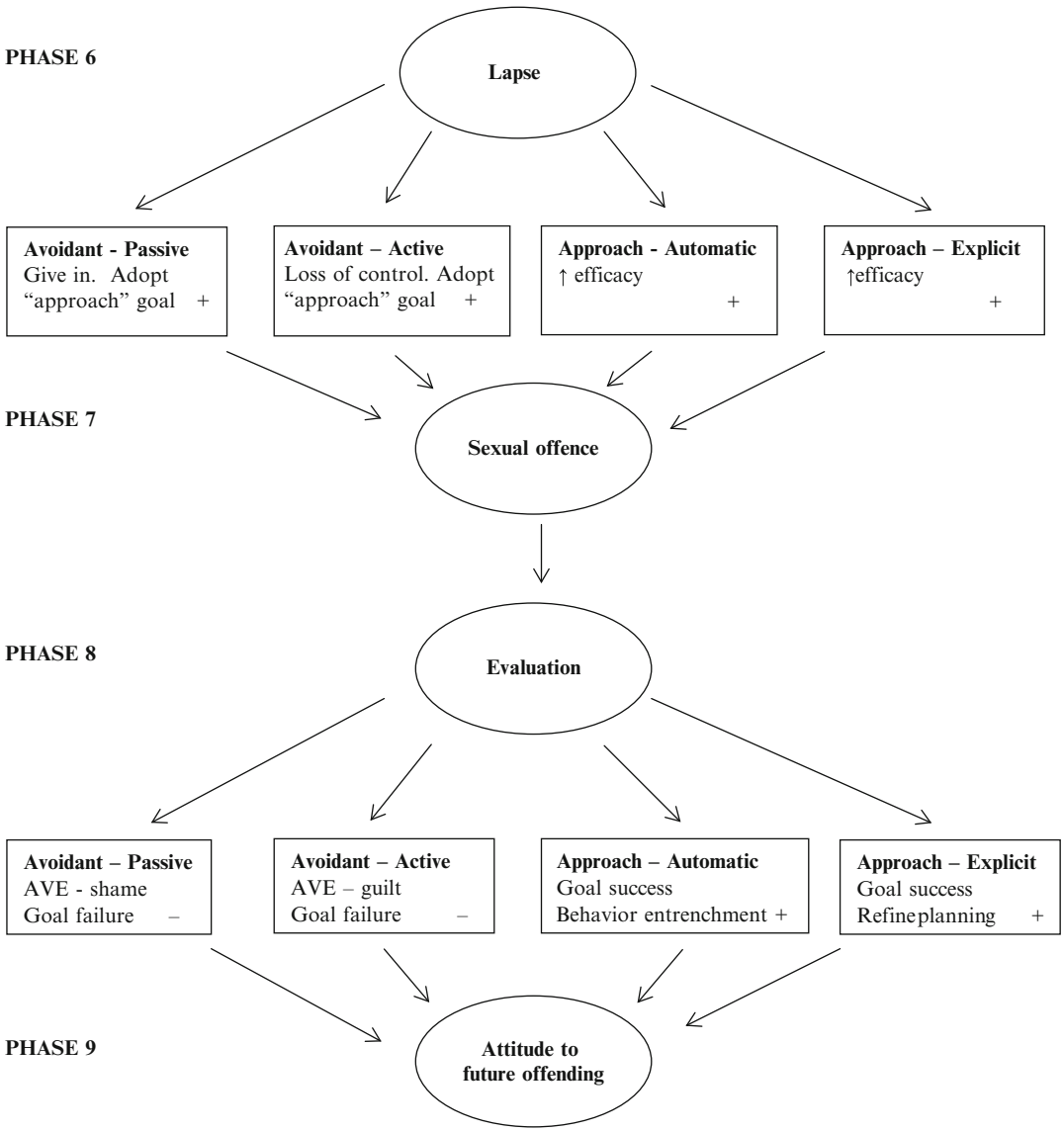

Fig. 1 (continued)

expect will reestablish self-control and that will prevent offending, whereas individuals with approach goals implement strategies that will serve to achieve the goal of offending. The combination of offense goals (Phase 3) and strategy selection (Phase 4) determines the pathway the individual follows to offending (see below).

In the next phase of the offense progression (Phase 5), individuals encounter a high-risk situation, such as access to a potential victim. Depending upon individuals' goals and strategies, such access may be accidental, incidental, or opportunistic or may result from either implicit or explicit planning. The individuals evaluate this situation in light of their offense-related goals and expectations regarding the likely effectiveness of strategies selected to achieve the goals. For individuals holding avoidant goals, this situation signals a failure to control behavior, whereas for offenders holding approach goals, this situation signals progress toward achieving the goal and is an indicator of success.

Once individuals have encountered the high-risk situation, the next phase in the offense progression (Phase 6) is the occurrence of a lapse, defined in the SRM as pre-offense behaviors that are likely to lead to sexual offending. For offenders with avoidant goals, the SRM proposes that, via processes such as cognitive deconstruction and failure to achieve this goal, individuals abandon the higher-order goal (avoidance) in favor of more proximal goals in the immediate situation (e.g., sexual gratification, achievement of intimacy). It is hypothesized that these individuals temporarily switch to an approach pathway, leading to the commission of a sexual offense (Phase 7). For individuals holding

avoidance goals, engaging in lapse or pre-offense behaviors is consistent with their offense-related goals, leading to the commission of the offense.

Unlike other offense process models, the SRM also considers individuals' experiences following the commission of a sexual offense via two post-offense phases during which individuals evaluate themselves and their behavior immediately after the offense (Phase 8) and develop intentions and expectations with respect to future offending (Phase 9). Following the offense, at Phase 8, individuals holding avoidant goals are expected to experience guilt, shame, a sense of failure, and cognitive dissonance associated with the disparity between their behavior (offending) and their goal (to avoid offending). They are likely to attribute the cause of offending to stable, internal, uncontrollable factors, to have cognitive distortions that justify offending based on these causes, and to regard the commission of the offense as a failure experience. Conversely, individuals holding approach goals are hypothesized to attribute their offending behavior to external causes and to have cognitive distortions that place responsibility for offending outside themselves, such as blaming the victim. Individuals with approach goals regard the commission of the offense as a success experience with respect to achieving the offense-related goal.

Finally, the SRM posits that, based on the offense experience and its evaluation, individuals form intentions with respect to future offending (Phase 9). Individuals holding avoidant goals may resolve not to offend again in the future, or alternatively, they may conclude that they lack the requisite skills to prevent offending and, consequently, adopt an approach goal with respect to future offending. Conversely, offenders holding approach goals are reinforced as a result of their "success" in achieving offense-related goals and may use the offense experience to refine offense strategies in the future.

Within this nine-phase offense process, the combination of offense-related goals and the strategies used to achieve these goals (i.e., self-regulation capacity) reflects four distinct pathways to sexual offending, each associated with varying degrees of awareness and planning associated with decision-making with respect to offending. These four pathways include:

1. *Avoidant-passive pathway.* Offenders following this pathway desire to refrain from sexual offending (avoidance goal) but lack the awareness and the required skills to effectively control their behavior in order to achieve this goal. Offending is associated with negative emotional states and disinhibition of behavior, loss of control, impulsivity, and anxiety when the individual is confronted with offense-related desires and opportunities to offend. These individuals may attempt to manage the desire to offend but do so typically by simply denying its existence or attempting to distract themselves from offense-related urges and desires (under-regulation). Negative affective states are the predominant emotional states throughout the offense progression, cognitive dissonance is evident, and offending is poorly or only covertly planned and is associated with goal failure.
2. *Avoidant-active pathway.* Similar to the avoidant-passive pathway, offenders following this pathway hold an avoidance goal with respect to offending (i.e., they desire to refrain from offending), but, unlike the avoidant-passive pathway, these individuals actively implement strategies to cope with the desire and opportunities to offend. That is, rather than simply denying or ignoring desires and urges, they attempt to regulate behavior via the use of specific strategies. However, the strategies they select are ineffective (mis-regulation) and, in some instances, result in the ironic effect of increasing the likelihood of offending. For example, individuals may engage in behavior such as masturbating to deviant images to avoid committing a hands-on offense or may use substances to regulate mood. Such behavior, however, functions to disinhibit the individual or to further entrench deviant arousal, thus increasing risk to offend. Predominantly negative affective states are evident throughout the offense progression, as is cognitive dissonance, and offending results from the implementation of ineffective strategies to prevent offending and is associated with goal failure
3. *Approach-automatic pathway.* This pathway is associated with approach-motivated goals with respect to offending and is characterized by *under-regulation* in achieving these goals. These individuals do not desire to prevent offending nor do they attempt to refrain from pursuing offense-related goals. Their self-regulation style is relatively automatic and impulsive, as they respond to situational cues in the immediate environment based on well-entrenched cognitive and behavioral scripts that guide behavior. Offense planning is rudimentary and unsophisticated, and offending is typically associated with positive emotional states, such as anticipation of sexual gratification, or may be associated with the attainment of specific negative goals, such as achieving revenge or dominance. Following offending, these individuals view their behavior positively, as they have achieved their goals, and are unlikely to experience cognitive dissonance, as their goals and behavior are consistent with each other.
4. *Approach-explicit pathway.* This pathway is associated with intact self-regulation. That is, individuals following this pathway do not have deficits in their ability to regulate their behavior, nor do they experience the disinhibition or loss of control evident in other offense pathways. Sexual offenses are explicitly and overtly planned in order to achieve a desired objective, such as sexual gratification,

and offending is associated with attitudes and core beliefs that support sexual aggression as an appropriate means by which to achieve these goals. Offending tends to be associated with positive affective states, and cognitive dissonance and goal conflict are absent.

As can be seen from the above brief overview, the SRM is more comprehensive than previous offense process models in that it acknowledges the heterogeneity in offense pathways and motivations for offending. The model is also consistent with the RNR principles, as treatment can be explicitly varied and adapted to individual offenders' needs, and is amenable to treatment using cognitive-behavioral methods. For example, within the SRM, dynamic risk factors can be more fully integrated with offense motivations, dynamics, and planning and can be linked to self-regulation capacity, offense-related goals, and offense strategies. This is discussed further in the following section.

Research to date on the SRM supports the validity of the model and its use in treatment. Specifically, there is support for the validity of the self-regulation model, including the existence of multiple pathways to sexual offending; offense characteristics such as offense planning and victim type; variability in pathways across different types of offenders (Bickley & Beech, 2002, 2003; Kingston, Yates, & Firestone, 2012; Proulx, Perreault, & Ouimet, 1999; Simons et al., 2008; Ward, Louden, Hudson, & Marshall, 1995; Yates & Kingston, 2006), as well as variations in actuarially measured static and dynamic risk (Stotler-Turner, Guyton, Gotch, & Carter, 2008; Kingston et al., 2012; Kingston et al., 2009; Leguizamo, Harris, & Lambine, 2010; Simons et al., 2008; Yates & Kingston, 2006); association with offense specialization (Leguizamo et al., 2010) and psychopathy (Gotch, Carter, & Stotler-Turner, 2007); and differential association with recidivism (Kingston, Yates, & Olver, 2013 under review; Webster, 2005). In addition, different pathways have been found to be differentially associated with treatment participation, compliance, motivation, progress, and outcome (Simons, Yates, Kingston, & Tyler, 2009). Taken together, research support is considerable for the use of the SRM in the treatment of sexual offenders.

An Integrated Approach to Cognitive-Behavioral Treatment with Sexual Offenders

As indicated above, research indicates that cognitive-behavioral treatment is the most effective approach to the treatment of sexual offenders, and adherence to the principles of risk, need, and responsivity shows the greatest treatment effect with respect to reduced recidivism. Recently, the GLM and SRM have been integrated into a comprehensive treatment approach (Ward et al., 2006; Yates, Prescott, & Ward, 2010; Yates & Ward, 2008) that can be delivered in a manner that effectively addresses risk, adheres to the RNR model, and utilizes cognitive-behavioral methods but that is also motivating to participants and that increases engagement with treatment. Integration of models also acknowledges the heterogeneity of offenders, the pathways they follow to offending, and the primary goods they seek to obtain via offending. Within this integrated model and in keeping with the RNR model, risk is assessed prior to treatment and appropriate treatment intensity levels are determined and applied. Based on the evaluation of both static and dynamic risk, higher-risk offenders are assigned to more intensive intervention, offenders posing a moderate risk to re-offend are assigned to moderate intensity interventions, and lower-risk offenders are assigned to minimal or no intervention. Also, in keeping with the RNR model, dynamic risk factors are explicitly assessed and treatment targets established accordingly and on an individualized basis. In addition to the evaluation of risk, individuals' good lives goals and self-regulation pathways are explicitly assessed using a structured protocol (Yates, Kingston & Ward, 2009), which also forms part of the treatment plan (Ward et al., 2006; Yates & Prescott, 2011; Yates et al., 2010; Yates & Ward, 2008).

In assessing good lives goals, part of the assessment process involves evaluating both that which the individual values and hopes to achieve in life generally and the goods the individual was attempting to acquire via offending, either directly or indirectly via a formal assessment protocol (Yates, Kingston & Ward, 2009). Attempts to attain these goods are reflected in dynamic risk factors. Thus, for example, individuals seeking to attain intimacy (a primary human good) may do so via sexual and intimate activity with children, manifesting as the dynamic risk factor of intimacy deficits and possibly deviant sexual interest. Individuals seeking to attain personal autonomy may have attempted to achieve this via sexual and/or physical aggression against an adult female, such as violent rape. The key activity in determining goods sought through offending is to establish the overarching good the individual sought to attain via offending.

Similarly, assessment of offense pathway, using the nine-phase SRM offense process model described above, assists in evaluating the route individuals have followed to offending and in delineating both good lives and offense-related goals implicated in offending, such that these may be targeted in treatment (Yates, Kingston & Ward, 2009, 2010; Yates et al., 2010). Furthermore, different offense pathways prescribe different approaches to treatment and different treatment objectives. For example, as is clear from the above discussion of offense pathways, some individuals require awareness raising and skill development in order to refrain from offending and to manage risk, whereas others require interventions designed to alter attitudes and core belief systems and cognitive schema that support offending.

In this integrated approach, the aim is not to change individuals' overarching goals (i.e., primary goods sought) but rather the methods used to attain these goods and the associated offense-related goals and strategies. Thus, treatment does not aim to eliminate offenders' needs for intimacy but to alter the manner in which they attempt to achieve intimacy such that it is sought with age-appropriate partners rather than with children and to develop the requisite skills and capabilities to achieve this. Similarly, treatment does not aim to eliminate offenders' need for autonomy, but helps them to achieve autonomy without dominating, controlling, or aggressing against others and to alter the belief that such behaviors are appropriate means to meet this need.

As is evident from this brief description, dynamic risk factors such as intimacy, interpersonal aggression, and problems with general or sexual self-regulation are addressed in treatment, thus adhering to the requirement of effective intervention to target known dynamic risk factors for offending. Furthermore, this integrated model represents a more positive approach to treatment than previous models such as RP and traditional RNR approaches that tend to focus on deficits and on the avoidance of problematic situations rather than inculcating positive approach goals. Within the integrated GLM/SRM model, there is at least equal importance placed on positive approach goals as on offense-avoidance goals—assisting the offender to achieve that which they value in life and enhancing well-being by actively working toward achieving important goals via pro-social, non-offending means in addition to managing risk. This is an important feature of treatment, particularly since such approach goals are more motivating and are more easily attained than are avoidance goals (Mann, 1988; Mann et al., 2004).

In treatment using this integrated model, treatment targets and methods also vary in accordance with offense pathways. Each of the four pathways described above is associated with different offense-related goals, strategies to achieve these goals, and self-regulation capacity. As such, treatment needs to be tailored to the specific goals and strategies of individual offenders. As indicated above, avoidant pathways are associated with the desire to refrain from offending, an objective that should be reinforced in treatment with offenders following this pathway. However, the two avoidant pathways, and their treatment requirements, differ in that individuals following an avoidant-passive pathway tend to be unaware of the offense progression as it unfolds, whereas individuals following an avoidant-active pathway demonstrate the capacity to monitor their behavior and responses to particular situations. Thus, treatment with offenders following the former pathway must focus on raising awareness of the offense progression in addition to assisting the individual to develop skills to monitor the environment and cope with circumstances and risk factors. By comparison, treatment of offenders following the avoidant-active pathway will focus less on raising awareness of the offense progression and more on awareness that strategies to achieve the avoidance goal are ineffective, as well as assisting the individual in developing skills and strategies that will be effective in managing risk. By contrast, as noted above, individuals holding approach goals with respect to offending actively work toward offending. A major target of treatment, therefore, is altering offense-supportive goals, beliefs, and attitudes and changing cognitive schema. In addition, because offenders following an approach-automatic pathway tend to respond relatively rapidly to situational and environmental cues and because this pathway is associated with general criminality (Kingston et al., 2012; Yates & Kingston, 2006; Kingston et al., in press), impulsivity typically needs to be targeted in treatment with these individuals, in addition to offense-supportive attitudes and cognitive schema. By contrast, individuals following an approach-explicit pathway tend to plan offenses carefully and explicitly and typically do not require intervention for impulsivity or other skills deficits. With these offenders, the primary treatment focus is on attitude and goal change.

As can be seen from the above discussion, using an integrated GLM/SRM model in treatment is consistent with the RNR model and principles of effective intervention and is amenable to the use of cognitive-behavioral methods and procedures. Adopting a GLM focus in particular also adheres to the principles of effective clinical intervention described above. Specifically, the GLM, with its positive approach, is more likely to motivate offenders to engage with treatment and with the change process via the establishment of mutual treatment goals that serve not only to reduce risk but also to improve well-being and life satisfaction. Adopting an SRM focus is also consistent with the principles of risk/need/responsivity, and it allows treatment to be better tailored to individual risk and criminogenic needs and to be responsive to individual offense pathways and motivation for offending.

Regardless of the approach that is followed in treatment, the principles of risk, need, and responsivity are important in determining treatment intensity and targets, as well as additional interventions that may be required, such as mental health interventions. For example, treatment may need to be longer in duration when significant risk factors such as sexual deviance or psychopathy are present. In such cases, additional risk management may be required, such as external supervision and monitoring.

Implementing a GLM/SRM treatment intervention may initially appear difficult, given how well-entrenched deviant sexual and criminal behavior may be among some clients. It is suggested, however, that these models will still apply in such challenging cases. In terms of the integrated GLM/

SRM model, sexually sadistic or psychopathic offenders may highly value such primary goods as happiness (under which is subsumed sexual pleasure) as well as autonomy and a sense of power, which is attained by manipulating, abusing, or controlling others. Similarly, such offenders may be more likely to follow approach pathways, such as the approach-explicit pathway, a pathway that is associated with higher levels of risk and that challenges current treatment methods generally (Ward et al., 2004). In such cases, it is suggested that the SRM can be of additional benefit, given that it better takes into account such factors as offense planning, positive affect, and positive reinforcement for offending, than does the traditional RP model. It is also suggested that the GLM can be of added value in such cases in addition to cognitive-behavioral treatment, as the origins of the behavior can be linked to what is important to the individual in his life, and alternative methods to attain such states as personal power and sexual gratification can be an integral part of treatment. Furthermore, by focusing on what the individual will gain from treatment (an essential element of the GLM approach), treatment is expected to be more motivating for individuals who may not view their behavior as problematic and who may be more amenable to an approach that focuses explicitly on what they personally have to gain by not offending and by engaging in treatment. As indicated above, regardless of the inclusion of the GLM and SRM in a specific treatment program, engaging offenders in treatment regardless of risk factors is essential to ultimate success, as is addressing risk and need. As with any treatment program, the right series of interventions is necessary to reducing risk to re-offend. It is suggested that the addition of the GLM and SRM to existing approaches will enhance treatment and lead to better achievement of this objective.

Conclusions

This chapter provided an overview of effective intervention with sexual offenders, with a focus on cognitive-behavioral intervention designed to alter patterns of behavior and cognition associated with sexual offending. The GLM and SRM models that have recently been developed and integrated into the treatment of sexual offenders hold promise to increase treatment effectiveness while adhering to research and established best practices. It is suggested that an integrated approach incorporating comprehensive assessment, the principles of risk/need/responsivity, cognitive-behavioral methods, effective clinical/therapeutic methods, and a positive approach that incorporates offender heterogeneity and variability in offense pathway will assist in increasing the effectiveness of sexual offender treatment and reducing the risk of future sexual violence.

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Forensic Psychotherapy for Sexual Offenders: Has Its Effectiveness Yet Been Demonstrated?

Harry M. Hoberman

Introduction

To what degree has psychotherapy been empirically demonstrated to result in the prevention of future acts of sexual offending? That is, what scientific evidence exists that demonstrates that psychosocial interventions with sexual offenders consistently and effectively lead to enduring reduced rates of future sexual offending? Psychotherapy is generally conceived of as a process through which clients attempt to "change" problematic or maladaptive aspects of themselves through interactions with clinicians–persons with particular qualifications (e.g., training and experience). Such psychosocial interventions broadly involve clinicians providing various means of providing support, understanding, and "influence" so that help-seeking persons achieve some desired outcome by promoting self-understanding and/or exposing them to experiences and methods for changing their behaviors, thoughts, attitudes, and emotions. Consequently, it seems conceivable that psychotherapy has the potential to play some role in the management of sexual offenders, at least theoretically, by facilitating personal change in factors presumably related to the initiation and/or maintenance of sexual offending. As with other persons with significant behavioral problems, it is plausible that mental health professionals might be effective to some demonstrated degree in providing varied but identified means for sexual offenders to "change" in ways that their propensity for sexual behavioral problems is eliminated or substantially reduced. From a criminological perspective, it has been argued that potential evidence indicating general criminal recidivism can be reduced short term by some psychotherapeutic interventions suggests that sexual offenders too might respond to such interventions. However, while both conceivable and plausible, ultimately it is an *empirical* question as to whether psychosocial interventions have been or can be proven on the basis of scientific study to affect change in sexual offenders or decrease the risk of sexual offense recidivism. The results of that empirical question also have critical and important policy implications. It has significant implications if psychotherapy has not or cannot be demonstrated to be an effective mechanism of personal change for sexual offenders. First, both therapists and society may demonstrate a false sense of security that once a sexual offender has been involved in a treatment program that their risk of sexual reoffending has been reduced. As a recent treatment review stated:

> As a matter of social justice for the offend, and to provide reassurance to the community, it is essential that the treatments provided work and therefore inspire confidence that offenders who have completed treatment programs really are at reduced risk of sexual reoffending. (Dennis et al., 2012, p. 7)

Without the type of "proof" that is expected for other psychosocial interventions, then mental health professionals cannot make claims that their efforts at such treatment of sexual offenders matter. Further, in the absence of scientific demonstrations of psychotherapy effectiveness with sexual offenders, it becomes reasonable and necessary for alternative management approaches to be employed with sexual offenders as a means of preventing or reducing the risk of future sexual offenses.

For mental health professionals (MHP), generally, there is an assumption or belief that psychotherapy should and does make a difference to their clients; there is a strong expectancy effect that psychosocial interventions should be effective. In particular, for MHP providing psychosocial interventions for sexual offenders, it appears that clinicians have very strong beliefs that sexual offender treatment can and does have a powerful and enduring effect on their "clients" (e.g., Fortney, Baker, & Levenson, 2009). However, such beliefs should obviously not be assumed or taken on faith. For example, as scientific evidence appeared, the sexual offender field shifted from a reliance on unstructured clinical judgment (clinical intuition) to a reliance on

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empirically validated risk assessment approaches. Similarly, as with any intervention for a serious behavioral problem, the effectiveness of psychotherapy for sexual offenders should be clearly and consistently demonstrated by scientific study. Olver, Stockdale, and Wormith (2011) emphasized that the central purpose of offender treatment programs is reducing the recurrence of future criminal acts; thus, the primary purpose of sexual offender treatment is to affect a reduction in sexual offense recidivism. As Hanson et al. (2002) wrote: "If treatment is to be widely used in the management of sex offenders, then it is important that it works." As the Association for the Treatment of Sexual Abusers (ATSA, 2008, p. 1) has noted, treatment for sexual offenders is significantly different than that for other clients because of "a focus on the harm causes to the victims, the protection of future victims and the prevention of re-victimization" (emphasis added). For many psychological conditions or disorders, the evidence for the *efficacy* of psychotherapy is much more limited than often assumed or believed. While psychosocial treatments have been demonstrated to affect positive outcomes for some "emotionally distressed" persons, there is far less evidence that they have substantive short- or long-term effects for those with multiple or more severe "behavioral problems" that have led to significant impairments or distress. There is also evidence that beyond being ineffective, some psychosocial interventions may actually create "harm" for clients and society (e.g., Lillenfeld, 2007; Arkowitz & Lilienfeld, 2006). Thus, for a number of important reasons, MHP who provide psychotherapy for sexual offenders should have an accurate view regarding the empirical evidence that exists regarding the degree of effectiveness of the services they provide to sexual offenders. Other stakeholders concerned about sexual offending should also possess accurate knowledge about whether scientific evidence exists that sexual offender treatment might be effective.

Some may assume that the sexual offender who ends up as a participant in sexual offender treatment is the only client in that process. However, unlike other presenting problems, for sexual offending, most commonly there are several other "clients" invested in the importance of effective management of that problem. In addition to the sexual offender, the community is also a primary client of sexual offender treatment because ineffective treatment can directly create significant risks and consequences for public safety; unsuccessful sexual offender treatment may lead to additional future sexual offense victims. As Berliner wrote in 2002: "The big difference for sex offender treatment is that the price of failure is the victimization of an innocent person rather than continued suffering by the client" (p. 196). Similarly, Hall (1995) wrote: "…the expectation of psychological treatments for sexual offenders is no recidivism because of the serious effect of even a single act of sexually aggressive behavior. Every act of sexual aggression adversely affects a person other than the perpetrator…" (p. 802). Moreover, the degree and relative persistence of harm that results from various forms of sexual offending can be profound; as Marshall et al. (2003) stated, such effects can be "devastating." This is a relatively unique state of affairs relative to almost all other types of mental health presenting problems where the consequence of ineffective treatment is primarily borne by the individual with the problem, leading to personal distress or impairment. Forensic psychotherapy is typically defined as that which pertains to "justice-involved clients," where the clinical outcomes of interest are most often focused on rule-breaking conduct and the determination of treatment benefit is most focused on a relatively specific outcome, namely, future criminality or reoffending (Mitchell, Simourd, & Tafrate, 2014).

Thus, almost all psychotherapy with sexual offenders would necessarily be regarded as "forensic psychotherapy," commonly understood as the psychological treatment of persons who have committed violent or aggressive offenses against others or themselves, who are often ordered into a therapeutic setting by the legal system, and who have particular sets of psychological and/or psychiatric characteristics that, to a large degree, define their criminogenic and treatment needs.

Further, to the extent that psychotherapy for a sexual offender is either required or funded by someone other than the offender, those sources are also a client. Certainly, public (government) and private (e.g., health insurance) funding sources of mental health programs are increasingly focused on empirically demonstrated effective interventions or evidence-based practice as a bottom line criterion for committing resources to publicly or third-party-funded interventions. Particularly, in times of limited economic resources, it seems unlikely that funding will be provided for treatment programs unless there is clear evidence of substantive effectiveness. Similarly, in addition to the primary victims of subsequent acts of sexual offending, other persons ("secondary victims") and entities bear the personal and financial responsibility of providing support and short- and long-term care and services for the effects experienced by the primary victims. In addition, almost all sexual offender treatment in North America is either explicitly or implicitly mandated by the criminal justice system; thus, again, it would be most appropriate to refer to sexual offender treatment as a form of forensic psychotherapy. Clearly, it is essential that all stakeholders relative to the management of identified sexual offenders—those persons involved in managing sexual offenders (particularly those who provide psychotherapy), those who are existing or potential direct victims or affected parties of sexual offending, and those entities that provide the funding for sexual offender treatment—have an accurate understanding of the nature and effectiveness of the existing

scientific literature on psychosocial treatment of sexual offenders.

Given the broad set of stakeholders involved with and affected by the effective management of sexual offenders, the issue of the relative value of sexual offender treatment as a component of that management system is of great significance. Unfortunately, the utility of psychotherapy for sexual offenders may, at best, be viewed as at a crossroads. For more than 30 years, there has been genuine and well-founded controversy about whether such interventions produce substantive and lasting changes for sexual offenders related to the prevention of future acts of sexual offending or reduced sexual offender recidivism. Relative to the conventional standards utilized to gauge treatment outcome studies, the existing scientific evidence does not yet provide support for the proposition that psychotherapy is an effective primary agent for "treating" or "changing" sexual offending or to reduce their potential for sexual reoffending. A series of reviews, including meta-analyses, have suggested—at best—"limited" or "cautious" evidence for the effectiveness of available psychosocial programs of sexual offender treatment for the typical sexual offender, at least as measured by the reduction of future sexual offense recidivism. That is, as even proponents of the efficacy of sexual offender treatment admit, the general results of studies of varying rigor have demonstrated only "small," qualified positive outcomes for such interventions for select sexual offenders. Further, such proponents acknowledge that the evidence for such "small," "promising" effects relies exclusively on scientifically "weak" studies and that the more rigorous scientific studies of sexual offender treatment have failed to show an effect of intervention. Even the Association for the Treatment of Sexual Abusers (ATSA) concluded in 2010: "After 50 years, the field of sex offender treatment cannot, using generally accepted scientific standards, demonstrate conclusively that effective treatments are available for adult sex offenders" (p. 1).

It is also important to consider broader contexts relative to the failure to demonstrate effectiveness of psychotherapies for sexual offenders. As Lilienfeld (2011) has pointed out, "Data indicate that large percentages of the general public regard psychology's scientific status with considerable skepticism…" (p. 1); he notes that the widespread and long-standing public skepticism of psychology reflects the mental health profession's failure to police itself and its problematic public face reflects the failure of the professional mental health field "to get its own clinical house in order and winnowing out the elements of our profession that are scientifically dubious, some of which have tarnished our hard-fought credibility…" (p. 125). As a function of some of these issues, the field of psychotherapy is facing an increasingly uncertain future, specifically the diminishing perceived value and utilization of psychotherapy. At a time when the demand for mental health care is actually growing (almost doubling in the past 20 years), substantially less of it is being provided by nonmedical providers such as psychologists, social workers, etc. Very recently, several articles have pointed out that the field of nonmedical mental health providers has not made a convincing case for the use of psychosocial interventions and, in fact, by largely disavowing the need for evidence-based (largely scientifically evaluated) psychotherapies and effectively abandoning the mental health field to pharmacotherapy. Gaudiano and Miller (2013) noted that psychotherapy use is on the *decline* despite overall *increased mental health utilization*. They noted that from 1998 to 2007, there was approximately a 5 % decline in the use of psychotherapy alone and 8 % decrease in the use of psychotherapy with adjunctive medication. Several years ago, Baker, McFall, and Shoham (2009) pointed out that the lack of adequate training in and acceptance of the science of psychotherapy was leading to a greatly diminished role for psychotherapy in the mental health treatment field. In particular, they point to psychologist's preference for valuing personal experience over research evidence—a "prescientific" perspective—as flying in the face of the evolution in health-care decision-making which places a premium on converging evidence that "a treatment is efficacious, effective-disseminable, cost-effective, and scientifically plausible" (p. 67). Similarly, Gaudiano and Miller place the responsibility for this decline in the utilization of psychosocial interventions primarily on psychotherapists' tendency to rely on "personal experience" and "intuition" in performing their clinical work. Gaudiano and Miller argue that psychologists and other psychotherapists' rejection of the principles of evidence-based practice largely stand in contrast to psychiatry's training and practice model with its presumptive reliance on evidence-based medication research, primarily controlled studies involving random assignment of clients and similar scientific practices. Moreover, they point out that "the train has already left the station," stating:

> …as psychologists hem and haw about potential constraints placed on psychological practice by increasing scientific standards, and thus resist the notion of more prescriptive treatment approaches, the health care system has already adopted such an approach, is implementing it, and is holding psychologists accountable to it through reimbursement restrictions. (p. 816)

Thus, in the private sector, personal experience and judgment about "what works" with clients is being accorded increasingly little role in the endorsement of interventions. Moreover, psychotherapists and psychotherapies for various types of clients are progressively and increasingly rapidly being disenfranchised and excluded from possible treatment possibilities as a result of clinicians' rejection or ignorance of currently available accepted empirical evidence and other supportive information related to such evidence-supported therapeutic practices.

Unfortunately, as a result of this longstanding failure to demonstrate clear effectiveness for psychosocial treatment, both policy makers and the more general community either are or are likely to be appropriately skeptical about practitioners' claims for sexual offender treatment effectiveness. In turn, the lack of demonstrated efficacy for psychotherapy for sexual offenders may increase reluctance to allow select sexual offenders to avoid incarceration or be released earlier from incarceration simply because they "participated in" or "completed" treatments, without scientific evidence that has demonstrated that such treatment results in decreased risk for sexual offense recidivism or relevant offender change. Further, in the absence of scientifically demonstrated results, the public and government stakeholders have been and are increasingly disinclined to endorse funding for the research of and/or implementation of existing or more novel programs of sexual offender treatment. In short, the relative role of psychotherapy as a component of a broad management approach for general sexual offenders necessarily remains in question.

This chapter is intended to provide a relatively straightforward, reasoned, and accessible review of the existing findings and issues regarding psychotherapy for sexual offenders. First, a brief synopsis of the research literature regarding psychotherapy in general shall be presented. Both the accepted methodological practices utilized in studying the effectiveness of psychosocial treatment as well as the results of the extant psychotherapy outcome literature will be summarized. Such a review provides a context for viewing the parameters for the more specific research literature on sexual offender treatment outcome. Second, the primary systematic reviews and meta-analyses of sexual offender treatment will be examined. The consensus of these reviews would appear to best be summarized as suggesting that to date the general efficacy of sexual offender treatment has not been scientifically demonstrated; few or no claims can be made for the "success" of such interventions. Third, a critical analysis of the methodological issues and inadequacies related to results of existing treatment research will be presented that provides perspective on the failure to yet demonstrate the effectiveness of sexual offender treatment.

The Nature, Methods, and Findings in General Psychotherapy Outcome Research

Methodological Principles in the Scientific Investigation of Possible Outcomes of Psychosocial Interventions

The available research on psychotherapy has been periodically summarized in the five sequential editions of the Handbook of Psychotherapy and Behavior Change, originally edited by Bergin and Garfield (1971, 1978, 1986, 1994) and more recently by Lambert (2004, 2012). Kazdin (1986, 1994); Kendall, Holmbeck, and Verduin (2004); and others have described the nature of how models or theories of psychosocial intervention should be examined via a program of research that could delineate if and how psychosocial treatments might be effective with particular types of patients. Historically, the essential question for the scientific study of the effectiveness or efficacy of psychotherapy involves a scientific or empirical investigation to determine for persons with a particular presenting problem who want treatment: (1) whether the "average" person who participated in a particular treatment program had a better outcome than the "average" person who did not participate in that treatment *and* (2) if a benefit is observed, is it due to the intervention itself (or other factors). The goal of psychotherapy outcome research is initially to determine whether evidence can be obtained or demonstrated that particular treatments have *specific* effects, that is, an effect above and beyond those placebo/expectancy effects of those of nonspecific or common factors. Chambless and Hollon (1998) characterized psychotherapies as being efficacious if they work better than no treatment and as being specific if they are demonstrated to work better than nonspecific controls or credible alternative interventions. Hollon and Beck (2013) suggested that the term superior be applied when a given treatment outperforms all other viable alternative interventions.

According to both Kazdin (1986, 1994) and Kendall et al. (2004), as for other treatment outcome research methodologists, the essential approach to study of if and how psychotherapy might be efficacious is through randomized controlled trials (RCTs) of an intervention hypothesized to benefit a clinical population. Following the methodology of basic experimental science, a proposed psychosocial treatment approach is first studied or tested under specified controlled conditions; this provides an opportunity to determine the *effectiveness* of a proposed treatment approach—does it work with a relatively homogeneous group of persons with a similar presenting problem who are actively seeking (voluntary) treatment to address the presenting problem? Initially, such comparisons are typically conducted with more homogeneous individuals with the targeted presenting problem and may be comparable to other persons with more complex presentations or circumstances. Thus, Kendall et al. identified that to be most useful, treatment outcome studies required a controlled comparison of a specified intervention technique or program, with randomly selected clients exposed to the experimental treatment and control group(s) composed of relatively identical persons not exposed to that particular intervention. The first objective of outcome research is to determine if any consistent change occurs for persons receiving a positive treatment outcome relative to those not receiving that treatment [and not some unintended negative consequences as can happen (e.g., Rice & Harris, 2003;

Seto et al., 2008)]. Thus, some interventions may not result in desired change for clients as manifested on the relevant outcome measures of the presenting problem.

If treatment appears to show a benefit for those who participated under controlled conditions, an additional key objective is to determine if that change is, in fact, related to the specific treatment itself as opposed to other factors (e.g., spontaneous remission or the passage of time, dissimulation by clients, receiving a therapist's attention, the experience of repeated assessments). Such possible extraneous factors need to be "controlled" in a research study in order for one to have confidence that the treatment itself was responsible for any observed change. A control group provides the key means of potentially controlling for some factors (like characteristics of the subjects) that might be related to the outcome regardless of the experience. Consequently, a key issue in general psychotherapy treatment outcome research (similar to medication treatment studies) is to utilize a *control condition or group(s)*, particularly one that accounts for obvious potentially confounding factors such as client expectations or nonspecific factors related to interacting with a therapeutic agent. A "no treatment" control condition still may not protect findings from potentially confounding factors of an active treatment such as the anticipation of treatment, expectancy for change, and/or the act of meeting with a therapist. Even the so-called attention-placebo or nonspecific treatments, which may provide a reasonable measure of positive expectancy, may not be comparable to a condition where therapists provide a specific intervention to which they may be committed to ("believe in") as an effective treatment. Typically, only an alternative treatment condition (e.g., treatment as usual, another specific model of treatment) allows for controlling for nonspecific effects of treatment such as the length of treatment or client and therapist expectancies. Ideally, a treatment outcome study would involve at least three groups: a group that receives the treatment believed to produce a desired outcome, a group that receives an alternative credible intervention, and a group that does not receive any substantive intervention.

Almost all empirical, controlled studies begin with clients who are relatively compliant and motivated individuals; in addition, the treatment recruitment and delivery process typically induces expectancy bias for participants as well as their therapists. Given the possibility that client characteristics may strongly influence the outcome of an intervention, beyond controlled comparisons, the *random assignment* of clients in controlled psychotherapy trials is viewed as the second critical factor in treatment outcome research to ensure initial comparability between treatment and control groups. Random assignment of persons who are interested and motivated to address a particular presenting problem should eliminate unwanted potential effects of extraneous factors [demographic variables (such as age, socioeconomic status, intelligence, education, and so on) as well as more substantive factors (such as the nature and degree of likely risk factors)]. Obviously, it would be problematic to allow the subjects themselves to select whether they are exposed to a particular experience or not exposed to a particular experience; the motivation and/or expectancy to either be exposed or not be exposed to the particular experience (or related characteristics) might determine the treatment outcome of participating subjects. Consequently, as Kendall et al. (2004) wrote:

> …comparisons of persons randomly assigned to different conditions are required to ensure control of the effects of factors other than the treatment. Comparable persons are randomly placed into either the control condition or the treatment condition, and by comparing the changes evidenced by the members of both conditions, the efficacy of therapy over and above the outcome produced by the extraneous factors can be determined. (p. 19)

Then, "When treated clients evidence significantly superior improvement over non-treated clients, the treatment is credited with producing changes. This control procedure has desirable features and eliminates several rival hypotheses…" (p. 19). At the same time, randomization does not guarantee comparability, and the actual comparability of the participants in the treatment and control conditions should be examined. However, while the random assignment via RCT does not absolutely assure absolute comparability of the control and therapy conditions on all measures, it does maximize the likelihood of comparability. That is, randomized and controlled trials offer the best research design strategy for distributing pretreatment differences randomly; effectively, only randomization can eliminate the subtle selection biases that affect even the best alternative study designs. Almost all independent medical research groups (such as the Cochrane Collaboration) as well as various policy-making entities, including the US Center for Disease Control and Prevention and the US Food and Drug Administration, define and determine effective interventions based on the results of RCT. Further, as Howard et al. (1996) wrote, given the high degree of experimental controls imposed by RCT design: "…it is quite rare that a randomized experiment fails to conclude that the experimental treatment works" (p. 1060).

In addition, another preferred method for treatment outcome research involves the "intent-to-treat" design. That is, in more contemporary psychotherapy treatment outcome studies, the experimental or treatment group consists of *all* persons originally assigned to that group, whether or not they complete the intervention (e.g., those who complete and those who drop out of an assigned treatment or control group). The degree to which persons are retained in and complete the assigned treatment is considered an important aspect of the outcome or results of the treatment comparison; a treatment that loses a significant number of participants

and succeeds only for some persons would not necessarily be considered a successful or effective intervention (although it might provide useful information about which persons are most and least responsive to a particular treatment). Consequently, the outcome for individuals who drop out of or are terminated from treatment is typically counted as part of the intervention group's results. Thus, methodologically superior treatment outcome studies utilize "intent-to-treat analyses where the treatment group consists of all persons who began the treatment, including those who technically completed the program as well as those who dropped out after being assigned to the treatment group" (e.g., Chambless & Holon, 1998).

Standards exist and have achieved wide acceptance concerning the determination and rating of the methodological quality of treatment outcome research. For example, Sherman et al. (1998) developed a scale of methodological rigor, known as the Maryland scale, to provide a clear perspective on the quality of the scientific quality of crime prevention programs. The scale provides an assessment of the quality of the research design and whether study results can reasonably be used to draw conclusions about the effectiveness of sexual offender treatment. Thus, per the Maryland scale, a score of "1" indicates that a correlation exists between a treatment program and an outcome measure, a score of "3" indicates that the study included an intervention group and a comparison group, and a top score of "5" indicates that the study used both random assignment and an analysis of comparable intervention and comparison groups.

Once the *effectiveness* of a particular psychotherapy approach is initially established under controlled conditions to limit potential methodological confounds, the outcome comparison is typically the subject of attempts to replicate or cross-validate the results, ideally by other investigators than those who initially developed and tested the approach. Assuming multiple successful replications from RCTs performed by scientists of varying allegiance to that approach, the experimental intervention is tested with RCTs in more naturalistic situations with clinically representative clients with the primary presenting problem (e.g., those outside of university research settings, typically with more complex presentations and/or severity). Thus, once robust evidence exists that a psychosocial intervention is effective in RCTs (under more controlled conditions), the intervention can be systematically tested with an expanded group of clients with the presenting problems (e.g., those with more severe or comorbid conditions). At that point in time, modifications of treatment procedures may also be tested under controlled conditions to optimize the potential outcome with more heterogeneous clients. If positive outcomes consistently result in more naturalistic or clinically representative settings, then the psychosocial intervention is said to have demonstrated *efficacy*.

In the 1990s, the general psychotherapy field moved to endorse a model of Empirically Supported Therapies (ESTs). As Arkowitz and Lilienfeld (2006) noted, this move was fueled by several considerations. First, ESTs are argued to protect clients against "a seemingly endless parade of fad therapies of various stripes…" (p. 45), a number of which have been found to be ineffective or even harmful. Second, ESTs are viewed as performing a quality control function for health-care agencies and policy makers to make scientifically informed decisions about which treatments should be reimbursed; "By placing the burden of proof on a treatment's proponents to show that it is efficacious, the EST list helps to ensure that therapies promoted to the general public have met basic standards" (p. 45). In 2005, the American Psychological Association (APA) issued a policy statement regarding evidence-based practice (EBP) in psychology, stating: "Evidence-based practice in psychology (EBPP) is the integration of the best available research with clinical expertise in the context of patient characteristics, culture, and preferences" (p. 13). They noted that this was similar to the definition of evidence-based practice adopted by the Institute of Medicine in 2001, where evidence-based practice (EBP) was defined as the integration of best research evidence with clinical expertise and consideration of patient characteristics; it was recommended that therapists determine the applicability of available research conclusions to the needs of particular help-seeking clients; thus, treatment should involve the application of available research evidence with probabilistic inferences for help-seeking clients based on current scientific knowledge.

To What Degree Are Psychosocial Treatments Generally Effective?

To provide a context for considering the effectiveness of sexual offender treatment, it obviously makes sense to consider to what degree and in what ways psychotherapies are effective in the broader field of mental health problems. There has been a long controversy as to whether psychotherapy as a type of interventions has been demonstrated to be effective. Thus, in 1952, Eysenck published a review of 24 studies and concluded there was no research evidence to support the effectiveness of persons participating in psychotherapy compared to groups not participating in psychotherapy. In contrast, since Eysenck's publication, most studies evaluating the outcome of psychotherapy have been more positive despite the increasing methodological rigor that characterized those studies.

Subsequent to Eysenck's review, meta-analyses (MA) or analyses not of subjects but of existing studies began to appear. In MA, statistical methods are used to obtain a quantitative estimate of the overall or cumulative effect of a set of existing interventions on an outcome. By combining results of multiple smaller studies (e.g., in terms of sample size) and weighting them by size, it is hypothesized that the combined

results (now based on a larger number of subjects) provide greater power and might allow for identifying "effects" across studies that might be missed in individual studies, particularly those with small numbers of subjects. In addition, a potential strength of meta-analysis comes from the use of a standardized unit to compare outcomes from studies that may use different measures and by averaging effect sizes across different studies and comparisons. This increases the effective sample size for investigation and potentially minimizes the influence of extraneous factors in individual studies. Such a practice allows for a more precise evaluation of the efficacy of treatment programs. However, as Lambert (2013) pointed out: "Meta-analysis is not a panacea and cannot be used to create worthwhile information if it's based on poorly designed studies or is biased" (p. 206).

As meta-analytic statistical techniques emerged, reviews of the expanding literature on psychotherapy have been subjected to a more sophisticated quantitative analysis. However, clear evidence that psychotherapy was associated with positive outcomes for general mental health problems did not emerge for 30 years after the Eysenck study. Smith et al. (1977, 1980) conducted a particularly significant MA of the extant psychotherapy literature. They analyzed more than 475 studies and demonstrated that the effects of psychotherapy were superior to no treatment and to placebo control conditions, typically for clients with some form of emotional distress or "neurotic" condition. Lipsey and Wilson (1993) reviewed 302 meta-analyses of a range of psychological, educational, and behavioral treatment and found a strong positive effect. They utilized more stringent criteria to examine a limited sample of studies (156 meta-analyses) and found that the average treatment effect size was 0.47.[1] They concluded that the evidence from this MA indicated that psychosocial treatments "generally have positive effects" (p. 141) on those who participated in them relative to a control condition.

However, based on an earlier analysis of the literature, Shadish et al. (1997) suggested that previous meta-analyses had overestimated the effects of treatment because they calculated *unweighted* effect sizes, which gave more importance to studies with larger N's. Thus, they recalculated the effect sizes for the Smith et al. (1980) data set and found an effect size of 0.60 (a medium effect) as opposed to the 0.85 effect size (a large effect) originally reported by Smith et al. (1980), and Wampold et al. (1997) also reanalyzed previous meta-analyses and noted that the effect size of psychotherapy compared to no treatment was 0.82 (considered a large effect); however, the effect size of psychotherapy compared to a placebo condition was 0.48, and the effect size of placebo vs. no treatment was 0.42. Thus, the relative effectiveness of psychotherapy was reduced to a medium effect when compared to placebo condition; further, a placebo condition, in and of itself, produced a medium-sized effect. These results suggested that a significant mechanism for the positive effects of psychotherapy was nonspecific and that, for predominantly emotional problems (such as anxiety or depression), positive benefits of psychotherapy may be largely due to factors such as clinical attention and/or expectation of change. Westen et al. (2005) pointed out that when investigators have compared two bona fide intent-to-succeed treatments, the outcome effects are generally small (e.g., an average ES or d of 0.20). That is, when two meaningful interventions are compared to one another (as opposed to a no treatment condition), the effect size was substantially reduced for clients.

Lambert and Ogles (2004) concluded that studies that were representative of clinical settings and conditions (e.g., more varied clients with comorbid conditions) appeared to produce generally similar effects to those that were not representative of clinical conditions. However, they also noted that higher-quality RCTs of treatment for actual clinical conditions were generally lacking; most extant positive studies for psychosocial interventions were conducted in research settings with more pure and circumscribed client samples. Most recently, Lambert (2013) wrote: "From 40 to 60 % of clients show a substantial benefit in carefully controlled research protocols, *although far fewer attain this degree of benefit in routine practice*" (p. 204, emphasis added).

Another critical question regarding psychotherapy concerns whether clients maintain whatever measured "gains" or initial response that they are reported to have made in treatment. Nicholson and Berman (1983) conducted the earliest and most influential meta-analysis regarding follow-up outcome of persons treated with psychotherapy. In their study of 67 studies, while noting some divergence in the studies, they reported that treatment gains were maintained (largely for the treatment of problems of emotional distress). Later, however, Lambert and Ogles (2004) identified several methodological concerns that prevent reaching broad conclusions about the maintenance of treatment gains. First, they noted that client attrition from the end of treatment to follow-up data collection was a critical issue (as well as attrition during treatment itself); that is, a significant number of persons who participate in treatment studies either leave the study during or after the controlled intervention phase. Consequently, only smaller groups are available for study at points distal to the end of psychotherapy. Second, in the majority of cases, most studies do not continue to follow subjects in control groups after treatment ends making follow-ups "naturalistic" (and *not* controlled or "comparative"). Westen and Morrison (2001) found that only 36–38 % of persons treated for depressions remained improved at a 2-year follow-up and that there were low levels of "sustained efficacy"; if those individuals who began but did not complete psychotherapy were included for study, the improvement rate dropped to approximately 25 %. They noted that

[1]Cohen (1992) identified the benchmarks for effect size for comparing independent means as 0.20 (small), 0.50 (medium), and 0.80 (large).

the available follow-up results were worse for clients with anxiety disorders. Westen and Morrison (2001) argued that psychotherapy provided to relatively pure samples of depressed and anxious clients, with rigorous inclusion and exclusion criteria, results in improvement/initial response of pathological states (as distinguished from disorders) which was approximately 50 % for those persons who complete psychotherapy but that the majority of clients do not show sustained improvement over 1–2 years, particularly for "generalized affective states." That is, the average client will maintain a mild but clinically significant level of symptoms after intervention, but "a substantial number of patients will continue to be highly symptomatic" (p. 885).

At best then, the available evidence suggests that various types of psychosocial interventions are somewhat effective in treating persons with relatively unidimensional presenting problems of emotional distress (primarily for anxiety and depressive conditions) most commonly found in typical clinical practice (i.e., for which people seek treatment). However, the evidence for the effectiveness of psychotherapy for more severe problems is much less clear. Compared to treatment for more circumscribed problems such as emotional distress, Lambert and Ogles (2004) showed that the average effect size for efficacy is much lower (e.g., approximately 50 % lower) for more severe problems such as schizophrenia, alcoholism, and delinquency and for persons characterized by "social detachment." Lynch, Laws, and McKenna (2010) in a meta-analysis of well-controlled RCTs found that CBT was not effective in reducing symptoms or preventing relapse for schizophrenia or in reducing relapse in major depression or bipolar disorder. Even in the treatment of major depression, they found that the effect size for reducing symptoms was small. Hollon and Beck (2004) concluded: "It remains unclear just how effective CBT (including relapse prevention) is in the treatment to substance abuse. It typically outperforms minimal treatment control, but is has a more inconsistent record relative to attention placebos and rarely exceeds alternative interventions" (p. 474). As noted, Kopta et al. (1994) showed that patients with significant characterological issues (e.g., maladaptive personality traits or personality disorders) required much "stronger" doses of treatment over a longer period of time prior to showing symptomatic improvement (e.g., treatment sessions that were more frequent and of longer duration); similarly Tyrer and Johnson (1996) also showed that clients with comorbid personality disorders have the highest initial levels of symptoms and improved the least over follow-up. Clarkin and Levy (2003) reported that clients with a greater number of personality disorder traits also had difficulty staying in active treatment and would drop out at a higher rate. Multiple reviews of the treatment of personality disorders, particularly Borderline and Antisocial Personality Disorders have found no or little scientific evidence that such conditions can be treated efficaciously (e.g., Binks et al., 2006; NICE, 2009a, b; Duggan et al., 2007; Gibbon et al., 2010; Stoffers et al. 2012). Further, in general, available studies show that individuals with maladaptive traits or personality disorders have much higher relapse rates when compared to patients with no such comorbid problems. In addition, methodological problems of lower power and attrition are more common among across studies of persons with more severe and/or chronic problems. While it can be said there is some evidence for psychotherapies involving persons with severe or chronic problems having a relatively positive effect on some elements of their problems and on "satisfaction" with the therapy experience, in a significant number of cases, "treated" clients continued to manifest ongoing symptoms of varying degrees of severity and/or to convert to other significant psychiatric conditions.

Currently, there is little evidence that any specific type of psychotherapy [e.g., cognitive-behavioral therapy (CBT)] is more effective than another therapy, particularly when the allegiance (expectancies of treatment success) of the investigator and study therapists is controlled. Wampold et al. (1997) and Wampold (2001) in reviewing their own MAs and those of others concluded that there was little evidence that specific ingredients are necessary to produce change as a result of exposure to psychotherapy. [Note that many of these studies involved the treatment of emotional distress, again typically anxiety or depression.] In a later MA, Wampold et al. (2002) also found that CBT was not more effective than other bona fide (credible) psychotherapies for unipolar depression and that all bona fide psychological treatments were equally effective in mood improvement. In their review in 2004, Lambert and Ogles concluded: "There is a strong trend toward no differences between techniques are modes in amount of change produced which is counterbalanced by indications that, under some circumstances, certain methods (generally cognitive behavioral) or modes (family therapy) are superior" (p. 164). They concluded that extant research "shows surprisingly small differences between the outcomes for patients who undergo a treatment that is fully intended to be therapeutic" (p. 164). With some exceptions, research generally supports that somewhat greater effectiveness of CBT over alternative psychotherapies has been demonstrated for clients with anxiety or depressive disorders and particularly for individual but not group psychotherapy. However, the mechanism of action for such outcomes is unclear regarding CBT. Per Longmore and Worrell (2007), review of CBT identified three empirical anomalies in the CBT empirical literature:

> Firstly, treatment component analyzes have failed to show that cognitive interventions provide significant added value to the therapy. Secondly, CBT treatments have been associated with a rapid symptomatic improvement prior to the introduction of specific cognitive interventions. Thirdly, there is a paucity of data that changes in cognitive mediators instigate symptomatic change…. A comprehensive review of component studies finds little evidence that specific cognitive interventions significantly increase the effectiveness of the therapy…. Although evidence for the early rapid response phenomenon is lacking, there is little empirical support for the role of cognitive change as causal in the symptomatic improvements achieved in CBT. (p. 173)

> More generally, collectively, research findings indicate that substantive behavioral change both precedes and lays the foundation for later cognitive change. Finally, it must be noted that very recent evidence suggests that modern CBT clinical trials appear to provide smaller decreases in depressive symptoms as compared with earlier research trials.

Measurement of clinical change has also been problematic in the general psychotherapy outcome literature. The percentage of persons considered "improved" has been shown to have more to do with particular rating scales and sources of information (e.g., global, self-report ratings) rather than actual behavioral change (e.g. Hill & Lambert, 2004). When more specific problems and behaviors were rated for change, there is less evidence of significant change or improvement. Weiss et al. (1996) reviewed 41 studies and found a basic lack of agreement regarding the nature of improvement; when agreement between client and therapist was found, it was not high. Both Pekarik and Guidry (1999) and Rosenblatt and Rosenblatt (2002) reported very similar results. In contrast, agreement was higher between clients and external raters or judges, clearly suggesting that clinicians were poor judges of treatment-related behavioral change (e.g. Johnson & Friberg, 2015). In other research, Gregerson et al. (2001) looked at ratings of treatment made pre- and posttreatment. They found that the difference in the size of treatments of pre- and posttreatment suggests that retrospective (post) evaluations of treatment change "overestimated treatment effects" by a *factor of two* compared to actual pre-/post-measurements. "Life records" and real outcome measures would be considered to be the least reactive of available assessment methods. Hill and Lambert (2004) noted that differences in outcome results have been found to be a function of a source (e.g., client, therapist, expert judges, and significant others) and not content (the actual functioning of a client). They concluded that therapist ratings of treatment outcome and global ratings of change are associated with an illusory "perception of greater effectiveness" of treatment compared to more specific and more distal measures. In their review, Hill and Lambert also pointed out that data from therapists who are aware of the treatment status of clients produce larger positive ratings than those from virtually all other sources. Similarly, they found that global ratings of change produce larger estimates of change than ratings on specific dimensions, symptoms, or problem areas and that proximal ratings lead to more positive ratings of change than distal ones. Physiological measures, in contrast to those by therapists or "unblinded" evaluators (those who know the treatment status of the client), typically show small effects of treatment, even when they are the targets of treatment. They noted in their review that global ratings of treatment goals are characterized by multiple methodological problems. Among them were high correlations among goal ratings (a "halo" effect); the use of relative perceived goal change as opposed to absolute, well-defined, standardized criteria for change; and a confounding between therapist expectancy and their ratings. They recommended that to the extent, global ratings are utilized to measure outcome that follow-up evaluators be as independent as possible from therapists/goal setters so that there is maximal independence of and objectivity in ratings.

Other issues have been identified relative to determination of aspects of the effectiveness of psychotherapy. There has been a consistent finding in the general treatment outcome literature that the investment of a researcher/therapist to a particular model of intervention accounts for a significant amount of the measured outcome in treatment studies that find particular interventions effective. Recently, Munder et al. (2013) conducted a MA of 30 studies of Researcher Allegiance (RA). They found that the mean RA-outcome association was statistically significant ($r = 0.26$) corresponding to a moderate effect size and that this relationship was robust across several moderating variables including characteristics of treatment, population, and the type of RA assessment. Munder et al. concluded that the RA-outcome association is substantial and robust. In addition, Lambert and Ogles (2004) reviewed several large treatment outcome studies that attempted to "dismantle" or study components of interventions. Results indicated that treatment outcome was not related to which specific components clients received or the acquisition of skills (symptoms improved before skills training and potential behavioral change). More recently, a meta-analysis was conducted on both additive and dismantling studies, which examined their effect both at the end of formal treatment and at follow-up. Bell et al. (2013) found that for dismantling studies, there were no significant differences between the full treatments and the dismantled treatments. For additive studies, the treatment with the added component showed a small but significant effect at completion and a large effect at follow-up. However, this was only true for specific problems that were targeted for intervention. Thus, some specific intervention components, directly related to the primary treatment target, made only a modest contribution at outcome. In short, other than investigators "finding" what they expect or want to, there are significant questions about what elements of psychotherapy "matter" or "work" relative to "symptom relief" or "behavior change."

In research settings, treatment dropout or attrition has averaged to 47 % and is even higher in actual clinical settings (e.g., Lambert & Ogles, 2004); per a meta-analysis, approximately 47 % of patients dropped out of psychotherapy (Wierzbicki & Pekarik, 1993). Clarkin and Levy (2003) identified that clients with maladaptive personality traits (such as those with personality disorders) were at high risk for premature dropout, with dropout rates varying from 40 to 67 %. Three client variables found to be particularly related to negative outcomes were overall problem severity at intake, interpersonal difficulties, and comorbid personality disorders

(e.g., Lambert & Ogles, 2004). Lillenfeld (2007) reported on a number of psychotherapies for specific problems that actually demonstrated harmful outcomes for clients. More generally, as many as 10 % of clients' problems worsen as a result of their participation in psychotherapy (e.g., Lambert & Ogles, 2004).

Research has also examined therapist and client variables related to treatment outcome. Lambert (1992) concluded in an earlier review that as much as 40 % of client improvement may be attributed to client variables and extra-therapeutic influences. Thus, number and severity of maladaptive personality traits and social detachment were also found to be associated with poor psychotherapy response (e.g., Clarkin and Levy, 2003). Some clinicians appear to be "outliers" in terms of their increased effectiveness as psychotherapists (Lambert & Ogles, 2004; Lambert, 2013); that is, in particular, it appears that specific therapists account for a disproportionate percent of "successful cases" in treatment outcome studies, leading to suggestions that there should be increased study of the "empirically validated therapist." Per Lambert and Ogles (2004), the importance of the so-called therapeutic alliance is a necessary but not sufficient condition for change in psychotherapy. They view the therapeutic alliance as a manifestation of the critical role of common factors in effective psychotherapy. However, they determined: "…we simply do not know enough yet about the therapist factor to specify when and how it makes a difference, nor when it matters more than technique" (p. 168). Similarly, Crits-Christoph, Johnson, Connolly Gibbons, and Gallop (2013) concluded:

> Despite extant research, there are mixed reviews on the importance of the therapeutic alliance in treatment outcome;" they pointed to a recent MA that found a "small to moderate relationship between the [therapeutic] alliance and therapeutic outcome (r=0. 27)." (p. 302)

Crits-Christoph et al. also pointed to research which suggests that early positive change in symptoms is the actual *cause* of a positive or improved "therapeutic alliance," as opposed to the opposite process.

Summary of Psychotherapy Outcome Literature

Relative to control conditions, psychotherapy has been found somewhat to be moderately beneficial for persons motivated for change in their lives, particularly for persons who seek treatment primarily because they themselves are disturbed by moderate to high degrees of emotional distress (e.g., they "feel badly"). For many persons who seek psychotherapy for anxiety or depression, the effects of treatment appear to be somewhat enduring (albeit these have typically been relatively "pure" clients by virtue of exclusion criteria that screen out significant—and typical—comorbidity, for example). In contrast, for persons seeking treatment to address more complex or severe behavioral problems, there is little to some evidence for the relative effectiveness of psychotherapy typically for particular features of those conditions (and not necessarily changes in key signs or symptoms). In general, greater problem severity and chronicity, comorbid psychiatric conditions (in particular, maladaptive personality traits), and functional impairment in everyday life were each associated with decreased response to psychosocial treatments. Researcher allegiance appears to account for a significant amount of variance in outcome; those invested in a particular intervention are more likely to find it effective. There is *decreasing* evidence that *specific types* of psychotherapy produce differential degrees of improvement, including even the treatment of emotional distress. Thus, most interventions are equally effective for persons with emotional distress. Little superiority of CBT has been demonstrated for more severe and/or behavioral conditions. To be effective, psychotherapy needs to be provided in a sufficient dose relative to the severity of the individual's presenting problem; a greater number of and/or more severe problems require more intense and/or higher doses of psychotherapy. Clearly, client characteristics have a particularly significant role in or influence on the outcome or benefit realized in psychotherapy. Therapist characteristics also impact the outcome of psychosocial treatment for common presenting problems; some individuals appear to be much more effective with clients than other clinicians. In 1986, Lambert concluded that common (therapeutic) factors accounted for 30 % of the therapeutic effect, technique 15 %, expectancy (placebo-effect) 15 %, and spontaneous remission 40 %. More recently, Lambert (2013) suggested that improvement from psychotherapy is a function of the following four factors to the indicated degree: client/life situation (40 %), common factors (30 %), client expectancy (15 %), and (specific) techniques (15 %).

Key Reviews of Sexual Offender Treatment Outcome Reviews

General Systematic Reviews of Sexual Offender Treatment

Systematic reviews (SR) of treatment research involve a particular approach to the examination of scientific literature, one that attempts to identify and appraise available studies regarding interventions for a particular problem or condition. SRs include a clearly formulated question; use systematic and explicit methods to identify, select, and critically appraise relevant research; and collect and analyze data from the studies that are included in the review. Specific statistical methods (e.g., such as meta-analysis) may or may not be used to

analyze and summarize the results of the included studies. In most fields of medicine or mental health more specifically, SRs are limited to a focus on high-quality studies such as RCTs. In certain cases, SRs involve simply a sequential discussion of selected studies with a critical discussion of the apparent results across studies. A second type of review is, in effect, a subsection of systematic reviews and often relies on meta-analysis (as noted previously, a particular statistical technique which appraises the combined results of varied studies utilizing common metrics). It is worth noting that a recent review of 300 studies by Moher et al. (2007) found that all systematic reviews were not equally reliable. Moher et al. concluded that the quality of reporting in such reviews was often inconsistent. For therapeutic reviews, the comparison of Cochrane[2] and non-Cochrane reviews provided discouraging results and suggested little improvement in the quality of reporting of non-Cochrane reviews over time. It was found that many non-Cochrane reviews did not report key aspects of systematic review methodology. Further, strong evidence of bias in outcome reporting was noted for non-Cochrane reviews.

In the first modern SR of sexual offender treatment, Furby et al. (1989) found few well-designed studies of sexual offense recidivism, including those where offenders received specialized sexual offender treatment or generalized treatment. In particular, they noted that the most common design for studies they reviewed were single-group, posttest-only designs; these were investigations where a group of sexual offenders were provided treatment and a recidivism rate was determined for that group. Thus, these studies did not include a "no intervention" control group to compare sex offense recidivism rates for comparable sexual offenders who did not receive treatment. Furby et al. concluded that there is "as yet no evidence that clinical treatment reduces rates of sex reoffenses" (p. 27).

White et al. (1998) developed the first Cochrane review (CR) of "Managements for people with disorders of sexual preference and for convicted sexual offenders." White et al. attempted to identify all relevant randomized controlled trials and could identify only three methodologically sound studies of the type typically considered for medical efficacy treatments and only two of these were psychological interventions: Romero and Williams (1983) compared psychodynamic group treatment to probation, while the Sex Offender Treatment Evaluation Project (SOTEP) Marques et al. (1994) was the preliminary report of what would eventually be the largest RCT of CBT-RP specific to sexual offender treatment. White et al. concluded:

> It is disappointing to find that this area lacks a strong evidence base, particularly in light of the controversial nature of the treatment and the high levels of interest in the area…large, well-conducted randomized trials of long duration are essential if the effectiveness or otherwise of these treatments are to be established. (Abstract)

Alexander (1999) reviewed 79 studies of rates of sexual offense recidivism of sexual offenders ($n = 10, 988$) as a means of opining whether sexual offender treatment might make a difference in such recidivism. She explicitly rejected applying a meta-analytic approach due to methodological issues regarding the lack of standardized research designs, making it problematic to determine whether observed differences were the result of exposure to treatment or to other study or group differences (e.g., follow-up periods, offender samples, recidivism criteria, or other design features). Further, as she noted: "The current subject pool does not include subjects who dropped out or were terminated during the course of the treatment. Dropouts/non-completers were excluded due to the lack of consistency with which data on these subjects were reported in their various studies" (p. 103). Alexander reported a very *slight* difference in sexual offense recidivism in favor of treatment ($d = 0.12$). Again, the majority of studies included no control group let alone subjects randomized to treatment; thus, the treated and untreated sexual offenders (the "quasi" control group), in most cases, were from different samples. As a result, it was unclear what kind of comparative conclusion could be reached. Hanson et al. (2002) indicated that a valid criticism of Alexander's results was that there was too much method variance across studies to allow for clear conclusions.

In a SR, Gallagher et al. (1999) examined 25 published and unpublished studies on the effects of sexual offender treatment on sexual reoffending. Of these, 22 are related to adult sexual offenders. They found that 11 or 44 % of the studies included no comparison group and 9 or 36 % included "nonspecialized" treatment. Further, only 2 studies used random assignment (RCT), only 5 used subject level matching, and only 12 % included treatment dropouts. The authors conducted a meta-analysis but provided little detail of their particular methodology. Overall, they concluded that most treatment groups fared better than comparison groups relative to sexual offense recidivism. They found a "medium" effect size, but they also found that effect sizes varied greatly, "suggesting genuine differences in treatment effect estimates across studies" (p. 22). [Of note, they considered the earliest publication of the SOTEP study, which showed more promising results than the final version.] Gallagher et al.

[2]The Cochrane Collaboration consists of systematically reviewing randomized trials of the effects of varied health interventions. Cochrane reviews (CR) are viewed a scientific investigation in itself, with a preplanned method section and an assembly of original studies (predominantly randomized controlled trials and clinical controlled trials). The results of these multiple primary investigations are synthesized by using strategies that limit bias and random error. The Cochrane Collaboration provides a handbook for systematic reviewers of interventions across various mental and physical health domains. Over 150,00 RCTs exist in the Cochrane library, and they are recognized as a key resource in evidence-based medicine.

showed that neither the strictly behavioral nor the augmented behavioral treatment produced significant reductions in recidivism. They reported that cognitive-behavioral treatment programs appeared to be effective in reducing sexual offense recidivism. Gallagher et al. found no difference between studies using cognitive-behavioral therapy alone or with relapse prevention methods. They concluded that despite heterogeneity of effects and various methodological issues, there was "sufficient evidence" to suggest the effectiveness of CBT for sexual offenders. However, as Hanson et al. (2002) indicated, the Gallagher et al. review included six studies in which biases in favor of a treatment effectiveness might be expected; in addition, the Gallagher review was also based on the preliminary results of studies in which the final or later results were more negative for the same studies (e.g., SOTEP).

Grossman et al. (1999) attempted to review what they regarded as available key papers presenting data on outcomes for sexual offenders in treatment programs. They noted that generally results suggested that biological and psychosocial interventions appeared to reduce sexual offense recidivism. However, they concluded: "Although some forms of treatment for sex offenders appear promising, little is known definitively about which treatments are most effective for which offenders, over what time span, or in what combinations" (p. 358). "In particular, they noted that available findings appeared to suggest that the more high risk a sexual offender was, the less confident we can be that treatment will have lasting benefits" (p. 359). Grossman et al. urged caution in "unfolding the implications of the positive treatment findings in the literature," stating that while treatments exist and results indicate some potential, "They are, however, complex, difficult to interpret and cause for cautious optimism as best. If mental health professional and society at large are to accept the challenge of promoting treatment for sex offenders, vigorous ongoing research efforts are mandatory" (p. 359).

Also in another SR from 1999, Polizzi, MacKenzie, and Hickman (1999) observed that the "The recent reviews and meta-analyses concerning the efficacy of sex offender treatment provide conflicting viewpoints" (p. 370). They compared prison-based to community-based sexual offender treatment programs. A key feature of this review is that they utilized the so-called Maryland criteria to assess scientific rigor. Initially, they began with consideration of 21 studies. However, the investigators rejected 8 studies as "too low in scientific rigor," leaving just 13 studies to examine. Polizzi et al. identified that approximately 50 % of the remaining studies showed statistically significant findings supportive of sexual offender treatment in reducing sexual recidivism. Most of these studies employed a CBT approach to treatment. They concluded that community-based programs were "effective." However, they only identified two studies that they characterized as possessing "scientific merit" [one of child molesters (from 1988) and exhibitionists (from 1991)]. More importantly, in the studies examined in their SR, Polizzi et al. did not control for the effect of dropouts/refusers on the recidivism rates of untreated comparisons. They concluded that "non-prison-based sex offender treatment programs using cognitive-behavioral treatment methods are effective in reducing the sexual offense recidivism of sex offenders." Thus, they claimed community-based CBT for sexual offenders "works." In contrast, they concluded that prison-based programs using CBT were "promising," "but the evidence is not strong enough to support a conclusion that such programs are effective" (p. 20). Of note, the authors included the SOTEP study as a community-based program, whereas the participants were actually prison inmates whose treatment site was a state hospital. The authors noted that there were too few studies focusing on particular types of sexual offenders to draw conclusions about whether treatment was effective for rapists, child molesters, or "high-risk" sexual offenders. Polizzi et al. concluded: "Any conclusions drawn from this review must remain tentative. With a heterogeneous population, it is difficult to provide general conclusions about the effectiveness of sex offender treatment programs" (p. 372).

Bilby, Brooks-Gordon, and Wells (2006) conducted a SR of quasi-experimental and nonrandomized controlled trials with matched and non-matched controls, including 21 quasi-experimental studies from the UK, USA, Canada, and Europe. They noted that due to the wide variety of outcome measures, they felt that they could not conduct a meta-analysis. They pointed out that although the majority of these studies were matched studies: "The problem with type of study is that, to match successfully, investigators need to know about all the relevant factors which may influence outcome, and this is unlikely to be the case, leading to potential differences between experimental and control groups" (p. 470). They also noted that 13/21 studies did not specifically match participants and that control groups were drawn from very different samples. In a later article, Brooks-Gordon and Bilby (2006) wrote:

> Most participants in matched trials where a significant treatment effect was found were allocated to treatment groups according to sentencing decision and post-sentencing risk assessment. Most of these studies were matched retrospective trials carried out on offenders in the criminal justice system; matching was done retrospectively. Matching offenders with a control group is problematic and can threaten the quality of the research. The results here were equivocal: more studies found no statistically significant treatment effect than found a significant effect. (p. 5)

Bilby et al. (2006) found that 7 studies showed a statistically significant treatment effect and 10 did not, while in 4 studies the data were not clear enough for analysis.

Brooks-Gordon et al. (2006) conducted a SR of RCTs regarding the effectiveness of psychological treatments for

sexual offenders. They found nine RCTs (all reported before 1998 and totaling 567 offenders), 231 of which had been followed up for 10 years. They concluded: "Analysis of the nine trials showed the cognitive behavioural therapy (CBT) in groups reduced re-offence at 1 year compared with standard care ($n = 1{,}555$) but increased re-arrest at 10 years" (p. 442). They noted that if the Romero and Williams (1983) study had had only a few more rearrests in the intervention group, it could be suggested that treatment was less effective than doing nothing. Brooks-Gordon et al. wrote that their findings were "likely to be controversial as there is a huge investment in sexual offender treatment programmes, and many policymakers erroneously and unreservedly assert that sexual offender treatment therapy is effective—whereas our findings show that uncertainty about effectiveness of treatment remains" (p. 460). Further, they stated:

> The ethics of providing this still-experimental [sexual offender] treatment to a vulnerable and potentially dangerous group of people outside of a well-designed evaluative study are debatable…Psychological interventions could help or they could harm sex offenders…In an environment of limited resources it would seem imprudent to allocate funds to unproven and potentially harmful interventions. (p. 461)

Kenworthy et al. (2003, 2004) initiated an updated CR of White et al.'s (1998) earlier study, noting that there was significant political and institutional pressure to prove that treatment works. However, they concluded: "To date, no positive treatment effects have been found in quasi-experimental institutional programmes" (abstract). They examined nine random assignment studies involving treatment of over 500 sexual offenders that were available as of 2002; thus, they evaluated the same studies as Brooks-Gordon et al. (2006). However, Kenworthy et al. found that a lack of relevant data made it impossible to draw conclusions for clinicians, concluding:

> Limited data make recommendations difficult. One study suggests that a cognitive approach results in a decline in re-offending after one year. Another large study shows no benefit for group therapy and suggests the potential for harm at ten years. The ethics of providing this still-experimental treatment to a vulnerable and potentially dangerous group of people outside of a well-designed evaluative study are debatable. This review proves such studies are possible. (abstract)

The Institute for Health Economics (IHE) in Alberta, Canada, provides evidence in health technology assessment to assist in health policymaking and best medical practices. The IHE, like the Cochrane Collaboration, is an independent, not-for-profit organization that performs research in health economics and synthesizes evidence to assist health policymaking and best medical practices. The IHE published a Health Technology Assessment (HTA) Report entitled "Treatment for Convicted Adult Male Sex Offenders" (Corabian, Opsina, & Harstall, 2010a). [Subsequently, Corabian et al. (2010b) provided an e-journal summary of the IHE study.] The IHE identified eight SRs conducted on the effectiveness of sexual offender treatment interventions that met their inclusion criteria; all eight focused on the use of psychotherapy and one also included studies of surgical castration and hormonal medication (e.g., Losel & Schmucker, 2005). These studies were selected as meeting the IHE inclusion criteria, which by virtue of design and quality of reporting were most likely to provide "high levels of evidence." They concluded that a subset of the studies showed "small but statistically significant reductions in sexual and general recidivism rates among convicted adult male sex offenders treated with various cognitive behavioural therapy (CBT) approaches…" (p. iv). Yet they noted when analyses were restricted to the few available RCTs, a mean effect was shown, but it was *not* statistically significant. Further, the IHE also stated:

> Confidence in these findings, however, must be tempered as the available evidence is based mostly on poor quality primary research studies…Given the methodological problems of the available primary research it is difficult to draw strong conclusions about the effectiveness of sexual offender treatment programs using various CBT approaches for such a heterogeneous population. (p. iv)

In addition, the IHE stated: "SOT programs neither cure sexual offending nor guarantee a complete cessation of offending…" (p. 37). At best, they noted that such interventions represent but one element in a comprehensive risk management strategy for sexual offenders. The IHE further noted: "Overall, the results reported by the selected SREs provide little direction regarding how to improve current treatment practices…There are still uncertainties reading the most useful elements and components of a SOT program for convicted adult male sex offenders." They concluded that the available research indicated "…more and better research was needed to clearly answer the set of remaining questions" (p. iv).

Later in the IHE report, they noted:

> …since the evaluated programs were not sufficiently documented…it was not possible to identify if any characteristics or elements contributed more or less to the success or failure of a program and who of the involved offenders were most likely to benefit from or be harmed by treatment. SOT programs typically work within a broad CBT framework but may vary in terms of resources, philosophy of a program and its treatment objectives, timing, duration, format, intensity, and content of treatment, level of worker expertise and treatment fidelity/integrity as well as the referred sex offenders' characteristics and selection criteria for participation in the program (which can be based on various risk assessment modalities or no risk assessment at all). (p. 33)

Ultimately, the IHE concluded: "Any conclusions drawn from this overview of SRs remain tentative. Given the methodological problems of the available primary research, it is

difficult to draw strong conclusions about the effectiveness of SOT programs using various CBT approaches for such a heterogeneous population" (p. iv).

In 2011, the Swedish Council on Health Technology Assessment HTA (identified by its Swedish acronym of SBU) was assigned by the Swedish government to conduct a SR of "Medical and Psychological Methods for Preventing Sexual Offenses Against Children." This review provided an extensive and detailed report of the existing SRs and meta-analyses of sexual offender treatment. The SBU found that in examining seven previous SRs:

> …the debate in the scientific literature on what sexual offender treatment interventions works for adult male sexual offenders remains divided…Although some of the selected SRs suggest a positive effect for CBT on both sexual and general recidivism, methodological problems, inconsistency results, and a lack of high-quality primary research studies included in the SRs raise uncertainty about which of the available approaches work for adults male sex offenders. (p. 32)

The SBU SR stated that the available evidence provided evidence for some effectiveness of treatment in reducing sexual offense recidivism, noting that existing SRs showed small reductions in such recidivism for sexual offenders after undergoing CBT. However, the SBU concluded:

> Major deficiencies were found in the evidence concerning effective medical and psychological interventions for individuals that have committed sexual offences against children. This is serious since the purpose of this treatment is to prevent new offences… For adults that have committed sexual offenses against children the scientific evidence is insufficient for determining which treatments that could reduce sexual reoffending. The lack of evidence concerns both benefit and risk for pharmacotherapy and psychological treatment programmes. (pp. 4–5)

In addition, the SBU concluded: "Sexual offender treatment programs neither cure sexual offending nor guarantee a complete cessation of offending, and they represent one element in a comprehensive risk management strategy designed for convicted adult male sex offenders…Not all sexual offender treatment interventions and programs are effective in reducing sexual/non-sexual recidivism in this population" (p. 37).

Most recently, Langstrom et al. (2013) conducted a systematic review of medical and psychological interventions of sexual offenders who committed sexual offenses against children. They reviewed 1,447 abstracts, retrieved 167 full text studies, and finally included eight (8) studies with low to moderate risk of bias. They concluded that there was "weak evidence for interventions aimed at reducing offending in identified sexual abusers of children…For adults, evidence from five trials was insufficient regarding both benefits and risk with psychological treatment and pharmacotherapy." Langstrom et al. noted: "Despite severe consequences for victims and society, this systematic review identified remarkably little research of acceptable quality on individual-level prevention of child sexual abuse" (p. 3). Of more recent studies, they identified only one RCT involving offenders who had sexually abused children. Overall, effectively, they concluded that no evidence exists of the effectiveness of cognitive-behavioral treatment or pharmacological interventions, noting "the remarkable lack of quality research studies in sexual abuser of children…" (p. 4). They expressed the hope that such treatments might be found to have some positive effects if and when large, methodologically rigorous, studies are implemented. However, they are also warned of the potential consequences of denying treatment to offenders for whom it might have benefit and, conversely, of providing unproven treatment that might increase the risk for future sexual offending.

Meta-Analyses of Sexual Offender Treatment

Kendall et al. (2004) identified that meta-analytic statistical techniques could be useful because they synthesize results across multiple studies by converting the results of each investigation into a common metric (usually, the "effect size"). Such a method increases the potential power of experimental studies by combining the results of a number of investigations (typically with relatively small numbers of subjects) to increased statistical power to determine if there is a trend or clear effect over the aggregated studies. As noted previously, such an effect size (ES) provides a measure of the magnitude or "strength" of the experimental effect; in and of itself, the effect size is not an indication of causality.[3] The outcomes of different treatment comparisons can then be compared with respect to the magnitude of difference reflected in such statistics. As noted, a key issue that arises in meta-analytic studies has to do with whether studies of inferior methodological quality should be included or omitted. Kendall et al., among others, agree that it is important to eliminate those studies whose quality does not allow them to contribute meaningful findings as a result of basic inadequacies in research design. A recommendation that a particular approach is effective or more effective than an alternative approach cannot be determined if that recommendation is based on inadequate research:

> If the research evidence is methodologically unsound, it is insufficient evidence for a recommendation; it remains inadequate as a basis for either supporting or refuting treatment recommendations, and therefore it should not be included in cumulative analyses…Caution is paramount in meta-analyses in which various studies are said to provide evidence that treatment is superior to

[3]The effect size (ES) is typically derived by computing the difference between the mean of the treatment group and the control group at post-treatment and then dividing the difference by the pooled standard deviation of the 2 group.

> controls. The exact nature of the control condition in each specific study must be examined…Meta-analyzers cannot tabulate the number of studies in which treatment is found to be efficacious in relation to controls without examining the nature of the control condition. (Kendall et al., 2004, p. 37)

Thus, a critical issue for interpreting the results of any MA is reliant on the quality of the specific investigations that compose the MA; the inclusion of methodologically weak or inadequate studies limits any conclusions drawn from that MA.

Hall (1995) conducted the first MA of sexual offender treatment studies that appeared after the review by Furby et al. He studied only studies that include some comparison group and utilize recidivism rates between each treatment and comparison groups (alternative or no treatment) as the outcome measure. Of 92 studies available, 80 were eliminated from consideration because they had fewer than 10 subjects, lacked a comparison or control groups, or did not report sexual offense recidivism rates. For the twelve studies Hall deemed adequate for evaluation, his MA revealed a "small" but statistically significant overall treatment effect ($r = 0.12$); however, the treatment ES across studies were significantly heterogeneous. Effect sizes were significantly greater in studies of outpatients than for studies of institutionalized offenders, potentially an effect of the severity of participant psychopathology. Hall concluded that comprehensive cognitive-behavioral treatments (CBT) showed better outcomes than purely behavioral treatments. Hall noted conservatively that 36 % of those eligible for participation in sexual offender treatment were typically excluded from participating in treatment: "In general, the most pathological participants were excluded from samples (e.g. extensive offense history, psychotic, organic brain syndrome, denied offenses, management problem in prison, withdrew from treatment program)" (p. 803). Consequently, he wrote, "Thus, the currently reviewed treatments may be less effective with the most pathological sexual offenders" (p. 808). In addition, it was found that 1/3–2/3 of participants refused hormonal treatments, while refusal and dropout rates for CBT were found to be about 1/3 of eligible participants. Hall concluded that his meta-analysis results suggested "the effect of treatment with sexual offenders is robust, albeit small…" (p. 808).

In 2002, Hanson et al. published the first report from a Collaborative Outcome Data Project (CODP) established by the Association for the Treatment of Sexual Abusers (ATSA). They noted that a primary objective of the CODP was "to promote professional debate concerning the relative quality of treatment outcomes studies for sex offenders" (p. 173). Hanson et al. conducted a MA that combined data on 43 psychosocial treatment programs involving 9,454 sexual offenders who were either assigned to either sexual offender treatment, were untreated or were provided other interventions. Of the treatments reviewed, 23 were offered in institutions, 17 in the community, and three in both settings; the major sponsor of the programs studied were departments of corrections ($n = 26$). The treatment studies considered were delivered between 1965 and 1999; only 23 studies had been published in either a book or a journal and approximately ½ were from the USA (Canadian samples made up another 16 studies). Approximately 80 % of the sexual offenders received "current" treatment (defined as CBT offered after 1980 or behavioral, other psychotherapeutic, and/or mixed treatments delivered between 1998 and 2000). The median length of the follow-up was 46 months for both treatment and comparison groups or just less than 4 years. Sexual offense recidivism was defined by reconviction in 8 studies, rearrest in 11 studies, while 20 studies used broad definitions (e.g., including parole violations, readmissions to institutions, unofficial community reports, or all of these). Thirteen programs reported outcome only on sexual recidivism, five reported only on general recidivism outcomes, and 25 reported on both.

Hanson et al. (2002) grouped the studies that they considered into several categories. The first category was based on the strongest method for comparing different comparison groups, random assignment; in these studies, persons were randomly divided into groups who received treatment and those who did not. The second category that Hansen et al. considered relative to treatment outcome was referred to as "incidental assignment" to treatment. In these studies, sexual offenders who were provided with sexual offender treatment were compared to varied comparison groups that were "created" from some pool of sexual offenders available to investigators. Per the 2002 review, such control groups were matched in various ways to those who received treatment. Thus, the control samples were selected according to varied criteria in specific studies, including offenders who (1) had been released before the implementation of the treatment program (5 studies); (2) had received no treatment or received treatment judged to be lower in quality, due to such administrative reasons such as too little time remaining on their sentences (5 studies); (3) matched from archives of criminal history records (3 studies); or (4) had received an earlier version of the treatment (2 studies). Hansen et al. labeled these 17 studies as involving "incidental assignment" because it was theorized or believed that there was no "obvious" or "a priori" expectation that the treated and untreated offenders should differ in risk and thus have no "obvious" bias in group composition. In addition, an additional category of subjects considered by Hanson et al. was those deemed "assignment based on need," where treatment [was] given to those assessed as requiring treatment. Finally, they compared any treatment attendance (including dropouts), treatment completers to treatment dropouts, and treatment dropouts to treatment refusers.

Results of the MA of 5,078 treated and 4,376 untreated sexual offenders found that the *unweighted* averages across all studies indicated the sexual offense recidivism rates were lower for the treated groups (12 %) than for the comparison groups (17 %). The chief conclusion drawn by Hanson et al. (2002) from these results was that "there was a *small* advantage for the treated versus the untreated offenders," and this finding was statistically significant (p. 181, emphasis added). However, this overall analysis included the results of sexual offender treatment for juvenile sexual offenders, which, were more likely to show a positive outcome for offenders (albeit largely for multiple trials of one particular method of treatment). Further, Hanson et al. noted considerably variability across studies, with treatment effects much larger in studies that had not been published. Of significance, when only the four methodologically superior RCT studies were examined, *no* treatment effect was found. In contrast, evidence for treatment effectiveness was found only in the results from the incidental assignment studies which, on average, showed statistically meaningful reductions in sexual offense recidivism, albeit with more variability than expected by chance. Perhaps oddly, Hanson et al. then combined the nonsignificant findings from the methodologically superior random assignment studies with the significant effects of the 17 methodologically inferior incidental assignment studies of "current" treatments and, on this basis, concluded that "current" treatments were associated with significant reductions in both sexual (from 17.3 to 9.9 %). Thus, the results that Hanson et al. found for treated sexual offenders over a mean 4-year follow-up (12 %) were comparable to the rates of sexual offender recidivism that had been found for largely untreated sexual offenders in the two MA of risk factors for sexual offender recidivism; respectively, Hanson and Bussiere (1998) and Hanson and Morton-Bourgon (2004, 2005) indicated that the mean 5-year rates of sexual reoffending for the two large samples of almost exclusively untreated sexual offenders were 13 and 14 %. Thus, the results for sexual reoffending that Hanson et al. (2002) reported for the treated sexual offenders in their treatment MA were equivalent to the rate of much larger samples of untreated sexual offenders in varied comparison groups.

According to Hanson et al. (2002), other findings from their meta-analysis included:

> studies comparing treatment completers to dropouts consistently found higher sexual and general recidivism rates for the dropouts, regardless of the type of treatment provided. Even in studies where there was no difference between the treatment group and the untreated comparison groups, the treatment dropouts did worse. (p. 182)

Although it was determined that dropouts were approximately twice as likely to sexually reoffend, in their analysis of the untreated "comparison" groups, Hanson et al. did not account for or control for such dropout effects; there was no analysis of intent to treat. Hanson et al. also reported "offenders who refused treatment were not at higher risk for sexual recidivism than offenders who started treatment" (p. 182), a finding that conflicts with that of the other reviews. Interventions that were viewed as "current" treatments were found to be associated with greater reductions in recidivism. In contrast to what Polizzi et al. (1999) reported, Hanson et al. (2002) found that both institutional and community treatments showed equal results regarding the degree of recidivism associated with the different types of programs.

However, a key finding by Hanson et al. was that "Offenders referred to treatment based on perceived need had significantly higher sexual recidivism rates than the offenders considered not to need treatment" (p. 182). The odds ratio was 3.4 (with an outlier study removed), and there was no significant variability, indicating that this was a robust phenomenon. Hanson et al. concluded: "Studies that compared sex offenders who 'needed' treatment to less needy offenders consistently found *worse outcomes for the treatment group*. It appears that evaluators are better able to identify high risk offenders than to change them" (p. 187, emphasis added).

Hanson et al. offered a considerably measured conclusion to their MA, writing, "We believe the balance of available evidence suggest that current treatments reduce recidivism, *but that firm conclusions awaits more and better research*" (p. 186, emphasis added). They indicated that when random assignment and incident assignment studies were combined, there was a *reduction* in sex offense recidivism and "These reductions were not large, but they were statistically reliable and large enough to be of practical significance" (p. 187, emphasis added). They concluded that the absolute reduction in recidivism rates was *modest* even among the better-designed studies of current treatments and that no treatment effect was found among the best-designed studies. The results reported by Hanson et al. suggested that treatments that appeared effective for adult sexual offenders were more "current" programs providing some form of CBT. They also reported no "setting" effect for sexual offender treatment; both institution-based and community-based programs for adults were found to be associated with reductions in sexual recidivism of adult sexual offenders. Hanson et al. did not identify specific interventions that provided guidance on the effectiveness of any sexual offender treatment interventions for different types of sexual offenders (e.g., "rapists" vs. child molesters or mixed offenders). Finally, the authors concluded that the results of their meta-analysis provided little direction in terms of how to improve current practice.

Several years later, Losel and Schmucker (2005, 2008) conducted another meta-analysis of both published and unpublished sexual offender "controlled" outcome studies available as of 2003, involving either psychosocial **or** biological

treatments. Losel and Schmucker (2005, 2008) reviewed 69 studies with more than 22,000 subjects; unpublished investigations comprised 36 % of the study pool. Of those studies, approximately 18 % were analyses of biological treatment (e.g., hormonal treatment and surgical castration). Of the remaining studies identified, 46 % were of CBT and 18 % were "classical" behavioral psychosocial treatments. Per their 2008 paper, however, "60 % of the identified studies used clearly non-equivalent control groups" (emphasis added, p. 16, emphasis added). About one-third of these studies had been reported since 2000, but the actual program implementation started earlier (e.g., in the 1990s). Approximately 70 % of these studies were conducted in North America. The definition of recidivism varied across studies: arrest (24 %), conviction (30 %), and charges (19 %). Recidivism was recorded after an average follow-up period of more than 5 years. Sexual recidivism outcomes were reported in 74 of the 80 comparisons. Although most treatments were specifically designed for sexual offenders, the authors found it difficult to rate whether treatment was implemented reliably, as three-quarters of the studies did not provide information on program integrity. Residential (institutional) treatment was somewhat more frequent than outpatient treatment; approximately one-half of the studies were implemented in an institutional setting. Although a group format was most frequently used, almost 50 % of the programs included at least some individualized treatment. Sexual offenders who received treatment participated voluntarily in most studies; however, 30 % of the comparisons referred to offenders who were at least partially obliged to attend treatment. In more than 50 % of the primary research studies, the authors were affiliated with the treatment program that was implemented (raising the question of allegiance issues).

Methodologically, approximately one-third of the comparisons contained fewer than 50 sexual offenders as subjects, while 46 % included 100 subjects or less. Only seven comparisons were based on random assignment and just six studies received a Level 5 designation of the Maryland scale. Conversely, 60 % of the treatment comparisons were at Maryland Scale Level 2 such that treatment and control group could not be considered equivalent; in an additional 24 % of studies, the equivalence of the two groups was simply assumed by the original investigators. In approximately 24 % of the comparisons, the control group consisted of treatment refusers.

Of note, when recidivism rates were calculated for treated and comparison subjects initially using unweighted averages, a treatment effect was found. However, when weighted averages were utilized (e.g., taking into account relative numbers of persons in treatment and comparison groups), "the difference in recidivism rates vanished completely (11 % each for treated and comparison participants)," (p. 127) although the authors dismissed this issue.

Subsequently, Losel and Schmucker (2005) utilized the mean effect size, which showed that the majority of effects were positive; they then calculated odds ratios.[4] Including treatments for **both** biological and psychological treatments, the mean odds ratio for sexual offense recidivism was 1.7, which was highly significant so that the absolute difference in sexual recidivism between the "any" treatment group (e.g., biological **and/or** psychosocial intervention) and the heterogeneous control groups was 6 %. The rate of sexual recidivism for the overall treated groups (e.g., psychosocial **and/or** biological treatments) was 11 % (the control groups showed an average sexual offense recidivism rate of 17.5 %). However, as with the Hanson et al. (2002) meta-analysis, there were considerable, statistically significant differences in effect sizes across the comparisons studied indicating considerable heterogeneity beyond what would be expected by chance. Large effects of treatment were found more frequently in studies with small sample sizes. Of note, medical treatments (e.g., hormonal treatments or surgical castration) were found to have considerably higher effect sizes than those for CBT (e.g., 2–10 times larger, respectively). Of psychosocial interventions, only cognitive-behavioral and "classic behavior therapy" generally showed a significant impact on sexual offense recidivism. An important issue relative to how the Losel and Schmucker (2005) results are typically discussed is that the widely reported reduction in sexual offense recidivism as a result of "treatment" includes the combined results of both biological and psychosocial interventions; the reported 6 % (or "37 %" relative reduction) for sexual offense recidivism resulted from a comparison of *both biological and psychosocial interventions* and would not apply to just psychosocial interventions. Losel and Schmucker (2005) reported that after removing those studies involving surgical castration (which had the highest effect size of all treatments), the effect size for treatment generally decreased and the relative sexual offense recidivism "drop" for nonsurgical treatments decreased by approximately one-third.

In contrast to the Hanson et al. (2002) findings, more modern sexual offender treatment programs were no more effective than earlier programs. Losel and Schmucker and Losel (2008) noted that "Some recent evaluations have revealed rather small or no positive effects…As follow-up one of the soundest evaluations has also found no positive effect…" (p. 136). That is, as with the Hanson et al. (2002) meta-analysis, Losel and Schmucker's (2005) review did not include the final results of the Marques, Wiederanders, Day, Nelson, and Ommeren (2005) study that showed no effect of sexual

[4]Odds ratio is the *odds* of being in one group relative to the *odds* of being in a different group and is used with categorical variables (e.g., treatment, no treatment; reoffend, not reoffend). The odds ratio is not the chance or likelihood but the ratio of the odds, not the percentages. The odds of an event occurring is the probability of an event divided by the probability of an event not occurring.

offender treatment utilizing a RCT. No difference was found between group and individual treatment programs by Losel and Schmucker (2005). Per their 2008 report, "Only outpatient treatment showed a significant effect" (p. 13). The odds ratio for institutional sexual offender treatment was considerably lower than that for outpatient treatment and *not* significant. Thus, similar to Polizzi et al.'s findings, prison-based programs or hospital-based sexual offender treatment programs showed outcome results that indicated little difference between sexual offender treatment participants and nonparticipants. No significant difference was found for treatments for adult and those for adolescent sexual offenders. In their two reports, Losel and Schmucker (2005, 2008) found that only sexual offender treatment programs involving *voluntary participation showed a significant effect*; programs that *involved* "a more or less coerced treatment" *did not show a significant effect* (2008, p. 13). Further, "Whether treatment was terminated regularly or prematurely had an impact on sexual recidivism. Whereas "regular" completers showed better effects than the control groups, dropouts did significantly worse. Dropping out of treatment doubled the odds of relapse…" (2005, p. 132). However, effect sizes that referred to treatment completers revealed considerable heterogeneity. Various methodological differences related to sample size and design quality were identified in comparisons between those who completed and those who did not complete sexual offender treatment. However, those differences were neither uniform or provided clarity as to their implications. However, those differences were neither uniform or provided clarity as to their significance.

Losel and Schmucker (2005) noted that their analyses repeatedly indicated problems of confounded moderators. Consequently, they tested to see to what degree the treatment effects were confounded with methodological and other study characteristics. Methodological characteristics accounted for a considerable amount of variance in outcome for treatment (e.g., 45 %). Of these methodological characteristics, general characteristics of treatment were most important, including specificity of treatment for sexual offenders, involvement of authors in the program, and a group format contributed to a 9 % increase in explained effect size variance. Thus, for example, treatment studies in which the study author(s) was in some way involved in the program delivery more likely showed significant treatment effects, but programs that were evaluated by independent researchers did not; this strongly suggests the so-called allegiance effects. They concluded that "… methodological factors play an important role and seem to be confounded with treatment and offender characteristics. This problem of confounded moderators is rather general and difficult to solve…" (p. 138).

In their conclusions, Losel and Schmucker (2005) stated: "Bearing the methodological problems in mind, one should draw very cautious conclusions from out meta-analysis. The most important message is an overall positive and significant effect of sex offender treatment" (p. 135); however, it appears that this conclusion was *inclusive* of surgical castration and hormonal treatments that were more effective than psychosocial treatments. As the authors pointed out in 2005, differences in treatment and comparison groups "most probably" related to their inclusion of both medical and psychological modes of treatment because, "The average effect of physical a treatment is larger than that of psychosocial programs" (p. 135). Further, the authors also cautioned, "One must bear in mind that outcomes of treatment often decline when model projects are transformed into routine practice" (p. 137). In 2008, Losel and Schmucker wrote:

> The size of the [treatment] effect is small to moderate… However, the evidence is based on studies that mostly apply a weak methodological standard. *Restricting the analysis to a few randomized trials shows a comparable mean effect but it does not render it statistically significant*…Obviously we need more high quality evaluations on the whole range of sexual offender treatment to come to unequivocal conclusions. (p. 17, emphasis added)

In their 2008 paper, Schmucker and Losel noted methodological study characteristics explained the largest proportion of variability in effect size variance; they concluded that "Overall, findings are promising but more differentiated evaluations of high quality are needed" (p. 1).

Hanson et al. (2008, 2009) completed an updated but somewhat different MA of sexual offender treatment relative to the 2002 paper. At the outset, they stated:

> All reviews have concluded that more and better studies are needed. Few studies have used strong research designs (i.e. random assignment), and there are even fewer studies with strong research design examining interventions consistent with contemporary standards. Consequently reviewers are forced to consider whether the less than ideal studies are "good enough." (p. 866)

Hanson et al. (2009) considered sexual offender treatment in the specific context of treatment of general criminal offenders (e.g., a criminological perspective) and not that of psychotherapy outcome research per se. More particularly, they examined the utility of the risk, need, and responsivity (RNR) model (e.g., Andrews & Bonta, 2006) which states that "… treatments are most likely to be effective when they treat offenders who are likely to reoffend (moderate or higher risk), target characteristics that are related to reoffending (e.g. criminogenic needs), and match treatment to offenders' learning styles and abilities (responsivity; cognitive-behavioral interventions work best)" (p. 866). Thus, Hanson et al. (2009) addressed the question of whether the principles of effective general criminological interventions also applied to the psychological treatment of sexual offenders. They also examined whether different results were found in better-quality studies than in studies that met only minimum standards of acceptability (e.g., weak designs) and relied on the Collaborative Outcome Data Committee (CODC, 2007a, b). Thus, they

noted that a "strong" study would be one that involved "a well-implemented random assignment study (e.g. uncorrupted random assignment, 5 or more years of follow-up, sample size >100, < 20 % attrition, no preexisting differences between the groups found post hoc)" (p. 869).

Hanson et al. (2009) found that no studies reported findings for different intensities of treatment services within the same setting. Studies were therefore coded as adhering to the risk principle if their treatment group was higher risk than average for sexual offenders. Programs were considered to meet the need principle if the majority (51 %) of the treatment targets were criminogenic needs. It was assumed that CBT programs adhered to the responsivity principle. Of the 23 studies accepted for analysis, 14 were published and 9 were not. Most of the studies were Canadian (12) or American (5). Only 19 studies focused on adult sexual offenders. Of the 23 programs, 10 were offered in institutions and 11 in the community; 16 programs were sponsored by corrections. In total, 22 studies examined 3,121 treated sexual offenders and 3,625 untreated sexual offenders.

Regarding results, the sexual offense recidivism rate for treatment groups had an unweighted mean of 11 % and for comparison groups 19 %. The odds ratio for sexual offense recidivism with a fixed weighted mean was 0.77, but there was more variability than would be expected by chance. For 22 studies examining the sexual recidivism rate, results from both fixed-effect and random-effect analyses indicated significantly lower sexual recidivism rates in the treatment groups than in the comparison groups. However, of note, the combined rate of sexual and other violent offenses was not significantly lower for treatment groups relative to comparison groups, while general recidivism rates were lower for the treatment groups. Again, Hanson et al. (2008) found no differences as to whether treatment was delivered in the community or in institutions; recent treatments were found to be more effective. The treatment effects on both sexual and violent recidivism were smaller in the good-quality studies than the weak studies.

Only two studies were each rated as following two of the three RNR principles. Analyses found that programs were more effective when they targeted criminogenic needs or delivered in a manner that was likely to engage sexual offenders (e.g., responsivity via CBT). Support was demonstrated for both the need and responsivity principles. However, Hanson et al. (2009) did not find that the risk principle was supported; that is, available program results were *not* significantly more likely to be effective when they treated offenders who were rated as at higher risk to reoffend. Overall, regarding sexual offense recidivism, results indicated that the relative effectiveness of sexual offender treatment increased according to the degree that treatment adhered to the RNR model, except for the risk principle. However, for the 10 studies that examined both sexual and violent recidivism as the outcome variable, there was no significant difference based on adherence to the RNR model.

Hanson et al. (2009) reported that the sexual and general recidivism rates for the treated sexual offender were lower than for comparison groups (based on unweighted averages). However, for a median follow-up of 4.7 years, the results for sexual offense recidivism that Hanson et al. (2008) found for treated sexual offenders (11 %) were again comparable to the rates of sexual offender recidivism that had been found for largely untreated sexual offenders in two MA of risk factors for sexual offender recidivism [respectively, Hanson and Bussiere (1998) and Hanson and Morton-Bourgon (2004, 2005) indicated that the mean 5-year rates of sexual reoffending for the two large samples of almost exclusively untreated sexual offenders were 13 % and 14 %]. Thus, the results that Hanson et al. (2009) found for the treated sexual offenders in their treatment MA were largely equivalent to the rate of much larger samples of untreated sexual offenders. Unfortunately, Hanson et al. (2009) noted that not one "strong" study of sexual offender treatment could be identified per CODC criteria. Hanson et al. concluded:

> Confidence in the findings, however, must be tempered by the weak research designs. Even after excluding the worst 80 % due to inadequate study quality, still only 5 of the remaining 23 studies were rated as good according to the CODC guidelines (18 were weak). The effects tended to be stronger in the weak research designs compared to the good research designs. *Reviewers restricting themselves to the better-quality, published studies…could reasonably conclude that there is no evidence that treatment reduces sex offense recidivism.* (p. 881, emphasis added)

In 2012, Dennis et al. (2012) authored another CR of psychosocial interventions for adults who had been sexually offended. In keeping with similar reviews, their selection criteria involved randomized trials comparing psychological interventions with standard care or another psychological therapy provided to adults in either institutional or community settings for sexual behavior. The authors stated: "While this review adopts the Cochrane principles of examining only evidence from RCTs, we do so without any apology, in the belief that other types of trial evidence are likely to inflate the positive findings for the intervention" (p. 27). They found ten studies that met their criteria involving a total of 944 male adults, of which four compared CBT with no treatment or wait list control and one which compared CBT with standard care. Four other studies involved behavioral programs and one study compared psychodynamic intervention with probation. For CBT, Dennis et al. reported: "The result of comparing reconviction for sexual offences between conditions was not statistically significant" (p. 23). Similarly, for the psychodynamic intervention, there was no difference in rate of sexual rearrest at 10-year follow-up. Thus, the investigators reported: "The main finding of this systematic review is that there was no evidence from any of the trials in favour of the active intervention in a reduction of sexual recidivism –the primary outcome" (p. 25). For both CBT and psychodynamic interventions with meaningful follow-up

data, Dennis et al. noted that "…neither showed any benefit for the intervention. Thus, neither…appeared to reduce sexual recidivism" (p. 35). They stated:

> The inescapable conclusion of this review is the need for further randomized controlled trials. While we recognize that randomisation is considered by some to be unethical or politically unacceptable (both of which are based on the faulty premise that the experimental treatment is superior to the control—this being the point of the trial to begin with), without such evidence, that area will fail to progress. Not only could this result in the continued used of ineffective (and potentially harmful) interventions, but it also means that society is lured into a false sense of security in the belief that once the individual has been treatment their risk of reoffending is reduced. Current available evidence does not support this belief. Future trials should concentrate on minimizing risk of bias, maximizing quality of reporting and including follow-up for a minimum of five years 'at risk' in the community. (p. 3)

Summary of Reviews of the Effectiveness of Sexual Offender Treatment

In his meta-analysis, Hall (1995) found a "small" statistically significant effect for sexual offender treatment for highly screened subjects and concluded that such treatments might be less effective with more "severe" sexual offenders. He found that outpatient sexual offender treatment appeared more effective than institutional treatment. Like Hall, Hanson et al. (2002) concluded from their meta-analysis that "there was a *small* advantage for the treated versus the untreated offenders" (emphasis added) and this finding was statistically significant. However, they found that if only those studies that utilized random assignment of sexual offenders to treatment were examined, no treatment effect was apparent. In addition, Hanson et al. identified a "robust" finding that sexual offenders referred to sexual offender treatment based on "perceived need" (e.g., likely higher-risk sexual offenders) had substantially higher sexual offense recidivism rates than those with less need and concluded such offenders were less responsive to sexual offender treatment. Hanson et al. concluded that "We believe the balance of available evidence suggest that current treatments reduce recidivism, but that firm conclusions await more and better research" (p. 186). Losel and Schmucker (2005, 2008) also concluded from their meta-analysis that a majority of treatment studies (a combined set of biological and psychosocial treatments) suggested a positive effect for sexual offender treatment. Losel and Schmucker found that "obligatory participation" in treatment resulted in no treatment effect. Thus, according to the conclusions of Hanson et al. and Losel and Schmucker, both higher levels of need and mandated participation were associated with no treatment effectiveness. In contrast to Hanson et al., Losel and Schmucker found no differences between "current" and older sexual offender treatment programs. Another difference between the Hanson et al. (2002) and Losel and Schmucker (2005, 2008) meta-analyses was that the latter identified a trend for lower effectiveness in institution-based programs, whereas the former did not. This was similar to what Polizzi et al. (1999) concluded, namely, that "…the evidence is not strong enough to support a conclusion that [prison-based programs] are effective." Relative to the effectiveness of sexual offender treatment, Losel and Schmucker (2005) concluded "one should draw very cautious conclusions from our meta-analysis" (p. 135), while Hanson et al. (2002) opined "firm conclusions await- more and better research" (p. 186). Hanson et al. (2008) found that unweighted rates of sexual offense recidivism were lower for the treated sexual offender than for comparison groups (based on unweighted averages). They did not find support for the risk principle—treatment was not more effective with more high-risk sexual offenders—comparable to their earlier finding about perceived need. They found no studies of adult sexual offenders that targeted risk, needs, and responsivity. Hanson et al. (2009) concluded that much could be done to increase confidence in outcome studies on sexual offender treatment. The IHE report interpreted the available data to suggest that sexual offense treatment had been shown to provide "small" reductions in sexual offense recidivism. However, the SBU found that the scientific evidence was insufficient for determining whether that such treatment could reduce sexual offending. Finally, one of the most recent, most rigorous reviews of treatment, for both CBT and psychodynamic interventions with meaningful follow-up data, Dennis et al. (2012) noted that "…neither showed any benefit for the intervention. Thus, neither…appeared to reduce sexual recidivism" (p. 35). This finding was also confirmed by Langstrom et al. (2013).

A key issue identified by most SRs and MAs was the dearth of high-quality research methodology in the available studies. Losel and Schmucker (2005, 2008) noted that only 6 of 69 studies available were considered to meet the Maryland Level 5 standard; as did most recent and prior reviewers, they emphasized that most of the studies included in their meta-analysis were of poor methodological quality. In addition, as noted, Losel and Schmucker did not include the final report from the Marques et al. study, the only contemporary RCT for psychosocial treatment for sexual offenders. Further, Hanson et al. (2002, 2009) pointed out that the treatment effects on sexual recidivism were, in fact, smaller in the good-quality studies than in the weak studies, suggesting that it was low-quality studies that inflated the already small positive outcome. Similarly, Losel and Schmucker (2005, 2008) showed that larger effects of treatment were found more frequently in studies with small sample sizes. In addition, they reported that the largest treatment effect was found for Maryland Level 3 studies in which the equivalence of comparison groups was assumed; thus, their results were

similar to those of the Hanson et al. meta-analysis where only incidental assignment ("assumed equivalence") showed an effect for sexual offender treatment. Hanson et al. (2009) also found that approximately 80 % of included studies were characterized by weak research designs and that more positive results were associated with more methodologically flawed studies. They concluded that if only higher-quality studies were considered, it would be reasonable to conclude that there was no evidence that psychosocial treatment decreased sexual offense recidivism. Langstrom et al. (2013) noted "the remarkable lack of quality research studies in sexual abuser of children…" (p. 4). Thus, all of the systematic reviews and meta-analyses, to date, have concluded that the field of sexual offender treatment was characterized almost exclusively by poor-quality methodology (primarily lack of RCTs and/or small numbers of subjects), that little information was provided about program integrity, and/or that no or minimal information was found as to elements of sexual offender treatment that were related to the outcome of the interventions. There was unanimity in the SRs and MAs that there was a strong need for more research of sexual offender treatment characterized by significantly higher scientific rigor.

Thus, at best, if one considers quasi-experimental research studies (consistently viewed across reviews as methodologically weak) only, a relatively small effect regarding decreased recidivism is sometimes demonstrated for treating low- to moderate-risk sexual offenders.[5] However, if only higher-quality, methodologically rigorous research studies (such as RCTs) are considered, from a scientific perspective, no definitive evidence has yet been presented by any researchers that psychotherapy is associated with any substantive reduction in sexual offense recidivism.

A Critical Perspective on the Results of Existing Systematic Reviews and Meta-Analyses of Sexual Offender Treatment

From an empirical perspective, no clear evidence of a scientific nature has yet been found via rigorous scientific study that psychotherapy is associated with a consistent, meaningful effect in the reduction of sexual offense recidivism; no substantive or strong proof yet exists that psychosocial interventions "work" in reducing future sexual offending at this time. In their own MAs, Hall (1995), Hanson et al. (2002), and Losel and Schmucker (2005, 2008) acknowledged that the effect sizes obtained in their meta-analyses for psychosocial treatments of sexual offender were "small"—despite the inclusion of and primary reliance on studies with acknowledged poor quality (e.g., problematic control groups) as well as relying on offender samples that likely enhanced the probability of obtaining positive outcome found for treatment conditions (e.g., predominantly low-risk offenders with few additional psychiatric or psychosocial issues). Langstrom et al. (2013) came to the conclusion that no evidence exists of the effectiveness of cognitive-behavioral treatment relative to sexual offender treatment for child molesters. Dennis et al. (2012) concluded that neither CBT nor other psychosocial interventions with meaningful follow-up data showed any benefit for the intervention; they did not appear to reduce sexual recidivism. Thus, to date, no investigator or scientific authority has produced or found what he or she consider to be a rigorous scientific evidence for and/or concluded that sexual offender treatment has been demonstrated to be "very" or "greatly" effective for sexual offenders. Rather, at best, if quasi-experimental research studies (e.g., incidental assignment) are included, the current findings indicate that such treatment might be "somewhat" "slightly" effective with voluntary, low-need/low-risk sexual offenders who are volunteers and are not "mandated" for participation in sexual offender treatment. Each available SR or meta-analysis has commented on the poor quality of the existing treatment outcome literature, and each has strongly recommended the need for additional studies, better designed with strong methodological qualities, particularly random assignment of subjects to treatment and control groups. In 1997, Hanson wrote: "Meta-analyses rely on the quality of the original studies, and skeptics can claim that there is an insufficient number of well-controlled studies to justify meta-analytic review" (p. 139). Even at present, it appears that an insufficient number of such studies exist.

Further, as Berliner wrote of the Hanson et al. meta-analysis at the time of its publication in 2002:

> The conclusions of this study, however, should not be exaggerated nor considered the final word on sex offender treatment. The studies measure reductions in recidivism and its elimination. *The effect sizes for recidivism reduction are not large, thus there will still be failures, the cost of which will be born by victims. It is not at all clear that these results can be generalized to the highest risk offenders. Even if they could be applied to these offenders, a moderate effect size reduction would still mean that high-risk offenders continue to be dangerous*. (p. 196, emphasis added)

Such comments are equally applicable to the subsequent meta-analysis by Losel and Schmucker (2005, 2008). [In addition, as will be reviewed in more detail, if one was to factor in (1) the sexual offenders who denied consideration

[5]While not intended as a study of sex offender treatment outcome, Helmus (2009) in her meta-analysis of factors in base rate variability in sexual offender samples found that the effects of sex offender treatment (among other variables) on sex offense recidivism. She compared offenders who completed treatment, dropped out of treatment and those who did not attend treatment. There was no difference in the rate of sexual reoffending relative to treatment participation; similarly, there was no difference between offenders who started treatment and those who completed treatment.

for treatment initially and/or (2) those who refused participation, and/or (3) those who dropped out of or were demitted from treatment, the minimal effects of sexual offender treatment outcome studies would almost certainly be even smaller or potentially nonexistent.] Beggs (2010) pointed out something obvious that is largely not addressed in the available sexual offender treatment literature—"the fact that residual post-treatment reoffending occurs at all indicates that not everyone who completes the same treatment will derive the same benefit" (p. 369). Of note, recent systematic reviews by the IHE, the SBU, Dennis et al. (2012), and Langstrom et al. (year) concluded that there was, at best, slight and, at worse, *no* scientific evidence of the effectiveness of sexual offender treatment. At this date, at best, no reviewer has concluded there is strong or even moderate empirical support for the effectiveness of psychosocial treatment for sexual offenders relative to reducing future sexual offense recidivism; at worse, the more consistent conclusion has been that there is no strong empirical evidence for the effectiveness of sexual offender treatment. This finding stands in marked contrast to the available scientific literature on psychotherapy more generally; as Westen et al. (2005) wrote: "The data are now clear that virtually anything researchers do for 10–20 sessions with patients that they firmly believe will be efficacious in fact leads to better outcomes than experimental conditions not intended to work…" (p. 428). Yet, despite what one presumes to be the best intentions of those providing sexual offender treatment, from the perspective of a "hard" outcome that matters most to stakeholders—reducing future sexual offending—there is little indication that psychosocial interventions are efficacious for participating sexual offenders.

In their article "Psychotherapy on Trial," Arkowitz and Lilienfeld (2006) enumerated a variety of reasons as to how clinicians can be misled into concluding that an ineffective psychotherapy is in fact efficacious. They identified that several phenomena that can make psychosocial interventions "appear" effective as justification as to why scientific psychotherapy outcome research is necessary: spontaneous remission, placebo effects, regression to the mean, treatment/programming interferences, selective attrition, effort justification, and demand characteristics. Each of these factors can be viewed as applicable to sexual offender treatment as well as general psychotherapy research. Since Furby et al.'s (1989) initial review of sexual offender treatment outcome, a number of general and specific methodological concerns have been raised regarding interpretations of the existing reviews of sexual offender treatment, including the select meta-analyses typically relied upon as the basis for the claims that sexual offender treatment "works." Beyond the failure of available sexual offender treatment outcome studies to empirically establish clear effectiveness of such interventions, a number of serious methodological issues undermine results obtained to date, which further qualify claims made in support of the effectiveness of sexual offender treatment. Such methodological issues in sexual offender treatment literature include limitations of meta-analysis, inadequate length and methods of follow-up of subjects, failure to utilize survival analysis in outcome measurements, allegiance effects, the general failure to use RCT designs (e.g., to use random assignment of motivated or genuinely help-seeking subjects to treatment and control groups), and distinct problems in the existing choices of control groups. Each of these factors seriously qualifies the already uncertain findings of the available sexual offender treatment outcome literature, particularly the last two.

Issues with Meta-Analyses

An initial issue for extant reviews that relied on meta-analysis is the well-known limitations of that method of evaluation. In the general psychotherapy outcome literature, a number of criticisms have been offered regarding meta-analytic studies of treatment outcome and the limitations of existing meta-analyses. Sharpe (1997) identified the primary criticisms of meta-analysis: (1) mixing dissimilar studies, (2) publication bias (including published studies which typically favor those with positive outcome), and (3) inclusion of poor-quality studies. Chambless and Hollon (1998) emphasized that in the absence of sufficient high-quality studies available for study, the results of meta-analyses were not dependable. Lambert and Ogles (2004) also opined that while there had been recent improvements in meta-analytic methodology, significant and problematic variability in meta-analytic methodology remains. The results of any meta-analysis of treatment outcome studies will be dependent upon the essential quality of available studies for analysis such that "summarizing" poor-quality or methodologically limited studies is not likely to be particularly informative. As Kendall et al. (2004) wrote, "Meta-analyzers cannot tabulate the number of studies in which treatment is found to be efficacious in relation to controls *without examining the nature of the control condition*" (p. 37, emphasis added). Specifically, virtually all of the SRs, including the meta-analyses, have noted the poor quality of existing sexual offender treatment outcome studies with virtually not of the available studies rating high on the Maryland scale or any other metric of study quality. As Eysenck (1994) stated, "…a good meta-analysis of bad studies will still result in bad data" (p. 789). He went on to state: "Meta-analyses are often used to recover something from poorly designed studies, studies of insufficient statistical power, studies that give erratic results, and those resulting in apparent contradictions…Effect sizes summed over such exceedingly heterogeneous data can hardly be accorded any validity, yet these data are often cited as proving the efficacy of psychotherapy" (pp. 791–792). As noted, Hanson (1997) offered a similar

opinion. Craig et al. (2003) noted the "considerable variability" in sample selection among studies of sexual offense recidivism and that sexual offenders are a particularly heterogeneous group of offenders. Many experts note the high degree of selectivity—investigator allegiance—that operates in the selection of which studies are included or disqualified and note that the problem of remaining "blind" in meta-analytic research has not been adequately addressed in such investigations (e.g., Eysenck, 1994; Westen & Morrison, 2001). Further, Matt (1989) demonstrated that judgmental factors are involved in selecting effect sizes from a meta-analysis. Average of varied effect sizes from the same studies showed variability; this can have a very significant influence on the reported results, to the point of reducing reported effect sizes by half. In addition, Hemphill (2003) noted: "It is important to recognize that different effect sizes to not produce results that are necessarily interchangeable. The magnitude of effect size cannot even be generalized across time within a single study because long follow-up periods increase observed base rates, which in turn influence magnitudes of effect sizes." Given that, like other criminal and violent outcomes, the base rate of sexual offense recidivism increases with longer follow-up periods (e.g., tripling over a 15–20 years interval), this suggests that current effect sizes would not provide a meaningful measure of treatment effectiveness, even if the current effect sizes were empirically meaningful. At present, even with a greater number of studies available, virtually no modern methodologically adequate—e.g., meaningfully controlled—studies have been conducted. Consequently, the low methodological quality of existing meta-analysis constitutes a "rate limiting factor" study (particularly considered within the context of issues in meta-analysis generally) that will continue to qualify any interpretation of the results of meta-analyses of sexual offender treatment outcome studies.

Issues with "Official" Recidivism as an Outcome Measure and Sample Censorship

Sexual offense recidivism is the primary outcome variable of interest relative to the efficacy of sexual offender treatment, that is, the primary concern as to whether psychotherapy "works" for sexual offenders as opposed to more common psychotherapy goals such as symptom relief or reduced personal distress. Such offense recidivism is the key metric for determining the efficacy of such interventions for several reasons. First, most generally, such recidivism best captures what Westen and Morrison (2001) referred to as sustained efficacy, the ability of treatment to produce lasting changes rather than an apparent positive initial response. Second, as forensic psychotherapy, the intention of such interventions, as well as the basis for providing public funding of sexual offender treatment, is public safety, specifically the prevention of future harm to possible victims.

The conventional means of measuring sexual offense recidivism in existing studies of sexual offender treatment is typically one rearrest or reconviction as measured by existing official criminal records. Thus, there is no "count" as to whether those "treated" sexual offenders who "failed" by sexual reoffending after treatment had one or multiple victims, the number of times they victimized one or more victims or the degree of harm that resulted from the sexual offense for primary or secondary victims. Rather, it appears that almost all existing treatment studies have relied on available criminal justice outcome measures and typically for follow-up periods of no more than 5 years. However, as Douglas et al. (2006) pointed out, "Sole reliance on official records will invariably underestimate actual criminal behavior" (p. 545) and lower base rates of actual recidivism. Regarding violent behavior generally, Douglas and Ogloff (2003) found that when criminal records were supplemented by other archival sources, the base rate *quadrupled* from approximately 10 to 40 %. Similarly, Monahan et al. (2001) found that the inclusion of information from official records, other collateral sources, and self-report increased recidivism rates by a factor of six! For sexual offense recidivism specifically, the results of Prentky, Lee, Knight, and Cerce (1997) reported they found a marked underestimation of sexual offense recidivism specifically depending on whether the criterion was based on charges, conviction, or imprisonment. Further, some offenders commit multiple sex offenses or victimize the same individual repeatedly over a follow-up period. Further, it is near universally agreed that such official rates of sexual offense recidivism "miss" most sexual offenses, because such offenses are not reported by victims or not processed through the criminal justice system (e.g., Craig et al., 2003). As Hanson (1997) noted that while "detected" recidivism is a credible measure, it is "an insensitive measure," pointing out that since most sexual assaults, particularly those against children are never reported to police; "It is impossible to study…that which remains hidden…Rarely will sexual offenders be falsely reconvicted, but many sexual offenses will go undetected" (p. 131). Craig et al. (2003) concluded: "…sexual recidivism could be underestimated by as much as 40 % in some studies" (p. 72). In addition, numerous studies via self-report in varied contexts have shown that under conditions created to maximize veracity, sexual offenders of all types reported substantially greater frequency (and diversity) of sexual offending (e.g., Abel, Blanchard, & Becker, 1978; English et al. 2000; Heil, Simons, & Ahlmeyer, 2003; Ahlmeyer et al., 2000; Hindman and Peters, 2001, 2010). Yet sexual offender treatment studies rely on the relative minority of actual sexual offenses that are detected, reported to, and processed by the criminal justice system. Consequently, using sexual offense recidivism

as measured by official records of arrests and/or convictions provides a grossly insensitive index of outcome, leading to a likely significant underestimate of both the frequency and severity of sexual reoffending.

In addition, it is the consensus that sex offense recidivism rates increase substantially with increased periods of follow-up (e.g., Rice & Harris, 2003); per Harris and Hanson (2004), rates of sexual reoffending almost double when follow-up periods are extended from 5 to 15 years (e.g., 14–24 %), and offenders have greater "opportunity time" in the community to commit new sexual offenses. Given such measured base rates for detected sexual offense recidivism, it makes little sense to investigate the effect of psychotherapy on sexual offense recidivism for periods of less than 5 years; as the results of Prentky et al. (1997) showed that for a 5-year study, only ½ of the total number of cases of sexual offense recidivism would have been identified. Similarly, Craig et al. (2003) noted that with a 5-year follow-up to treatment studies, "only one-half of the total number of cases of sexual reoffending – would likely have been identified. Thus, extended periods of follow-up are necessary to determine if true, meaningful reductions in sexual offense recidivism occur." Several studies have shown that sex offender recidivism increased to approximately a rate of 40 % by a 20-year follow-up, approximately triple the rate of 5 years sex offender recidivism rates (40 %, e.g., Hanson, Morton, & Harris, 2003; Harris & Hanson, 2004; Harris & Rice, 2007). Doren (2002) noted that there are no research studies of sex offender recidivism through the death of the entire sample (e.g., a lifetime rate of such recidivism). Sexual offenders demonstrate "first-time" sexual reoffending even 20–30 years after release from institutionalization (e.g., Hanson, Steffy, & Gauthier, 1993; Prentky et al., 1997); Hanson et al. (1993) reported that 23 % of sexual offender recidivists were reconvicted for more than 10 years after release.

Sample censorship is another issue relative to the accuracy of sexual offender recidivism rates. The common method of simply counting the percentage of individuals who sexually reoffend over a limited period of time for several reasons has several limitations that make it very likely to produce an underestimate of the true rate of such recidivism. First, persons with more severe histories of sexual offending may serve longer sentences of being indeterminately confined or detained and thus "unavailable" to sexually reoffend. Second, of those individuals released to the community, a significant number may only reside in the community for brief periods of time (e.g., due to re-incarceration of secondary to high general criminal recidivism rates or parole revocations) and will also be "unavailable" to sexually reoffend. Relative to this second point, Langan, Schmitt, and Durose (2003) found that 43 % of sexual offenders were rearrested for some crime (75 % of which were felonies) within 3 years of their release from prison. Even more recently, Durose, Cooper, and Snyder (2014) showed that 71 % of violent offenders (including sexual offenders) were rearrested for some criminal offense within 5 years of release from prison. Given these results from the Department of Justice, a significant proportion of released sexual offenders are jailed or re-imprisoned during what would have been their "follow-up" time and, obviously, less "available" to commit another sexual offense. Epperson (2009) found that over 52 % of moderate-risk sexual offenders, 56 % of higher-risk sexual offenders, and 65 % of the highest-risk sexual offenders released from prison on conditional release experienced revocation that in a number of cases would have led to additional periods of jail or prison time. Thus, higher-risk sexual offenders were more likely to be out of the community during some portion of a potential "follow-up" period. Furthermore, since the late 1990s (e.g., Prentky et al., 1997; Rice, 1997), the scientifically endorsed method for follow-up studies of sexual offenders is survival analysis. This method takes into account not only whether members of the groups of sexual offenders commit subsequent sex offenses but also when the end of sexual offender treatment or release from incarceration occurs and the length of time "available" to each offender for sexual offending activity in the community (e.g., not or deceased and/or incarcerated or jailed for lengthy periods of time). That is, survival analysis only counts the time that an offender is, in fact, "available" to sexually reoffend; as a data analytic procedure, survival analysis provides a better estimate of sexual offense recidivism (relative to a point recidivism rate) as it takes into account the "opportunity time" for each offender who has been "in the community" and actually had the chance to sexually reoffend. Of note, when Olver, Beggs Christofferson, Grace, and Wong (2013) controlled for risk and individual differences in follow-up time using survival analyses over an 8-year fixed follow-up period, the overall group of treated sex offenders did not demonstrate significantly lower rates of sexual recidivism than a much smaller control group. Relative to this point, Langan, Schmitt, and Durose (2003) found that 43 % of sexual offenders were rearrested for some crime (75 % of which were felonies) within 3 years of their release from prison. Even more recently, Durose, Cooper, and Snyder (2014) showed that 71 % of violent offenders (including sexual offenders) were rearrested for some criminal offense within 5 years of release from prison. Since most sexual offender treatment studies to date have failed to employ survival analysis, it seems highly likely that existing treatment studies overstate any benefits of such studies, since they are likely "missing" a substantial number of sexual offenders in general—and higher-risk sexual offenders more specifically—during the follow-up period.

Posttreatment Experiences of Treatment Participants

Another methodological issue concerns posttreatment experiences or services that treatment participants may have received. Following their experience of sexual offender treatment, some portion of "treated" sexual offenders remain in institutions and/or are followed in the community over time after their experimental treatment experience. During this period after sexual offender treatment, there are often further opportunities for exposure to many possible events that might have short- or long-term impact on their sex offense recidivism rates. That is, after the initial intervention hypothesized to be effective at reducing sex offense recidivism, it seems quite possible—and even likely—that treatment subjects and control subjects may have obtained additional treatment experiences, social services, and/or some degree of parole supervision, all of which might be significant factors related to lowering recidivism rates. It is commonly noted that sexual offenders in the Canadian correctional system may receive additional, often substantial, rehabilitation or pro-social programming (e.g., substance abuse treatment, criminal thinking interventions, reintegration services) while institutionalized and/or during probation, including additional specialized sexual offender treatment as they are placed sequentially at different institutions. Obviously, the nature (intensity of conditions) of post-release supervision or probation as well as varied types of post-release or posttreatment aftercare may have a significant and differential effect on those who did and did not participate in sexual offender treatment.

Treatment Allegiance

Allegiance to a treatment approach refers to the degree to which a therapist providing the treatment believes that the psychotherapy is effective; in effect, this constitutes an expectancy effect and potential bias. Those who develop or are advocates for particular or general treatment programs may be relatively zealous about the likely benefits for their own proposed or endorsed interventions. Unlike medications studies (which can be administered in a blind or double-blind manner), allegiance effects in psychotherapy cannot easily be controlled. Wampold (2001) reported that early meta-analyses showed that treatment effects for which the clinician had an allegiance or expectancy produced an effect that was approximately 1/3 larger than the opposite condition. He noted that in one meta-analysis, the correlation between allegiance ratings and the effects of the study approached 0.60, while another similar study suggested that allegiance effects might be somewhat less. However, Wampold (2001) concluded:

> …it is clear that allegiance of the therapies is a very strong determinant of outcome in clinical trials. That the effects due to the allegiance accounts for dramatically more of the variance in outcome than does the particular type of treatment implies that therapist attitudes and expectancies about the results of psychotherapy are a critical component of effective therapy…. (p. 168)

As noted in a MA, Munder et al. (2013) found that research allegiance to the intervention itself showed a moderate effect size with treatment outcome; psychotherapy researchers are likely to "find" what they want or intend to "prove." Not surprisingly, allegiance effects apply to sexual offender treatment as well. In their articles, Losel and Schmucker (2005, 2008) found that in more than 50 % of the primary research studies, the studies' authors were affiliated with the treatment program that was implemented (suggesting allegiance issues). Not surprisingly then, they showed that for such treatment, studies (in which the study author(s) was in some way involved in the program delivery) showed clearly significant treatment effects. Yet in contrast, programs that were evaluated by *independent* researchers did *not* show positive treatment effects; this strongly suggests the so-called allegiance effects.

The Lack of Randomized Controlled Studies: A Multitude of Problems

The primary methodological criticism of the existing literature on psychotherapy for sexual offenders concerns the almost uniform failure to utilize accepted standardized research designs for interventions (e.g., RCTs involving both random assignment of similar subjects to a psychotherapy condition and at least one control condition). Hanson et al. stated that a "strong" treatment outcome study would be one that involved "a well-implemented random assignment study (e.g., uncorrupted random assignment, 5 or more years of follow-up, sample size >100, < 20 % attrition, no preexisting differences between the groups found post hoc)" (p. 869). In contrast, the available sexual offender treatment research literature relies almost exclusively on experimental and control groups that are *each* biased in the direction of providing the appearance that sexual offender treatment has been demonstrated to be effective. While RCTs offer one perspective as part of an evidentiary hierarchy and of evidence-based practice and do not necessarily avoid some methodological issues themselves, they are the critical standard in providing key experimental findings that are more conclusive in establishing casual relations of treatment effects than results obtained utilizing other methods or approaches. As Kendall et al. (2004) articulated from a research perspective and the Cochrane Collaboration emphasized from a health policy/health economics perspective, RCTs provide the fundamental basis for evidence-based intervention research and resultant health-care treatment policies. Sacket et al. (1996) wrote "…we should avoid non-experimental approaches…since these routinely lead to false positive conclusions about efficacy…[so that]

the systematic review of several randomized trials… has become the 'gold standard' for judging whether a treatment does more good than harm" (p. 171). RCTs are studies that enable stakeholders a relatively unique opportunity to assess whether an intervention itself, as opposed to other factors, is responsible for observed outcomes in clients. RCTs are designed most likely to nullify unknown or hidden threats to internal validity or confounding factors. The failure to utilize random assignment of comparable and motivated sexual offenders to intervention or control conditions dramatically works to prevent reaching any meaningful conclusion that sex offense treatment might be effective at reducing sex offense recidivism. As noted previously, in the general psychotherapy literature, RCTs are considered the sine qua non of methodologically correct scientific study of treatment outcome.

McConaghy (1993) was one of the first authorities to emphasize the importance of RCTs and the limitations of uncontrolled sexual offender treatment studies. The unique significance of RCTs in sexual offender treatment specifically has been repeatedly emphasized by numerous individual authorities (e.g., Quincy et al., 1993; Rice & Harris, 1997; Quinsey, Khanna, & Malcolm, 1998, 2006; Rice & Harris, 2003; Seto et al., 2008). Seto et al. (2008) noted that primary health-care research and policy agencies, including the Cochrane Collaboration, the US Center for Disease Control and Prevention, and the US Food and Drug Administration, each identify effective interventions exclusively based on RCT results. As Seto et al. stated, from an experimental design perspective, RCTs "are the best at distributing [pretreatment] differences randomly, and only randomization can eliminate the subtle selection biases that affect even the best incident study designs" (p. 249). Similarly, the SBU stated:

> The ideal study design is the randomized controlled trial (RCT), where offenders or people at higher risk of becoming offenders are randomly assigned to either a treatment (i.e. the studied intervention) or a control group (e.g. another intervention or no treatment)…[as a result of this procedure] we can be relatively confident that a difference in reoffending is a result of the treatment. (p. 16)

Since 2010, the Association for the Treatment of Sexual Abusers (ATSA) has been on record that:

> [I]t recognizes randomized clinical trials (RCT's) as the preferred method of controlling for bias in treatment outcome evaluations. ATSA promotes the use of RCT to distinguish between interventions that decrease the recidivism risk of sexual offenders and those program that have no effect or are actually harmful…full RCTs are always preferable, and are unparalleled for determining causal relationships between treatment and outcome. (ATSA, 2010a)

RCTs provide for two factors that allow conclusions to be reached about the possible effectiveness of intervention. First, they require that an intervention condition be contrasted with one or more control conditions; thus the RCT design provides a preliminary determination as to whether subjects who received the intervention may have received some specific positive benefits relative to the control conditions. In an early paper, Quinsey et al. (1993) (as cited in Rice & Harris, 2003) first advocated criteria that could provide useful scientific data on the effectiveness of treatment, stating "…unless a study measures officially recorded recidivism from at least two distinct groups of sex offenders (at least one of which receive treatment), and unless the groups are, except for treatment, comparable, that study has no scientific value in evaluating treatment" (p. 431). McConaghy (1993) noted that random allocation of subjects in sexual offender treatment is the only procedure that offers the possibility of controlling all relevant variables, known and unknown. Generally, some 30 years ago, Cook and Campbell (1979) pointed out that the main problem of quasi-experimental design is the differential selection of subjects that receive the program compared to the subjects that do not receive the program. If at the beginning of the program the groups are not equivalent for the relevant variables, then the posttest comparison of the two groups can produce a biased estimate of the effect size. More recently, regarding sexual offender treatment specifically, as Miner (1997) put it:

> The major problem with uncontrolled designs is that they provide no means for assuring the internal validity of the study. The lack of control or comparison groups makes it plausible that any changes in subject status could be attributed to factors other than the intervention itself. This leaves the researcher unable to conclude much about the effectiveness of treatment. (p. 99)

As Schlank (2010) noted, several common psychological phenomena can affect intervention results. For example, she identified the Hawthorne effect, where a temporary change in measured behavior occurs as a result of subjects' awareness that they are being observed. In addition, she also noted the Pygmalion effect when a perceived "leader" or teacher's expectations affect the behavior of students (or clients), at least temporarily (a problem often related to allegiance effects).

A related methodological issue is the comparability of intervention and control groups; both groups must be relatively equivalent in key characteristics. As Miner (1997) stated: "The major problem with nonequivalent groups designs is an issues of the linkage between cause and effect," (p. 100) noting that differences in groups on variables as simple as motivation for treatment make it difficult to conclude that group differences may be related to an intervention condition. Thus, similar to standard psychotherapy outcome research, in order to best assure comparable treatment and control groups, it is necessary to start with subjects comparably interested in and motivated for treatment and then randomly assign them to treatment or control groups. Similar to Miner, Rice and Harris (2003) emphasized that investigators

generally agree that it is desirable to limit or control possible sources of measurement bias in the study groups and that the best and necessary means of accomplishing this is through random assignment via an RCT. With random assignment of subjects to intervention or control group(s), the allocation of similarly motivated subjects to either intervention or control groups is determined solely by chance (and not by personal preference or social mandate). [Such groups may differ by chance, as Rice and Harris noted that while "the gold standard is a random assignment study, but even with random assignment the treatment does not guarantee the groups are comparable: random assignment merely guarantees that differences are randomly distributed" (p. 429).] Thus, RCTs are a necessary but not necessarily sufficient condition to demonstrate that any differences found between experimental/treatment and control groups are most likely the result of the intervention and not simply the result of preexisting differences in the experimental and control groups.

Rice and Harris (2003, 2012) and Seto et al. (2008) have identified that, historically, several significant studies of medical and psychosocial interventions were initially conducted without random assignment of subjects to intervention and control groups and initially appeared to show that a particular treatment was effective (including studies of delinquency intervention, arthroscopic knee surgery, drug abuse prevention, and critical stress debriefing). However, when RCTs were utilized for these and other problems, either no or even negative effects were demonstrated for what had previously been regarded as theoretically sound interventions. Consequently, without the use of RCTs, inadequate and/or harmful interventions would have gone undetected. Similarly, regarding sexual offender treatment, Seto et al. (2008) commented on the possibility that "unproven treatment might have harmful effects, unintentionally increasing recidivism and thereby harming victims, offenders, and their respective families" (p. 250). They provided several examples of how current practices in sexual offender treatment might hypothetically lead to increased risk for sex offense recidivism. Other authorities have echoed these concerns (e.g., Corabian et al., 2010; Dennis et al., 2012).

Schmucker and Lösel (2008) acknowledged that 60 % of the studies they reviewed "used clearly non-equivalent control groups" (p. 16). In considering the sexual offender treatment outcome studies reviewed by Hanson et al. (2002) assigned to the category of random assignment of subjects (to either psychological treatment or no psychological treatment), Rice and Harris (2003) noted that Hanson et al. found only three studies in total that could be assigned to this category. Two of these studies indicated deleterious effects of treatment and one indicated reduced general but not sex offense recidivism. Only one RCT study reported positive treatment results for sex offense recidivism; Borduin et al. (1990)[6] provided "multisystemic therapy" (MST—a model not easily applied to adults) for a small group ($n = 24$) of adolescent offenders with positive effects. Subsequently, Rice and Harris agreed with the conclusion by Hanson et al. "that no empirical support for treatment effectiveness can be drawn from the random assignment studies, especially not for sex offender specific treatment for adults" (p. 434). Of note, Losel and Schmucker (2005) similarly found: "The size of the [treatment] effect is small to moderate…Restricting the analysis to a few randomized trials shows a comparable mean effect but it does not render it statistically significant." Eggers et al. (2001) demonstrated how conclusions from a meta-analytic review based on a number of small-scale trials were subsequently contradicted by results from a single study containing a much large sample; as McGuire has stated "The two most frequently repeated criticisms of meta-analysis, are loosely termed, those of 'garbage in—garbage out' and 'apples and pears'." With the absence of positive results from the very few RCTs for sexual offender treatment outcome, Rice and Harris wrote: "…weak inference evaluation leads to too many errors (and incorrectly accepting the existence of beneficial effects)…" (p. 429).

Further, another significant methodological issue makes even random assignment of potential sexual offender participants in treatment problematic. Typically, in RCTs for mood/anxiety and/or behavioral problems, the initial subject pool for treatment or control group assignment is persons who have volunteered to participate in such treatment. Consequently, most psychotherapy investigations start with persons who truly want—are motivated—to participate in such intervention to relieve personal distress or impairment. In fact, they are likely to be persons who may have tried other treatments without success and have elevated positive expectations and enthusiasm for treatment participation. Subsequently, that group of motivated help-seeking persons is typically randomly assigned to either treatment or control conditions. However, almost all extant sexual offender treatment outcome studies have not included motivated or help-seeking sexual offenders in comparison or control groups. Rather, these studies involve the biased preselection or composition of either or both the experimental/treatment group and the control group. More specifically, as will be seen, persons who end up participating in sexual offender treatment are generally likely to have lower sexual offense recidivism a priori, while those who decline such treatment are likely to have higher sexual offense recidivism rates a priori.

[6]Of note, per Westen et al. (2005), when MST was "transported" from research ("effectiveness" to community settings "efficacy," with effect sizes diminished by as much as 1/3 when provided by community therapists (as opposed to carefully supervise graduate students); in addition, there were relatively small effects on individual psychopathology relative to family relations.

Thus, a significant issue is which sexual offenders are included in sexual offender treatment outcome studies. First, many or most sexual offenders appear to not even be offered treatment. As Marshall (Marshall & Marshall, 2007; Marshall, Marshall, Serran, & O'Brien, 2011) has pointed out, most RCT treatment studies involved exclusion criteria that are often quite extensive (e.g., not disruptive, no below average intellectual functioning, no comorbid psychiatric conditions, and so on), and as a result, those offenders who participate in treatment are much more likely to have lower recidivism rates even prior to treatment. In addition, other investigators have differentially excluded particular groups of sexual offenders from possible participation in treatment studies. Reviewers have identified that a number of treatment programs only included offenders deemed less "severe" (e.g., of only low or moderate risk) and *excluded* more high-risk or "severe" sexual offenders for participation in sexual offender treatment. For example, in Hall's meta-analysis, as many as 33 % of sex offenders eligible for treatment were "screened out" and *not offered* treatment; specifically, Hall noted that the more "severe" sexual offenders (e.g., those with more extensive sexual offense histories, with mental health problems, who denied their sexual offense history, perceived as management problems, etc.) were not offered treatment in the studies that he reviewed. Similarly, Jones, Pellissier, and Klein-Saffran (2006) reported that 16 % of persons who had volunteered for sexual offender treatment were refused because of psychological reasons including lower intellectual capacity, severe mental illness, low motivation, history of treatment failure, and nonacceptance of responsibility for sexual offending. An additional 22 % of sexual offenders were refused treatment after being accepted and assigned to treatment. In addition, Marques et al. (2005) excluded any sexual offender with more than two prior felonies; thus, the treatment candidates were a low- or moderate-risk group to begin with. They also excluded offenders who denied their crime. Further, Marques et al.'s study could be viewed as "incentive laden" in that it involved a transfer from a prison to a one specific hospital setting, further limiting potential candidates. After selection criteria in SOTEP, 68 % of participants were low or medium risk. As Marshall and Marshall (2007) have pointed out:

> These exclusionary criteria would have biased the SOTEP *in favor* of finding a treatment effect… "they pointed out"…it seems reasonable to conclude that the nonvolunteers were among the most treatment resistant offenders and likely the ones in most in need of treatment. (p. 183, emphasis added)

[Despite this bias, of course, the SOTEP did not identify a positive treatment effect for CBT-RP and aftercare.] Thus, outside of mandated/coerced sexual offender treatment, as Harris, Rice, and Quinsey (1998) suggested, relying on persons who volunteer for and persist with treatment effectively screens out most high-risk sexual offenders and consequently participation in "…treatment over the long terms serves as a filter for detecting those offenders who are relatively less likely to reoffend…" (p. 103).

Beyond higher risk, other factors also influence the inclusion of offenders into sexual offender treatment; these include acknowledgement of some history of sexual offending and self-reported motivation for intervention. Beyond eliminating offenders with more serious sexual offending history (e.g., per risk studies, higher-risk sexual offenders), studies have typically selected only those offenders who (1) (must) admit to their offenses and/or (2), to varying degrees, are willing to participate in sexual offender treatment, either because they believe it is beneficial or because they may view such participation as providing them some gain or advantage (e.g., early release). Tierney and McCabe (2002) noted that some treatment programs target only the most "motivated" sexual offenders because they are considered most likely to change their behavior. In the SOTEP (Marques et al., 2005), only 1/3 of sexual offenders invited to participate in sexual offender treatment were willing to enter the research intervention; that is, **2/3** of sexual offenders offered sexual offender treatment refused to even consider entering the sexual offender treatment study. Thus, in this unique modern RCT, there was a highly significant degree of self-selection relative to a willingness to pursue sexual offender treatment. Rice and Harris (2003) pointed out that, in general, offender self-selection for sexual offender treatment has been the norm. Losel and Schmucker (2005) found that only 16 % of sexual offender treatment participants could be characterized as "volunteers." Further, Larorchelle et al. (2011), in their review of 18 studies, found that between 15 and 86 % of sexual offenders who began sexual offender treatment dropped out (the most consistent predictor being antisocial personality disorder and other antisocial characteristics). Thus, outside of mandated/coerced sexual offender treatment, Rice and Harris (1998) suggested that the utilization of persons who volunteer for and persist with treatment effectively screens out the higher-risk sexual offenders. As a result, in most contexts, sexual offenders who do "volunteer" for and remain in sexual offender treatment appear to an extremely different group of sexual offenders (e.g., lower risk for sexual reoffending) from those who choose not to participate or those who are excluded from participating.

Yet another issue to be considered relative to those sexual offenders who "agree" to participate in sexual offender treatment is the degree to which entering into sexual offender treatment is truly voluntary. Marshall and Barbaree (1990) noted, "quite a number of patients are under judicial or administrative pressure to enter and remain in treatment" (p. 375). As Losel and Schmucker (2005) reported, only sexual offender treatment programs involving *voluntary* participation by offenders showed a significant effect; programs that involved "a more or less coerced treatment" did not

show a significant treatment effect. Other studies have also found that the degree of mandate or coercion is related to treatment outcome in offender populations.

In short, to date, those person who have been studied after receiving sexual offender treatment are a minority of sexual offenders, apparently lower-risk offenders, those without comorbid psychiatric disorders or intellectual disabilities, and those with mixed or uncertain motivation (e.g., some intrinsically motivated and others mandated and with external motivation). Consequently, the experimental or treatment groups in sexual offender treatment outcome research should be viewed skeptically as representatives of sexual offenders in general, relative to their apparently unique identification or interest in seeking treatment as well as their degree of risk and associated disorders.

In addition, the nature of the comparison or control group in sexual offender treatment outcome studies is another highly significant methodological issue that potentially contaminates the results of such studies. As Marshall and Marshall (2007) noted:

> One problem with the incidental design, however, is that there may be a plethora of undetected but significantly influential differences between the treated and untreated subjects aside from the usual matching variables (i.e. some limited demographic and offense history features). Frustration with not begin given access to treatment, differential responses by the authorities to treated and untreated subjects (e.g. refusal to grant parole to untreated offenders, placement in a less attractive prison setting) may provoke responses in the untreated subjects that might confound the matching process. (p. 186)

The majority of sexual offender treatment outcome studies that utilize a nonrandom assignment control group are characterized as "incidental assignment" studies and constitute what is referred to as "quasi-experimental" designs. Since they are not RCTs, they have not randomly assigned comparable, motivated offenders to either treatment or a control condition. Thus, in the existing incidental assignment studies, researchers have resorted to utilizing various groups of offenders to serve as a "control" condition including identified treatment refusers; treatment dropouts; persons selected from a general group of sexual offenders (sometimes contemporaneous offenders and sometimes from a different time period); and/or general sexual offenders matched to a treatment group on one or more variables. However, it has been demonstrated that such comparison groups are each problematic for determining if the treatment condition for sexual offenders is actually effective. It can be demonstrated that for at least the first three potential control groups, their use of such types of sexual offender as a control group is compromised since each group—a priori or pretreatment—would almost certainly have a higher rate of sexual offense recidivism than those persons typically screened or volunteering for participation in sexual offender treatment.

The general group of sexual offenders, particularly after removing those selected as potential treatment candidates or who volunteer for sexual offender treatment, consists relatively of sexual offenders who would either refuse sexual offender treatment or would likely drop out of such treatment; both groups are known to be at higher risk of sexual offense recidivism than the "average" sexual offender. Using persons for control groups who have or would refuse sexual offender treatment will lead to a control group that is already characterized by an elevated risk for sexual offense recidivism. Thus, several years before Hall's initial meta-analysis, Quinsey et al. (1993) had argued that treatment refusers should not be ignored in considering treatment efficacy because of their particularly high rate of recidivism. More generally, this recommendation was in line with the increased importance of intent-to-treat (ITT) analyses in the general psychotherapy outcome literature. "Intent to treat" is a strategy for the analysis of randomized controlled trials that compares all clients based on the groups to which they were originally randomly assigned. Thus, to meaningful measure how well a particular intervention works, all individuals randomly assigned to that treatment condition are followed and evaluated, regardless of whether they actually entered, dropped out, or completed that treatment. ITT analysis reflects the practical clinical scenario because it recognizes the meaning of treatment noncompliance, later treatment rejection and treatment protocol deviations. Clinical effectiveness may be overestimated if an intention to treat analysis is not done (e.g., Hollis & Campbell, 1999); for example, how effective is surgical castration if few or no persons are willing to consent to it? Of note, the FDA of the USA recommends ITT analyses, noting the results of a clinical trial should be assessed not only for the subset of patients who completed the treatment but also for the entire sample of individuals who were randomized to treatment or control conditions.

As Harris et al. (1998) initially pointed out for Hall's (1995) meta-analysis in several studies, "all or most of the control group were men who refused or quit treatment…" (p. 102). Losel and Schmucker (2005) showed that in approximately 24 % of the psychosocial sexual offender treatment comparisons, the control group consisted of treatment refusers. Treatment refusers are clearly not characterized by significant motivation for sexual offender treatment. Marshall and Barbaree (1990) commented on earlier research by Abel, noting that almost 35 % of sexual offender entering his program withdrew or were terminated; "the highest rates of withdrawals from their program occurred in those patients who felt the greatest pressure to participate in therapy" (p. 375). Olver et al. (2013) noted that if dropout rates were not carefully managed and reduced, dropping out might act like a self-selection process, unwittingly resulting in the treatment of predominantly or exclusively lower-risk offenders. As

noted previously, in the SOTEP study by Marques et al. (2005), initially, 2/3 of sex offenders offered sexual offender treatment refused to consider such intervention. Later, an additional 21 % of that 1/3 that had previously volunteered for sexual offender treatment withdrew prior to the beginning of treatment. Given that 66 % of sexual offenders declined to participate in sexual offender treatment initially and then additional 21 % of those assigned to treatment refused, a basic issue raised regarding sexual offender treatment is the level of interest or motivation for participating in a particular intervention program. Such sexual offender treatment refusers have been identified as characterized by higher sex offense recidivism rates than persons who volunteer for sexual offender treatment (Abel, Becker, Cunningham-Rathner, Mittelman, & Rouleau, 1988, as cited in Quinsey et al., 1993). Utilizing a control group of sexual offenders who appeared to be untreated sexual offenders, Olver et al. (2013) found that "The importance of controlling for risk was underscored by the fact that untreated offenders scored significantly higher on [a static risk measure] and thus were higher risk for sexual and violent recidivism overall" (p. 415). That is, as with many studies that utilize a quasi-experimental design, those sexual offenders selected for control purposes were at elevated risk for sexual violence to begin with. As Rice and Harris (2003) wrote, "It is highly probable that, irrespective of the effects of treatment, those who refuse represent greater risk than those who volunteer for and completed…" (p. 432). More recently, Seager et al. (2004) found that treatment refusers had particularly high rates of sex offense recidivism relative to treatment completers (e.g., 42 %).

It is also problematic to utilize persons for control groups who have dropped out of or been terminated from treatment as that will also lead to a control group that is characterized by an elevated risk for sexual offense recidivism. As noted previously, for psychotherapy in general, treatment dropout or attrition from research studies has averaged 47 % and in actual clinical settings has been found to be even higher (e.g., Wierzbicki & Pekarrik, 1993). Quinsey et al. (1993) also pointed out that sexual offender treatment dropouts should not be ignored in considering treatment outcome because of their particularly high rate of recidivism. Beyko and Wong (2005) noted, "Unfortunately, attrition from many sexual offender treatment programs is high, up to 30–50 % in both residential and community programs" (p. 376). In SOTEP, Marques et al. (2007) found that 18 % of the small group of sexual offenders that had previously volunteered for and were assigned to sexual offender treatment did not complete the program (27 voluntarily withdrew and 10 were demitted because they presented as "severe management problems in the hospital"). Thus, dropout rates for persons placed in sexual offender treatment are very high.

More importantly, most available data suggests that treatment dropouts (or persons terminated from such interventions) are each characterized by higher recidivism rates than persons who volunteer for sexual offender treatment (Abel et al., 1988, as cited in Quinsey et al., 1993); failure to complete sexual offender treatment was a significant predictor of sex offense recidivism. As Olver et al. (2011) stated: "The clients who stands to benefit the most from treatment (i.e. high-risk, high-needs) are least likely to complete it" (p. 6). Marshall (1993) concluded "dropouts included a significant proportion of those sex offenders at greatest risk to offend" (p. 526). Specifically, Miner and Dwyer (1995) showed that treatment dropouts sexually reoffended at a rate three times that of treatment completers. Miner (1997) noted in his research that he "found higher reoffense rates in those [offenders] who terminated prematurely" (p. 101). As Seager et al. (2004) pointed out, Hanson and Bussiere (1998) found that there was a 17 % difference in sex offense recidivism rates between treatment dropouts and completers. Alexander (1999) found that dropouts were twice as likely to sexually reoffend. While Hanson et al. (2002) did not report the frequency with which control groups contained treatment dropouts, they did find that persons who eventually dropped out of treatment had consistently higher rates of sex offense recidivism. More recently, Seager et al. (2004) also found that treatment dropouts (as well as persons who were rated as failing to complete treatment) had particularly high rates of sex offense recidivism relative to treatment completers (e.g., six times greater). In this last investigation (albeit a small sample), the following rates of recidivism were found: 18 % for treatment dropouts and 100 % for those terminated from treatment. As noted, Losel and Schmucker (2005) reported, "Whether treatment was terminated regularly or prematurely had an impact on sexual recidivism. Where as regular completers showed better effects than the control groups, dropouts did significantly worse. Dropping out of treatment doubled the odds of relapse…" (p. 132). Langton, Barbaree, Hansen, Harkins, and Peacock (2007) also found that treatment dropouts showed the fastest failure rates.

Hanson (per a personal communication cited by Rice & Harris, 2003) agreed that, in fact, there were a priori reasons why treatment dropouts should be considered at higher risk to reoffend. Generally, as with sexual offender treatment refusers, dropouts are identified as likely to be more impulsive, show less self-control and other antisocial characteristics, and possess fewer social skills, all factors known to be associated with increased recidivism risk (e.g., Marques et al. 1994; McConaghy, 1999; Rice & Harris, 2003, 2012; Seager et al., 2004). Langton et al. (2006) also found treatment dropouts had significantly higher PCL-R scores (more psychopathic traits) than offenders who completed the same treatment program. Similarly, Beyko and Wong (2005) found that sexual offender treatment dropouts were characterized by two clusters of behaviors, one which they related to

criminogenic needs (e.g., aggression, rule-breaking behavior, longer offense histories, and more criminalized) and a second which they viewed as a responsivity issue (e.g., lack of motivation and denial). Olver and Wong (2009) found that 56 % of sexual offender treatment dropouts met study criteria for psychopathy. Nunes and Cortoni (2008) found that treatment dropouts were significantly associated with elevated general criminality characteristics. Olver et al. (2013) found that their untreated (but not randomized) control group scored as higher risk for sexual and violent offense recidivism than their treated group. In short, since sexual offenders who drop out of sexual offender treatment appear to be different and, most importantly, higher risk for reoffending than offenders who complete such treatment, "intent-to-treat" or treatment as assigned analyses appear imperative to rule out the significance of pretreatment differences.

A number of outcome studies for sexual offender treatment have utilized persons selected from some general group(s) of sexual offenders. Based on the research findings cited above, the majority or a large percentage of a general group of sexual offenders would refuse to participate in such interventions. In addition, such general groups of sexual offenders would include persons typically or historically excluded from treatment studies because they would be deemed high risk, mentally ill, intellectually limited, unmotivated, and so on, by virtue of what is known about treatment exclusion criteria. More importantly, as should be apparent from the just reviewed studies, since the great majority of sexual offenders either refuse or withdraw/drop out of sexual offender treatment, any group of general sexual offenders would almost certainly contain a substantial group of likely treatment refusers/dropouts if placed in or offered treatment. Thus, whether a control group included persons typically excluded from sexual offender treatment studies or treatment refusers/dropouts, such control groups would necessarily be composed of persons who, *prior* to any treatment being provided in a study, would very likely be sexual offenders at much higher risk to reoffend: high risk, unmotivated, more severely and comorbidity disordered, and likely to drop out if placed in treatment.

Another mechanism employed to create a control group relative to a treatment group is to attempt to "match" characteristics of the treatment group in the selection or creation of a control group, with the notion that such matching might result in equivalent groups for comparison. However, McConaghy (1993) noted that it is not possible to match offenders on all relevant variables as many offenders are not possible to assess accurately and many relevant variables were (are) not yet known. Similarly, relative to matching, as Seager et al. (2004) pointed out, studies rarely use more than three risk factors to match subjects, and they are often unable to match all treated subjects with untreated controls on the specified risk factors. In addition, while the comparison group may be "matched" on certain variables, the members are still selected from the larger set of sexual offenders, which is to say that they include persons typically excluded from sexual offender treatment studies and/or treatment refusers/dropouts. Further, it is important to note that the most sophisticated sexual offender treatment outcome study, the SOTEP (prior to randomization), matched potential treatment candidates on age, criminal history, and type of offender (Marques et al., 2005) but still found no treatment effect. As the SBU indicated, when control groups are created for comparative purposes not by random assignment, there can be no certainty that any difference obtained between treatment and control group is the result of treatment; even with statistical attempts to control for variability between the groups, "since the differences between the groups cannot be attributed to chance, we can never be completely certain that the results are not due to some unmeasured, and perhaps unknown, risk factor that is more common in one of the groups" (pp. 17–18). Thus, Quinsey et al. (1998), when considering only the available studies from Hall's MA that used a matching or randomization design, found that the effect size fell to 0; that is, the already "small" treatment effect in that MA was eliminated and no longer statistically significant.

As reviewed, the only basis for Hanson et al. (2002) concluding that there was *any* evidence of a treatment effect for psychosocial interventions applied to sexual offenders was their consideration of "incidental assignment" studies. Consequently, it is worth examining those results more closely. Rice and Harris (2003) reviewed the results of Hanson et al.'s (2002) "incidental assignment" treatment control group findings. As noted, in these studies, comparison groups were offenders selected as "matching" according to various methods including similar criminal records but who had been released before the implementation of the treatment program or who came from different geographical areas, who received an earlier version of the treatment, or who received no treatment or an alternative treatment due to such administrative reasons is too little time meeting their sentences. Hanson et al. (2002) labeled these seventeen studies as "incidental assignment" because they believed that there was no obvious a priori reason that the treated and untreated offenders would differ in risk and, thus, no "obvious" bias in group assignment. Of the 17 "incidental assignment" studies, only 11 were considered to be studies involving current treatments (those still being offered at the time of the meta-analysis).

Rice and Harris (2003) pointed out, "…with few exceptions, the studies included in this meta-analysis did not meet our criteria for minimally useful evaluation" (p. 433). They concluded that "the balance of available evidence suggests that various well-known threats to validity and the reliance on non-comparable groups are responsible for apparent beneficial treatment effects…" (p. 438). Rice and Harris (2003) specifically noted that 8 of the 11 "incidental assignment" studies clearly included sex offenders in the comparison group who

were not offered treatment, and thus, such studies appear to *include* likely treatment refusers or treatment dropouts in the control group who were not offered treatment. As noted previously, sex offenders selected for having completed treatment are not comparable to sex offenders who were not offered treatment because both refusal and dropping out are a priori risk factors for increased sex offense recidivism. As Seager et al. (2004) stated:

> Within 'untreated' comparison samples a subset will be refusers and dropouts thus giving rise to concerns because refusers and dropouts reoffend at higher rates than completers. By failing to mathematically remove anticipated refusers and dropouts from untreated comparison groups, there is an inflationary effect for the treatment condition; that is, untreated comparison groups will have an exaggerated recidivism rate relative to the subgroup of untreated offenders who would have accepted treatment and remained till completion if offered the opportunity. (p. 601)

"Given that [a general group of sexual offenders] can be assumed to include a significant proportion who would have refused or quit treatment had it been offered to them and, therefore, are not appropriate comparison or control groups for the evaluation offender treatment" (Quinsey et al., 2006, p. 149) and would have dropped out of treatment had it been offered to them. Of the three remaining studies involving incidental design of current treatments reviewed by Hanson et al. (2002), Rice and Harris (2003) stated that each of them included significant methodological confounds that would neither meet their criteria for minimally useful evaluation nor even the Hanson et al. definition of "incidental assignment." Further, Rice and Harris (2003) and Seto et al. (2008) pointed out that in a number of studies included in "incidental assignment groups" in the Hanson et al. (2002) meta-analysis, a *double error* was found: offenders who refused or would have dropped out of treatment were not counted as part of the treatment condition but were counted as part of the control group. This procedure potentially reduced the measured sex offense recidivism of the treatment group *and* increased the sex offense recidivism of the control group, irrespective of the value of the intervention itself. As Rice and Harris (2003) concluded:

> It is highly probable that, irrespective of the effects of treatment, those who refuse represent greater risk than those who volunteer for and completed…any study that does not track both refusers and dropouts cannot provide scientifically useful data in support of treatment effectiveness because there are clear a priori reasons to expect differences between the groups in recidivism… Samples of untreated sexual offenders will contain a substantial minority who would refuse treatment if offered, and another subset who, after beginning treatment, would quit or be ejected. (p. 432)

Similarly, Seto et al. (2008), responding to Marshall and Marshall (2007), pointed out that the design of the studies that provided the support for the conclusions of Hanson et al. (2002) emphasized that "…this decision creates a selection bias, independent of any treatment effect, that increases the chances of finding newer offense among the treated sexual offenders…" (p. 252). They pointed out that "All of the incidental designs touted by Marshal and Marshall are even more vulnerable to the problem of inadvertent nonequivalence of groups, and all depend on some kind of statistical control from known risk factors" (p. 248). However, unknown risk confounding factors would not be subject to such a priori control. They also pointed out that Marshall and Marshall's rejection of RCTs would not take into account treatment motivation for sexual offender treatment (an issue on which Marshall himself has identified as a more systemic issue in providing interventions for sexual offenders). Barnett et al. echoed this concern stating "One problem with the incidental design, however, is that there may be a plethora of undetected but significantly influential differences between the treated and untreated subjects aside from the usual matching variables (i.e., some limited demographic and offense history features). Frustration with begin given access to treatment, differential responses by the authorities to treated and untreated subjects (e.g. refusal to grant parole to untreated offenders, placement in a less attractive prison setting) may provoke responses in the untreated subjects that might confound the matching process" (p. 186). Most recently, even Hanson (2014) has rejected the results of "incidental design," writing: "Comparisons between treated and untreated offenders from the same setting are usually biased because those who get treatment area systematically different from those that do not…" (p. 6).

Concerning both participants and refusers of sexual offender treatment, it seems clear that both typical treatment study participants and those excluded from inclusion, as treatment participants, are distinct and different groups of sexual offenders from one another. Both the exclusion of potential sexual offender participants by investigators and the self-selection by offenders relative to participation in treatment create meaningful differences in the pool of subjects who have composed treatment conditions. As Harris, Rice and Quinsey (1998) suggested years ago, volunteering for and persisting with treatment appears to effectively screen out most high-risk sexual offenders, writing "the data so far are consistent with the conclusion that agreeing to and persisting with treatment over the long term serves as a filter for detecting those offenders who are relatively less likely to reoffend…" (p. 103). That is, participation in sexual offender treatment does not appear to actually reduce recidivism rates for those who complied with treatment program but merely enables lower-risk, motivated sex offenders to demonstrate their commitment to not reoffend. Later, in 2012, Rice and Harris wrote, "…the predictors of treatment non-completion indicates that those who volunteer for and complete psychosocial treatment would, on average, exhibit a moderate to large difference in recidivism compared to those not offered

treatment, even if treatment had no effect" (p. 11). Effectively, in available sexual offender treatment outcome studies and the MAs and SRs of them, relatively lower-risk sexual offenders are being offered and accepting treatment participation, while higher-risk sexual offenders are both being excluded from or refusing participation in the sexual offender treatment that is the subject of study and often utilized as a comparison group. Further, both actual treatment refusers and dropouts appear similarly higher risk; relative to "intent-to-treat" principles, sexual offender treatment studies must identify and track both treatment refusers and dropouts because there are a priori reasons to expect differences between those groups and treatment volunteer/completers. Consequently, it is not at all surprising that group differences that *appear* to be treatment effects are identified when sexual offenders selecting and/or selected for treatment are compared to those sexual offenders who are not considered for or not volunteering for such treatment (because a significant proportion of who would likely refuse or drop out of such treatment) since a comparison group of non-volunteer sexual offender treatment individuals containing a relatively high proportion of both likely treatment refusers and actual treatment refusers will consist of a significant proportion of persons *already* at higher risk for sexual offense recidivism. Rice and Harris (2003) wrote: "In our opinion, few useful scientific data on effectiveness can come from studies contrasting complete treatment completers with sex offenders not offered treatment because such contrasts almost inevitably entail non-comparable groups" (p. 432). The most reasonable conclusion is that truly volunteering and being motivated for sexual offender treatment are among the most critical factors relative to outcome and that whatever intervention is offered makes little difference to the outcome; psychotherapy is irrelevant once client variables are accounted for.

In short, even prior to implementing treatment, in studies that find "small" differences between treated and untreated offenders, such differences would be expected based simply on the *likely preexisting differences in sexual offense recidivism rates* between persons selected and choosing treatment and other sexual offenders who are utilized as "control" groups. When differences in sexual offender treatment are found in non-RCT studies, the most reasonable conclusion is that sexual offender treatment *does not* lower the rate of sex offense recidivism below that of the average sexual offender; rather the most compelling conclusion is that rates of sex offense recidivism for *persons used as comparison groups are significantly higher than the average sexual offender*. Thus, the differences between treatment and control groups are not the result of treatment but a straightforward consequence of *preexisting risk status*. To this end, it is notable that per Table 1, the 5-year sex offense recidivism rates of sexual offenders who participated in treatment per the 2002 and 2005 treatment meta-analyses (10–12 %) are very similar to the 5-year sex offense recidivism rates of the very large groups of predominantly untreated sexual offenders identified in the risk-factor meta-analyses (13–14 %). Such a point is driven home even more so by the fact that when sexual offender treatment outcome studies utilize an RCT methodology (randomly assigned, comparably motivated, more equivalent treatment and comparison groups), no difference is found between those who participate in sexual offender treatment and those who do not as per Marques et al. (2005) (Table 1).

Thus, to date, scientific evidence has failed to demonstrate that sexual offender treatment completion per se reduces sex offense recidivism generally or for specific types of sexual offenders. Rice and Harris (2003) concluded, "The current empirical support suggesting beneficial effects of treatment rests on the use of non-comparable groups in which control subjects were of higher a priori risk" (437). Rice and Harris indicated, "Weak inference methods (as exemplified by almost all of the studies review by Hanson et al. (2002) ensure that the field of sexual offender treatment will continue to exhibit change without progress" (p. 438). Specifically, they concluded that the studies considered by Hanson et al. (2002), especially those in the so-called incidental category:

> …cannot support even the tentative positive conclusions drawn…Indeed, the Hansen et al. (2002) analysis of incidental designs illustrates an important limitation of meta-analysis. The analysis of a set of uniformly weak designs cannot attribute variation of effect size to study quality. An overall effect size derived from studies of uniformly poor quality cannot obviate universal methodological weaknesses. Conclusions based on such a meta-analysis are no more justified inclusions based on the individual studies. (p. 437)

In fact, Rice and Harris (2003) found "the mean effect of treatment on sexual recidivism indicated a trend toward treatment having been detrimental…" (p. 437). It should also be pointed out that very little knowledge has accumulated about various matters critical to sexual offender treatment, including which aspects of treatment might produce reductions in recidivism or for what types of offenders might be most responsive to treatment. Rice and Harris reported that, "The literature provides almost no information about which treatment be most beneficial…" (p. 437). In fact, they pointed out "the mean effect of treatment on sexual recidivism indicated a trend toward treatment having been detrimental…" (p. 437). Hanson et al. (2009) concluded "Reviewers restricting themselves to the better quality, published studies… could reasonably conclude that there is no evidence that treatment reduces sex offense recidivism" (p. 881). The IHE (2010) stated, "Given the methodological problems of the available primary research it is difficult to draw strong conclusions about the effectiveness of sexual offender treatment programs using various CBT approaches for such a

Table 1 Sexual offense recidivism rates in meta-analyses (MA) and SOTEP

Sex offense recidivism: general untreated sexual offenders+			
Hanson and Bussiere (1998) MA of risk factors	**13 %** SOR Sex offenders 23,0000	**19 %** SOR Rapists	**13 %** SOR Child molesters
Hanson and Morton-Bourgon (2004) MA of risk factors	**14 %** SOR Sex offenders 31,000		
Sex offense recidivism: meta-analyses of sexual offender treatment			
Hanson et al. (2002) Treatment MA	**12 %** SOR General treatment	**17 %** SOR Comparison group	
	10 % SOR CBT	**17 %** SOR Comparison group	
Losel and Schmucker (2005) Treatment MA	**12 %** SOR Biological and psychological treatments	**24 %** SOR Comparison group	
	11 % SOR CBT	**18 %** SOR Comparison group	
Hanson et al. (2009) Treatment MA	**11 %** SOR	**19 %** SOR	
Sex offense recidivism rates for randomized control sex offender treatment study			
Marques et al. (2005) SOTEP	**22 %** CM SOR CBT+RP+ aftercare	**17 %** CM SOR Volunteer controls	**21 %** CM SOR Did not volunteer
Marques et al. (2005) SOTEP	**20 %** R SOR CBT+RP+ aftercare	**29 %** R SOR Volunteer controls	**14 %** R SOR Did not volunteer

CBT cognitive-behavioral therapy, *SOTEP* sex offender treatment evaluation project, *RP* relapse prevention, *CM* child molesters, *R* Rapists

heterogeneous population…Overall, the results reported by the selected SREs provide little direction regarding how to improve current treatment practices…There are still uncertainties reading the most useful elements and components of a sexual offender treatment program for convicted adult male sex offenders" (pp. iii–iv). As per the SBU in 2011, "For adults that have committed sexual offenses against children the scientific evidence is insufficient for determining which treatments that could reduce sexual reoffending." Dennis et al. (2012) concluded: "The main finding of this systematic review is that there was no evidence from any of the trials in favour of the active intervention in a reduction of sexual recidivism—the primary outcome" (p. 25). Rice and Harris (2003) summarized:

> In the end, we are obliged to conclude that the available data afford no convincing scientific evidence that psychosocial treatments have been effective for adult sex offenders… We conclude neither that treatment has been shown to be a waste of time nor that is been demonstrated to be effective. (p. 427)

In 2010, the ATSA Executive Board endorsed the unique value of RCTs as the preferred method of demonstrating if sexual offender treatment is effective, writing: "ATSA believes that RCT can and should be implemented in ways that respect the highest ethical standards. Community safety is better promoted by identifying treatments with strong evidence of effectiveness than by a proliferation of programs for which the efficacy is debatable." There should be little disagreement with this point; no data from RCTs has yet to determine or establish that sexual offenders volunteering for (and not mandated for intervention) and who are randomly assigned to sexual offender treatment (as opposed to control conditions) exhibit lower rates of sexual offense recidivism during time spent in the community.

Other Issues Regarding Outcome for Sexual Offender Treatment

Alternate Outcome Methods and Results from Sexual Offender Treatment

Marshall (1993) has long disputed the notion that RCTs are demanded to make claims about the effectiveness of sexual offender treatment. Marshall and Marshall (2007) claimed

that while elegant, RCT studies "are fraught with all kinds of scientifically unacceptable problems when applied in a practical setting with sexual offenders" (p. 178). Similar to writers in the general psychotherapy field (Howard et al., 1996; Westen et al., 2004), Marshall and Marshall noted the limitations of external validity of RCTs, namely, that because they involve controlled variables but fail to control for all possible variables, and standardized implementation (reliance on manuals or other formal treatments which limit clinical flexibility), which could raise questions about their generalizability. Marshall and Pithers (1994) challenged the utility of carefully controlled investigations of treatment effectiveness, writing, "Highly structured outcomes studies requiring clients to take part in time-limed, inflexibly sequenced interventions are likely to underestimate the potential effectiveness of treatment" (p. 22). In particular, in these various writings, Marshall has argued that research that involves structured intervention programs (e.g., involving manuals, uniformity of treatment elements, prescribed (and limited) number of sessions, and duration of treatment) is problematic as such phenomena undermine the potential influence of the therapist. Marshall has argued that RCT designs are "not suitable for determining the effectiveness of sexual offender treatment" (e.g., Marshall & Marshall, 2007; Marshall et al., 2011); rather, he has suggested that treatment be optimized by largely individualizing treatment for offenders and allowing therapists freedom to be responsive to the particular presentations of specific clients. Similarly, Levenson and Prescott (2013), while calling for "accountability" in treatment outcome research, reject a reliance on methodological rigor as compromising "clinical validity," suggesting that methodological approaches such as RCTs "rarely apply to practice in the field" because results are questionable in translating to therapeutic practice in the "real world." On its surface, such claims are potentially appealing. However, evidence-based practice for any medical or psychological intervention requires some clear and consistent demonstrations of efficacy of particular treatment approaches, with select offenders under relatively controlled conditions and random assignment. Only once some substantial evidence of general treatment effects is demonstrated would it be appropriate to pursue subsequent investigation of whether, in fact, results of more individualized treatment elements (such as therapist variables; longer, more flexible, and intensive treatment programs; greater focus on personality issues and diatheses) be more systematically investigated.

Alexander (1999) while noting that research in sexual offender treatment outcome "remains in the formative stages" claimed, "Should offender treatment be abandoned until its efficacy is incontrovertibly established? While this course may be tempting from a scientific perspective, the public safety ramifications of withholding even relatively ineffective treatment from dangerous offenders cannot be risked" (p. 112). More recently, Marshall (in various publications, e.g., Marshall & McGuire, 2003; Marshall et al., 2011) has argued that a consideration of effect sizes generally would indicate that even if an intervention has a small effect on outcome, it should be considered potentially useful in that it may lead to "harm reduction" (e.g., reduce sexual offense recidivism for some offenders and/or limit the number of victims among high-frequency offenders). He refers to the reported effect sizes of several SRs of sexual offender treatment and of the Hanson et al. (2002) meta-analysis of such studies as suggesting that the effects of studies utilizing incidental assignment allow the conclusion that sexual offender treatment is effective for some sexual offenders. He describes these results both as "encouraging" and as "convincingly demonstrate[ing]" that such interventions are effective. Certainly, the medical outcome literature has shown that when interventions truly show small effect sizes, they can have substantial practical value; however, in such cases (e.g., a daily aspirin is a common example), that might occur if a treatment is relatively inexpensive, is easy to execute, is politically feasible, and can be employed on a large scale so that it affects a large number of individuals. Assuming it was politically feasible, it is unlikely that sexual offender treatment can be delivered in a manner that is easy to execute, particularly in an inexpensive fashion to many or most sexual offenders. More importantly, Marshall's argument on behalf of potential small effect sizes is predicated on what currently is an inaccurate or unproved presumption, namely, that the sexual offender treatment literature actually or "truly" shows a positive effect size, even a "small" one. However, as Hanson et al. (2002) and Losel and Schmucker (2005) demonstrated existing RCTs of sexual offender treatment have *not* shown positive effect sizes, let alone even "small" ones: if the mean recidivism score of the treatment group is significantly reduced by excluding higher-risk offenders and the mean recidivism score of the control group is significantly inflated by including excessive high-risk sexual offenders, then the resultant effect size becomes effectively zero. Consequently, if the effect size is minimal or nonexistent—reflective of the lack of significant differences in RCT comparisons—the harm reduction argument is significantly diminished or eliminated; it becomes moot. Seto et al. (2005) and Duggan and Dennis (2014) have effectively responded to all the concerns raised by Marshall regarding RCTs.

Alternately, arguments have been made that in correctional settings, RCTs for psychosocial interventions are not easily implemented and have been shown to make minimal differences in outcome results (e.g., Landenberger & Lipsey, 2005). However, they are clearly possible (e.g., Davidson et al. 2009; Cullen et al., 2011). In a Cochrane Review regarding CBT's utility in reducing recidivism among general criminal offenders, Lipsey, et al. (2007) made the claim that there

was no difference in results of RCT versus quasi-experimental designs in interventions for criminal recidivism. Yet, regarding their meta-analysis of interventions for general criminality, they noted that only 6/19 RCTs were conducted on "real-world" CBT practice and that a different set of 6/19 RCT studies involved sufficiently high attrition that the validity of their results was compromised. In addition, Lipsey et al. noted that the mean length of the follow-up in most studies of criminal recidivism is rarely longer than 12 months and little information exists about the longer-term effectiveness of such interventions. As other writers (e.g., Sanchez-Meca, 1997) have noted, in the "corrections intervention literature," most if not all of the studies comparing RCTs to "quasi-experimental" groups have relied on relatively short-term follow-ups and that effect sizes typically diminish with longer follow-up periods. In addition and more generally, Sanchez-Meca (1997) also noted other methodological issues in interpreting meta-analytic results of corrections interventions. First, he pointed out that different outcome measures lead to different effect sizes; recidivism as an outcome tends to have the lowest effect sizes, while "expert" [e.g., clinical] ratings produce the highest effect size. Second, studies with larger sample sizes typically evidence the lowest effect sizes. Third, pretest/posttest designs overestimate effect size in comparison with "between-group" designs; this is particularly problematic given the evidence that posttreatment measurements may be "faked" for purposes of impression management or distorted by ego-syntonic personality characteristics. Thus, studies of general psychosocial interventions in correctional settings have relied upon quasi-experimental control methods and are often characterized by factors that inflate their effect size relative to better-designed studies.

Ultimately, as emphasized previously, many or most investigators and research authorities agree that RCTs are the preferred method for evaluating any treatment's effectiveness, including studies of correctional samples generally and sexual offenders specifically (e.g., Seto et al., 2008; Hanson et al., 2009) and specifically relied upon by the gatekeepers of approved interventions and funding stakeholders. However, while sex offense (and other criminal) recidivism has been the primary focus of existing treatment outcome studies, several other research methods have been suggested as an alternative means to evaluate treatment effectiveness. Several writers have noted that simply completing sexual offender treatment provides no guarantee that meaningful personal changes have occurred for treatment participants. Alternately, other writers have argued that reduced recidivism is a too absolute and stringent requirement to judge the potential success of sexual offender treatment; Levenson and Prescott (2013) have argued:

> When measuring sex offender treatment, effectiveness studies have focused almost exclusively on measuring recidivism rates, while other measures of client improvement have been largely ignored. Certainly, given the harm caused by sexual victimization, decreased recidivism is the salient goal of treatment. But dichotomous recidivism measures as the only outcome of importance limit our ability to define success. Traditionally, measurement of success in other types of psychotherapeutic interventions has included a reduction in the frequency, duration and intensity of distressing symptoms, or the increase of desirable behaviours. Such appraisals are relative measures. In contrast, sexual offender treatment outcomes evaluate only recidivism, which is an absolute measure. Recidivism as the only construct of improvement within sexual offender treatment almost surely sets everyone up for failure—sexual offenders, clinicians and the field as a whole. (p. 3)… By measuring only arrests and convictions as therapy outcomes, do we ignore information about other ways that an offender's risk may diminish with treatment? Researchers should consider incorporating relative measures of behavioural change in addition to the absolute measure of recidivism.

One can certainly agree that dimensions of personal change have relevance to sexual offender treatment, particularly if and when a sexual offender is a sole or primary stakeholder in psychotherapy. However, to the extent that the public is a stakeholder, the likely victim of failed or inadequate sexual offender treatment, and the source of funding for such treatment, reducing sexual offense recidivism should be the principal aim of such psychosocial interventions. As Prentky et al. wrote (2011), "…the most compelling reason for treating sex offenders is reducing the likelihood that those offenders will reoffend and create additional victims. The primary goal of sex offender treatment is not to cure sexual offenders or to make them feel better but (a) to reduce the risk that they will reoffend, and (b) to assist with the optimal management of those sexual offenders who are in the community" (p. 117).

In fact, numerous investigations have attempted to examine relative change as a result of sexual offender treatment as means of obtaining perspective as to the efficacy of sexual offender treatment for select sexual offenders. One such approach to outcome research is the measurement of change of putative risk factors believed to be the mediators of sexual offending. Harkins and Beech (2007) reviewed different methodologies utilized to measure the effectiveness of sexual offender treatment suggest that multiple methods have both weaknesses and advantages. They questioned whether distal outcomes such as recidivism should be the only means of determining positive sexual offender treatment outcome. Harkins and Beech suggested that the examination of more proximate outcomes, such as apparent changes within treatment (e.g., intraindividual changes), might allow the comparison of those offenders apparently "successfully" and "unsuccessfully" treated; Hanson (1997) had previously noted that a potential indicator of treatment effectiveness might be to assess within-treatment changes on the typical elements that sexual offender treatment therapists presumably target in their work. Participation in a focused sexual offender treatment (such as one incorporating CBT principles

and techniques) is theorized to produce changes in a sex offender's cognitions, behavior, and affective experiences. If that were the case, it would be presumed that treatment would produce valid proximal changes in treatment targets (which in turn would be associated with more distal changes in a more global outcome measure, namely, sex offense recidivism). Change on treatment targets is typically measured by comparing difference between the treatment and the control group (via a "difference" score created between mean pretreatment scores of variables of interest and mean posttreatment scores). In particular, the so-called risk principle would be expected to be particularly operative; as Olver et al. explained, "as would be predicted by the risk principle, higher-risk individuals, that is, those who have more 'room' to lower their risk, are expected to show more risk reductions in treatment when compared to lower risk individuals, whose potential for risk reduction would be limited by the 'floor effect'" (p. 114). An additional step would be to examine the possible association of differences in intraindividual pre- and posttreatment measures and sex offense recidivism. Historically, CBT was initially studied by determining if specific techniques did, in fact, modify particular targets of intervention in treatment outcome participants. In addition, to serving as another important outcome measure, such assessments might also shed light on what targets of treatment might be mediators of intervention and associated with larger positive treatment outcomes.

However, there are several issues with this proposed method. Hanson (1997) pointed out the primary behavior of interest (sexual offending) would not be expected to occur in most treatment settings; consequently, potential within-treatment changes on primary behavior of interest would be difficult to measure in institutional settings (e.g., with no or limited contact with children or adolescent and adult females). In addition, Harkins and Beech (2007) also noted that the meaning of any identified change would be dependent upon the sensitivity and validity of the measures of such change. As noted earlier for psychotherapy in general, Gregerson et al. (2001) looked at ratings of treatment made pre- and posttreatment. They found that the difference in the size of treatments of pre- and posttreatment suggests that retrospective (post) evaluations of treatment change "overestimated treatment effects" by a *factor of two* compared to actual pre-/post-measurements. Further, there are several issues with regard to the validity of measurement of potential change for sexual offenders. First, in general, Kelly (2000) showed treatment participants generally tend to present themselves to therapists in a socially desirable manner; from a forensic therapy perspective (e.g., with potential sanctions for perceived noncompliance), this would seem likely to be substantially more characteristic of treatment client/offenders. In addition, many of the test or measures for potential outcome or change utilized by extant studies are extremely face valid, such that it is likely clear to an offender what the socially desirable or even expected response might be from the perspective of a therapist or treatment program; Marshall and Eccles (1991) pointed out that the majority of instruments used in measuring select aspects of sexual offenders are relatively transparent and it is relatively obvious in identifying the socially acceptable responses. Gannon and Polaschek (2005) hypothesized that relative to self-report measures, "It may be naïve to assume that offenders will not fake good following treatment. A compelling argument can be made that after (post) treatment, offenders have even more incentive to fake good than they did previously. After all, if they don't demonstrate change after treatment then maybe they are not ready for release, or perhaps the therapist, with whom they may have developed strong bonds will be displeased with lack of change" (p. 196). Gannon and Polaschek (2005) found that evidence for this phenomenon was supported. In a later study, these authors found that when sexual offenders believed they were subject to a polygraph, they admitted to increase offense-supportive cognitive distortions relative to their previous reports and those of a control group, thus suggesting that their report of change was little more than impression management of their clinicians (Gannon et al., 2007).

A particularly critical question has to do with whether relative change as measured by pre-post results of testing is, in fact, associated with sexual offense recidivism and might indicate potential mediators of personal change. As Olver et al. (2013) noted: "Aside from a small collection of studies (e.g., Beggs & Grace, 2011; Olver, Wong, Nicholaichuk, & Gordon, 2007, 2013; Wakeling et al., 2013), remarkably little research has explicitly examined linkages between treatment-related changes in important sexual offender risk–need domains and possible reductions in recidivism." Further, what research that is available has found that pretreatment scores are more predictive than posttreatment or change measures (posttreatment scores–pretreatment scores). That is, almost universally, pretreatment information is more strongly associated with the degree of sexual reoffending after treatment. Marshall and Barbaree (1990) found that clients demonstrated reduced deviant sexual arousals (DSA) at the end of treatment but found that neither pre-, posttreatment, nor change scores of DSA were associated with sexual offense recidivism for either rapists or child molesters. Beggs and Grace (2011) reported that for a group of low-risk child molesters treated with CBT, several measures of treatment gain were associated with small reductions in recidivism for up to a 12-year follow-up (even controlling for pretreatment scores). However, they pointed out that correlations between change scores and recidivism were near zero and stated "Given the transparent nature of the tests and incentives for the men to show improvement, it is likely that much, if not most of the self reported gains were due to impression

management" (p. 9). As Beggs (2010) noted, the significance of secondary gain for sexual offender treatment participants (e.g., early release from institutions or favorable parole boards) and the potential lack of intrinsic motivation for change or treatment may obscure any potential true treatment effects on individuals. Beggs and Grace also noted that their results could mean that offenders who performed better in the program might have actually been at lower risk to begin with. Further and more broadly, as Miner (1997) noted, "There is a tendency for test scores to regress from the extremes to the mean. Thus, changes in measures from beginning of treatment to end may be simply an indication of regression to the mean rather than actual change in the construct being measure" (p. 98). Perhaps, an even more important issue in utilizing pre-post changes in proposed outcome measures is that persons who drop out or are removed from sexual offender treatment are not available to provide posttest outcome measures; this differential availability of offenders is likely to inflate positive results from interventions.

Marques et al. (2005) found that self-reported cognitive distortions and self-reported sexual arousal to children and rape were significantly lower after treatment than before treatment. Williams et al. (2007) found that sexual offenders showed significant improvement on almost all self-reported measures of treatment change including denial, minimization, cognitive distortions, empathy, relapse preventions strategies, and self-esteem. Of note, the largest effect size was for relapse prevention strategies, followed by empathy for victims. Williams et al. also examined the association between risk and change and found that no risk group showed significantly more or less improvement than other risk groups. However, there was no control group, and there was no determination as to what level of these measures individual offenders endorsed prior to exposure to treatment. In combination, then, sexual offenders' responses on self-report measure "appear" to improve, regardless of determined risk level; however, without accounting for individual pretreatment scores, having a control group to determine in what ways offenders' responses change at a second assessment point, or demonstrating an association with decreased sexual offense recidivism, such studies provide little information about the "meaning" of reported "improvement" in self-report of sexual offenders. Thus, it remains unclear if reported change in self-report measures, particularly victim empathy and relapse prevention, is simply about impression management of a clinical team or other public agents.

McGrath et al. (2012) reported that ratings on the Sex Offender Treatment Intervention and Progress Scale (SOTIPS) made at 1, 7, and 13 months after community-based treatment began predicted sexual recidivism at the follow-up (after starting sexual offender treatment) for a group of predominantly (87 %) first-time sexual offenders (e.g., mean Static-99R score = 0.2, SD 2.4). In a repeated measure design, group SOTIPS ratings by therapists and supervision officers, on their own, were predictive of sexual offense recidivism during the short follow-up period; however, offenders were generally rated as showing improvement over time on the measure, and no change scores were apparently utilized. The results were found for sexual offenders against children but not for those with adult victims.

Further, as Nunes et al. (2011) pointed out, such group-level analyses of treatment change are not sensitive to the presence of non-dysfunctional posttreatment status, specifically clinical significance (e.g., did the client reach some target level of function as a result of treatment and whether the amount of improvement found was large than what would be expected by chance alone). Nunes et al. studied treatment change both in the group and individual level. They found, generally, that the results from group-level analyses were more supportive of "change" than those from individual-level analyses. Thus, measurements of the changes for specific individuals indicated more modest gains, with approximately one-third of participants showing reliable change and reaching functional levels posttreatment on specific measures. Nunes et al. also showed that group-level findings of presumed treatment differences were not always consistent with individual-level findings. They also noted a number of methodological issues that might qualify their results.

Change on treatment targets may also be measured in terms of *clinical significance* (the degree to which self-reported measures fall in the "normal" range for a particular variable or measure) to determine if a client is characterized by meaningful improvement during treatment. Mandeville-Norden et al. (2008) examined pre- and posttreatment measures of cognitive distortion, emotional identification with children, victim empathy, self-esteem, loneliness, unassertiveness, ability to cope with negative feelings, and locus of control. They compared used norms on those measures based on correctional officers to compare treated sexual offenders. They found that between 51 and 71 % of sexual offenders (depending on the particular measure) had scores in the "functional" range after treatment. Mandeville-Norden et al. (2008) also tested to determine if this was a reliable change (e.g., not due to chance); they found clinically significant improvement had been achieved by 7–26 % of offenders (depending on the particular measure). However, these investigators failed to separate offenders who self-reported already functional scores at pretreatment from those who were dysfunctional at pretreatment. Thus, the proportion of participants who were in the functional range posttreatment would overestimate the effectiveness of treatment since a significant number were reporting "functional self-reports prior to treatment. More recently, Barnett et al. (2012) also found in a large sample of sexual offenders who received

a mean of 14 months of community-based sexual offender treatment that posttreatment psychometric test scores were less discriminative and less predictive of reconviction than were pretreatment scores; further, when tests were grouped into dynamic risk domains, only the pretreatment scores of the domain-labeled socioaffective function predicted recidivism. They concluded "the poor performance of these measures posttreatment suggests that treatment providers should rely less on these scores as way of assessing risk after treatment" (p. 23). Similarly, based on a similar study of potential measures of treatment change, Olver et al. (2014) concluded "The results from the present sample generally do not support using most of these self-report psychometric measures to assess sexual offender risk or predict recidivism" (p. 13).

Olver et al. (2007) included measures of possible treatment change rated by therapists from records and indicated that the dynamic change measure added incrementally to a static measure of risk of sexual offense recidivism. Similarly, Beggs and Grace (2010) also found that the same "dynamic" scale made independent contributions to risk assessment beyond that of static factors. However, Beggs and Grace noted that the greater association of the dynamic scale might simply reflect its increased breadth and comprehensiveness (e.g., more than twice as many individual items). Beggs (2010) provided a review of within-treatment outcome among sexual offenders. She noted that there was relatively little research yet conducted on possible proximal treatment outcome among sexual offenders. She pointed out that such outcome if based on self-report might be problematic given the transparency of self-report measures and their openness to social desirability bias responding. Beggs concluded that "Overall, it can be seen that as yet there is a lack of reliable and consistent findings linking within–treatment dynamic change (measured psychometrically) with decreases in recidivism…" (p. 375). She further concluded that evidence for the validity of guided clinical judgment was poor regarding within-treatment outcome. In a later study that showed that suggested that measures of change in treatment were associated with sexual offense recidivism, Beggs and Grace (2011) noted that the association between treatment change and sexual offense recidivism was "relatively modest" and that an explanation for those results might be that offenders who were lower risk to begin with performed better in the program. Finally, Beggs (2010) noted that the results of within-treatment outcome change as measured by idiosyncratic systems of clinical rating were varied, including results within the same studies using multiple operationalization of such outcome. She also pointed out that none of the available studies linked specific treatment changes or individual treatment targets with recidivism so their results did not provide insight into potential mechanisms of change related to sexual offender treatment. Most recently, Olver et al. (2013) again reported that record-based "change" scores from pre- to posttreatment added incremental value to static variables and showed good predictive accuracy; after sexual offender treatment, they found significant pre-post changes on rated dynamic factors, ranging from small to moderate in magnitude ($d = 0.22–0.62$) across various intensity programs. These change scores, in turn, were associated with decreases in sexual offense recidivism; the majority of relationships examined attained significance even after partialing out of pretreatment scores. Thus, there is now recent evidence from one research group utilizing a particular measure that rated treatment change is associated with sexual offense recidivism. Yet as the authors noted, there was no control group, and more importantly, risk scores indicate that it was a predominantly moderate- to low-risk cohort of sexual offenders with a lower base rate of sexual offense recidivism relative to other Canadian samples for similar follow-up periods.

Currently, little evidence currently exists that provides reliable empirical support linking proximal changes in treatment targets with distal changes in sex offense recidivism. To date, treatment progress as measured by difference scores between pre- and posttreatment measures has been found to be a poor predictor of sex offense recidivism (e.g., Hanson & Morton-Bourgon, 2004; Marques et al., 2005). Few studies have found a link between treatment changes and sex offense recidivism (e.g., Beech & Ford, 2006). Langton et al. (2006) found that a rating sexual offense response to treatment failed to predict either serous or sexual recidivism. Similarly, Looman et al. (2005) studied whether an offender's risk to reoffend was reduced during treatment based on an overall rating of treatment performance (including performance not only in groups and homework assignments but also on the client's behavior outside of the formal treatment program). However, the performance ratings showed *no* association with posttreatment sexual offense recidivism. Hanson et al. (2008) stated "… much less is known about the processes by which sexual offenders change. Studies frequently find that improvements on factors presumed to be criminogenic have no effect on sexual recidivism rates" (p. 887). In effect, only Olver et al. (2013) reported that after controlling for risk, change scores (total and sexual deviance) were associated with decreases in sexual offense recidivism. However, they noted: "There was no untreated control group with pre- and posttreatment VRS-SO ratings in order to compare change over the passage of time with that made with treatment services. As such, there is some possibility that other change agents, aside from treatment, contributed to the changes… we cannot rule out the influence of other change agents (e.g., participation in other programs, aging) that may have contributed to changes in risk" (p. 12). In a recent review,

Wakeling and Barnett (2014) reviewed the relationship between psychometric test scores and reconviction in sexual offenders participating in sexual offender treatment in the UK. They concluded:

> We believe that these results suggest that it may be unwise to rely on large batteries of psychometric tests to determine change in treatment and that further research is required before we can be sure of the relationship of psychometric tests to recidivism outcome…it is very unfortunate that we are not yet in a position to make reliable estimates of the extent to which such programs have benefited individual participants. The use of psychometric tests may not be so promising as we once thought. Additionally, *the evidence so far suggests that to use change on psychometric test scores for program evaluation (*i.e. *as a proxy measure of reconviction outcome) is not warranted*. (p. 143; emphasis added)

Thus, despite the desire to determine "relative change" in sexual offenders as a means of showing treatment effectiveness, little evidence exists that sexual offender treatment outcome can be meaningfully assessed or demonstrated by the use of within-program, pre-post self-report tests and/or questionnaires.

Further, a number of studies have found that posttreatment measures are either not or are *less* predictive of sex offense recidivism than pretreatment measures. In a key early study, Quinsey (1983) first reported that neither changes in deviant sexual interest indices nor posttreatment deviance measure was associated with subsequent recidivism in treatment sexual offenders. Subsequently, Rice et al. (1991) found that pretreatment measures of deviant sexual arousal were better predictors of sex offense recidivism than posttreatment measures, raising questions about what those posttreatment measures actually assessed. Marshall and Barbaree (1990) also reported that neither pretreatment, posttreatment, nor apparent changes in reducing deviant sexual interests were related to treatment outcome. Thus, it remains unclear if sexual offenders actually change as a result of sexual offender treatment. Langton et al. (2006) noted:

> For some sex offenders, ratings of treatment progress in later, follow-up programs may prove unreliable indicators of any gains made…they may obscure the validity of ratings made for participation in earlier/initial treatment programs as offenders become familiar with program content and expectation s and strive to appear compliant and 'treated' in order to be found eligible for parole or relaxation of supervision intensity…The challenge is, in part, one of measurement. Because sex offenders learn, indeed are expected to learn, the terms and concepts of CBT and relapse prevention, determining the veracity of their presentations will be difficult. (p. 116)

Consequently, while sexual offenders who participate in sexual offender treatment may learn the information related to and terms of sexual offender treatment such that they can answer self-report and even interview questions to reflect such information acquisition, their "internalization" or intent to use that information may remain unchanged.

In a recent paper, Rice et al. (2013) concluded:

> While research on this issue is preliminary, evidence suggests that, given a comprehensive set of valid static, historical factors, pre-release difference scores afford minimal incremental validity (Olver & Wong, 2011; Olver et al., 2007). Again, we conclude this is due to pre-release risk-relevant change on these constructs indexing the same aspects of temperament and personality that are reflected by established static, historical risk factors…. (p. 10)

For example, Rice et al. (2013) noted that the results of Olver et al. (2007) showed that static risk scores were more predictive than either dynamic pre- or posttreatment scores. Olver et al. (2013) were the first and only group to report that "change" scores from pre- to posttreatment added incremental value to static variables and showed good predictive accuracy. After sexual offender treatment, Olver et al. (2013) found significant pre-post changes on select observer-rated dynamic factors, ranging from small to moderate in magnitude ($d = 0.22$ to 0.62) across various intensity programs. These change scores, in turn, were associated with decreases in sexual offense recidivism; the majority of relationships examined attained significance even after partialing out of pretreatment scores. Thus, there is now recent evidence from one research group utilizing a particular measure. However, more broadly, Serin et al. (2013) reported in a review of intraindividual changes in criminal offenders following interventions: "It is apparent within this review that therapeutic change does not consistently lead to reduced likelihood of future crime" (p. 50). They stated:

> It is especially difficult to defend programs when apparent successful adoption of treatment skills does not translate into a definitive lower risk to reoffend. However, it is also difficult to defend successful programs when it is unclear which treatment elements are responsible for presumed or "perceived" change and which offenders might have changed. (p. 50)

As Wakeling and Barnett (2014) also concluded: "Pretreatment psychometric scores appear to have a better relationship [with sexual offense recidivism] than those gained post-treatment, suggesting the former should be preferred to the latter when assessing risk of recidivism outcome…it may be that the [posttreatment] results are negatively impacted by desirable responding…" (p. 143). They recommended that future efforts be directed at developing reliable and valid measures of "risk domains" as opposed to specific risk factors. In short, the fact that pretreatment measures are more predictive of sexual offense recidivism than posttreatment self-report and clinician ratings provides further evidence that even apparent change reported by sexual offenders or perceived by their treatment providers may well not be genuine and that as the SOTEP identified (e.g., Marques, Nelson, Alarcon, & Day, 2000; Marques et al., 2005), sexual offenders can learn the language and "display" motivation while in a sexual offender

treatment program, but fail to demonstrate that motivation or enact purportedly learned skills once returned to the community even with aftercare and supervision.

Of particular interest is the ability of sexual offender treatment therapists to offer a meaningful or valid perspective on the relative progress of their sexual offender clients. Unfortunately, most available studies indicate that sexual offender treatment clinicians' opinions about their clients are not informative. In more general psychotherapy literature, clinicians have typically been found to be poor judges of treatment progress. Thus, research has shown that therapists' ratings of clients' progress are significantly greater than what their clients report or what is reported by client's significant others (e.g., Hill & Lambert, 2004); this is likely to be even more pronounced in forensic therapy settings, where there is significant potential secondary gain for sexual offenders who present as reflecting positive treatment behavior and apparent treatment gains. Further, as noted previously, in their review, Hill and Lambert concluded that therapist ratings of treatment outcome and global ratings of change are associated with the "perception of greater effectiveness" of treatment compared to more specific measures and more distal measures. In their review, Hill and Lambert also pointed out that data from therapists or expert judges who are aware of the treatment status of clients produce larger positive ratings than those from virtually all other sources. Walfish et al. (2012) showed that clinicians providing psychotherapy tended to overestimate the rates of their client improvement relative to their own perceived clinical skills. The same seems to be particularly true for therapists in sexual offender treatment programs; this is a finding that has been replicated over time. Quinsey et al. (1998) first found that therapists' judgments about treatment progress were unrelated or negatively related to recidivism. Similar results were found by Seto and Barbaree (1999) in the initial analyses of a research sample but not found in a somewhat expanded sample from the same source (e.g., Barbaree, 2006). Marshall and Eccles (1991) also opined that generally clinicians' judgments of treatment effectiveness (as well as those of offender clients) were considered unreliable. Citing a variety of earlier studies, Hanson and Harris (2000) noted: "Experienced clinicians are frequently unable to differentiate between sexual offenders who benefited from treatment and those who did not…" (p. 7). In a short-term prospective study, Seager et al. (2004) showed that clinical judgments of treatment (even guided by specific clinical criteria) were unrelated to recidivism failure. Specifically, they found that positive evaluations of treatment changes in posttreatment assessments (e.g., such as quality of disclosure and perceived enhanced victim empathy) showed no correlation with sex offense recidivism. They found that "…clinical judgments of treatment change, although guided by specific clinical criteria, were unrelated to recidivism failure…Narrative commentary on treatment participation appears superfluous in the context of predicting recidivism of rates. Quality of participation appears unrelated to recidivism" (p. 610). Thus, they found that positive evaluations of treatment change such as the quality of disclosure and perceived increased victim empathy found in posttreatment assessments did not correlate with recidivism. Seager et al. (2004) concluded, "…sex offender programs are not changing psychological characteristics that affect recidivism" (p. 610). Hanson and Bussiere (1998) found that most clinical measures of treatment progress were unrelated to sex offense recidivism as did the updated meta-analysis for risk factors for sex offense recidivism by Hanson and Morton-Bourgon (2005). They found that poor progress in sexual offender treatment, measured at the end of such intervention, was unrelated to sexual reoffending. In addition, the aforementioned general and specific findings regarding that allegiance to a treatment model was associated with more positive finding (e.g., Losel and Schmucker, 2005) suggests that clinicians' belief in that model may well account for more variance in outcome than any specific interventions or changes by treatment participants. This corresponds to the consistent finding in the general treatment outcome literature that researcher/therapist allegiance accounts for a significant amount of the outcome in treatment studies that find particular interventions effective. Consequently, there are both empirical and theoretical reasons to view therapist ratings of personal change and individualized risk reduction as non-empirically supported and not particularly useful in gauging the outcome or psychotherapies for sexual offenders.

It should be noted that some writers (e.g., Levenson & Prescott, 2013) call attention to a specific observation reported by Marques et al. (2005), relative to sexual offenders who "got it" or were seen as benefiting from treatment provided as having lower sexual offense recidivism. Several points are worth noting. First, "When the Got It scores of sexual recidivists were compared to those of non-recidivists, no significant differences were found…." When they the investigators employed a median split, the trend was still not significant. No differences in reoffending were found between low and medium treated sexual offenders. However, they reported that "high-risk offenders," "largely accounted for by child molesters" who "got it," showed lower sexual reoffending after treatment. However, per their results, there was only *one* "high" risk sexual offender (a total of 7 treated sexual offenders who got it), who was responsible for their claim of decreased sexual offense recidivism.

In summary, alternative ways of assessing outcome for the efficacy of sexual offender treatment (in contrast to reduced recidivism) also do not provide support for psychotherapy, particularly as a means to measure individual change. While some change is evident on self-report measures in certain instances, most of those measures are quite

transparent, and to date, no consistent, replicated association between pretreatment or "change" scores and recidivism has been demonstrated. Further, clinician-rated improvement in sexual offenders as a function of treatment appears to provide an overly positive view of change. Rather, pretreatment and essentially static constructs show the strongest association with sexual offense recidivism.

The Efficacy of Sexual Offender Treatment for Higher-Risk Sex Offenders

There is a profound lack of information about the RCT-based effectiveness of sexual offender treatment with higher-risk/high-need sexual offender, both from an actuarial perspective and those with a greater degree of criminogenic needs. Not unexpectedly, no RCT of any psychosocial treatment exists at this date for such a subset of sexual offenders. Hall (1995) noted that the most severe sexual offenders were typically excluded from treatment in the studies he reviewed. In the most comprehensive RCT to date, Marques et al. (2005) *excluded* any sexual offender with more than two prior felonies; thus, the treatment candidates were generally a low- or moderate-risk group to begin with (77 % feel into that category and only 22 % were deemed "high risk." They excluded sexual offenders with more than two prior felonies, major mental disorders, and lower IQ and/or those who had displayed severe management problems while in prison (they also excluded any offenders who denied their sexual offense from the "volunteer" group). The SBU review from 201 stated "Unfortunately, no studies have assessed the effects of treating high-risk individuals who have not sexually offended against children" (p. 22). It is notable that numerous studies of sexual offender treatment have systematically excluded high-risk/high-need sexual offenders. That is, the sexual offender treatment outcome literature is marked by "sample censorship" or exclusion for higher-risk sex offenders. Thus, Hall (1995) noted that many more severe sexual offenders were not even offered sexual offender treatment, while the SOTEP study did not include a significantly large group of "high-risk" sex offenders. In SOTEP, most treatment subjects were first-time sex offenders, of low- or moderate-risk groups that per RNR criminological models of intervention should have responded best to intervention and shown decreased sex offender recidivism rates. In short, most of the existing treatment outcome literature relates to low- or moderate-risk sexual offenders; thus, that evidence indicates that sexual offender treatment has not been demonstrated via RCT to be effective with such offenders.

However, what literature does exist indicates that sexual offender treatment is not effective or, at best, is substantially less effective with higher-risk sexual offenders. Both the Hanson et al. (2002) and Losel and Schmucker's (2005) meta-analyses found offenders referred to treatment based on *perceived need* had significantly higher sexual recidivism rates compared to offenders considered not to need treatment. It will be recalled that Hanson et al. (2002) found that "Offenders referred to treatment based on perceived need had significantly higher sexual recidivism rates than the offenders considered not to need treatment" (p. 182). The odds ratio was 3.4 (with an outlier study removed), and there was no significant variability, indicating that this was a robust phenomenon; thus, sex offenders viewed as high need provided sexual offender treatment reoffended over three times the rate of untreated sex offenders. Olver et al. (2011) identified that high-risk/high-need offenders are those persons least likely to complete treatment, presenting with a number of specific responsivity issues such as low motivation, poor engagement, and disruptive behavior. Over just a 2-year follow-up, Friendship et al. (2003) found that high-risk offenders were six times more likely to be reconvicted of a new sexual and/or violent offense than low-risk offenders. Stirpe, Wilson, and Long (2001) found that higher-risk sex offenders who received sexual offender treatment did not maintain motivation over time in the community. In their review, Rice and Harris (2003) also considered Hanson et al.'s (2002) group of studies involving "assignment based on need" and emphasized that the overall odds ratio was 3.0 for sexual recidivism; studies of these offenders "indicated that those [of greater perceived need] who were treated reoffended over three times the rate of the untreated" (p. 434). Olver et al. (2001) applied MA and found that general criminal offender treatment noncompleters (e.g., those who started but dropped out) were higher-risk offenders and rates increased when pretreatment attrition was also included. Olver et al. (2013) also did not find a risk by treatment interaction. Rice and Harris also noted that some "assignment based on need" studies, in effect, controlled for static factors before examining whether the treatment added anything to the assessment of outcome (a methodological plus) but still showed no recidivism lowering effect of sexual offender treatment for higher need sexual offenders. Stirpe et al. (2011) reported that RP-related treatment components showed a steady increase from pretreatment throughout follow-up in the community for low- or moderate-risk offenders, but *not* for high-risk offenders. Both groups improved substantially in level of motivation from pretreatment to posttreatment; however, only those in the low- or moderate-risk group maintained their motivation levels once released to the community; that is, higher-risk sexual offenders did not maintain motivation once released to the community.

Similar to all other presenting problems, it must be the case that some sexual offenders are characterized by sufficient severity, chronicity, and/or a large number of risk factors (as predisposing or maintaining factors). As the larger psychotherapy literature clearly indicates, more severe,

chronic problems are quite resistant to the effects of psychotherapy generally; more typically, more minor changes, at best, result from such interventions and may not be retained. Fifteen years ago, Harris et al. (1998) wrote, "The idea that a high-risk sex offender can be converted into a low-risk offender through the application of treatment or through progress in treatment simply has no empirical support from the literature taken as a whole" (p. 106). Further, as suggested by various writers (e.g., Rice et al., 1999), there may be some offenders whose risk level is sufficiently high that no psychotherapy could reasonably be expected to reduce it to a leave at which release to the community could be recommend and that "The idea that a high-risk offender…can be changed into a low risk offender through treatment or through progress in treatment simply has no empirical support from the literature taken as a whole" (p. 305). To date, little data has accrued that undermines that contention. Thus, as some writers have stated, "…it is important to note that there are some sex offenders whose risk level is so high that no treatment could reasonably be expected to lower it to a level where release to the community could be recommended" (e.g., Harris et al., 1998, p. 106). At the risk of repetition, regarding the Hanson et al. meta-analysis of 2002, Berliner (2002) pointed out: "It is not at all clear that these results can be generalized to the highest risk offenders. Even if they could be applied to these offenders, a moderate effect size reduction would still mean that high-risk offenders continue to be dangerous" (p. 196). In fact, as Hanson et al. (2008, 2009) reported, the risk principle of the RNR model was not confirmed by their meta-analysis; the most high-risk sexual offenders did not respond significantly better to sexual offender treatment relative to lower-risk sexual offenders. [This is actually similar to a work with criminal recidivism where the risk principle showed the smallest effect of the RNR dimensions in relapse prevention programs for criminal offenders (Dowden, Antonowicz, & Andrews, 2003)]. Ten years ago, Rice, Harris, and Quinsey (2001) concluded:

> The idea that a high-risk offender (especially focus serious offenders as serial sexual murderers) can be changed into a low-risk offender through treatment or through progress in treatment simply has no empirical support from the literature taken as a whole…it is also important to point out that there may be some offenders who's e risk level is so high that no treatment could reasonably be expected to lower it to a level at which release to the community could be recommended. (pp. 305–306)

At the present time, nothing in the empirical or scientific literature has emerged that would support the belief that such conclusions would be different for the general high-risk/high-need sexual offender. Rather, each individual's experiences in psychosocial and other adjunctive treatments would need to be carefully considered to offer a well-documented, person-specific opinion that a particular high-risk/high-need sexual offender has changed substantively as a result of such psychotherapeutic efforts.

The treatment of sexual offenders with higher levels of psychopathy, as a specific subset of likely higher-risk sexual offenders, has received research attention. Generally, there has been a pessimistic view that persons with a higher degree of psychopathy can be successfully treated to reduce their potential for future violence, including sexual offending. Ogloff et al. (2013) reported that psychopathic traits are associated with negative behaviors in treatment. More recently, both Langton et al. (2006) and Looman et al. (2005) found that, despite sexual offender treatment, more psychopathic sexual offenders (e.g., with PCL-R scores ≥ 25) reoffended in sexually and/or violently at significantly higher rates than those with lower scores; however, they suggested that there may be a subset of psychopathic sexual offenders who may respond to some interventions. An early study of violent offenders by Rice et al. (1992) found that persons with elevated levels of psychopathic traits who participated in a therapeutic community while incarcerated subsequently had higher rates of violent recidivism than similarly psychopathic persons who did not participate in such an intervention. A similar finding was made by Seto and Barbaree (1999); later studies by Langton et al. (2006) and Looman et al. (2005) did not find an interaction between psychopathy and treatment for increased recidivism. Thornton and Blud reported that both of the aforementioned studies showed that "…offenders in whom higher levels of psychopathy were combined with 'good' treatment performance had worse rates of serious recidivism" (p. 517). Olver and Wong (2009) maintained that with appropriate treatment interventions, sex offenders with significant psychopathic traits can be retained in correctional treatment program and those showing therapeutic improvement can reduce their risk of both sexual and violent recidivism. Doren and Yates (2008) reviewed the effectiveness of sexual offender treatment for psychopathic sexual offenders. They concluded that (1) sexual offender treatment does not appear effective in lowering serious recidivism and (2) sexual offense recidivisms rates were variable for treated psychopaths, but there were indications that some psychopaths did show decreased recidivism after treatment. However, the available research did not indicate which psychopathic sexual offenders benefited from sexual offender treatment and which did not. Doren and Yates (2008) also noted: "The present qualitative analysis also clearly found a consistent absence of untreated comparisons groups in all studies. Hence, no conclusion can be drawn from existing research about the degree to which psychopath offends benefit from sexual offender treatment" (p. 354); thus, again methodological factors precluded drawing absolute conclusions. Several writers have suggested that the most successful interventions for psychopathic offenders are likely to be characterized by high structure, high intensity, and extended duration, a high degree of

involvement by mental health professionals and increased attention to responsivity and, particularly, to maintain such offenders in the treatment process (e.g., Salekin, 2002; Olver and Wong, 2009; Thornton & Blud, 2007). Currently, the most appropriate perspective appears to be that perhaps some sexual offenders with psychopathic traits may respond somewhat differentially to CBT, with some more psychopathic offenders showing a more positive response to such intervention. Thornton and Blud (2007) both review a significant set of factors that would likely lead to the poor outcomes typically found in treating psychopathic offenders; they also offer suggestions about possible aspects of intervention that might lead to more positive outcomes with more psychopathic sexual offenders. In a more pessimistic vein, Harris and Rice (2006) stated:

> We believe there is no evidence that any treatments yet applied to psychopaths have been shown to be effective in reducing violence or crime…We believe that the reason for these findings is that psychopaths are fundamentally different from other offenders and that there is nothing 'wrong' in the manner of a deficit or impairment that therapy can 'fix.' (p. 568)

Ultimately, whether more psychopathic sexual offenders are amenable to psychosocial treatment is an empirical question; since no RCTs of relatively psychopathic sexual offenders have yet been conducted since the review by Doren and Yates (2008), their conclusion remains the same: the available evidence is not generally positive, but no absolute conclusions can be drawn in the absence of scientifically valid research.

If sexual offender treatment cannot be demonstrated to be effective in RCTs with more motivated sexual offenders with fewer comorbid conditions and lower severity of "problems" (e.g., fewer victims, lower density of risk factors and/or criminogenic needs), then even more serious questions are raised about its potential utility for "higher"-risk sexual offenders characterized by entrenched maladaptive behavior patterns maintained by a greater number and severity of risk factors and predisposing conditions. To date, of the various government programs in various jurisdictions that have detained violent sexual offenders (e.g., civil commitment of the so-called Sexually Violent Predators in the USA, Dangerous Offender Programs in Canada, and the Dangerous and Severe Personality Disorder Program in the UK), no data are available—no studies have been published—as to whether more intensive and long-term treatment of high-risk/high-need sexual offenders show reductions in sex offense recidivism as a specific result of treatment received while detained. Consequently, little useful information exists to establish the efficacy of psychosocial interventions in the management of moderate and high-risk/high-need sexual offenders; there are no RCTs of high-risk/high-need sexual offenders; empirically, it is simply unknown as to what the components, other treatment factors, and the length and density of psychosocial treatment are necessary to reduce such offenders' likelihood for sexual offense recidivism. Further, even with studies of the treatment of high-risk/high-need sexual offenders while detained, given that many of these individuals will only be released back to the community under terms of intensive and long-term supervision, it may not be possible to isolate the effects of sexual offender treatment generally or its components for such individuals.

Longer-Term Outcomes for Sexual Offender Treatment

Most sexual offender treatment outcome studies have not followed subjects for lengthy periods of time. Consequently, little is known about the longer-term effectiveness of sexual offender treatment. However, all authorities have stated that sex offense recidivism increases with the length of follow-up (e.g., Hanson et al., 2003; Harris & Hanson, 2004; Harris & Rice, 2007). Other studies demonstrate that even some treated sexual offender reoffends after lengthy periods without a detected sexual offense (e.g., Prentky et al. 1998). Given at best small effects for psychosocial treatments for sexual offender, it is important to know to what degree any positive outcomes may persist for such persons. This is particularly important given the general psychotherapy results regarding the diminishing persistence of treatment-related changes. As noted, Barrett, Wilson, and Long (2003) found that treated sexual offenders showed a significant decrease in rated motivation after release to the community. They wrote:

> The results of this study clearly show that clinicians in community settings should expect to have difficulty re-engaging offenders in the treatment process and should not assume that a positive institutional report will be reflected in a client' attitude and behavior in the community. (p. 279)

Similarly, Stirpe et al. (2001) found that higher-risk sex offenders who received treatment did not maintain motivation for sexual offender treatment practices when released to the community, and within 3 months after release, apparent treatment gains had diminished for higher-risk sexual offenders when returned to the community (even with the benefit of 3 months of additional treatment in the community). Marques et al. (2005) revealed: "We learned from interviews with the offenders that a number of our treatment failures did not use the self-management skills they acquired in the program, and some did not even accept the basic goals of self-control and relapse avoidance…" (p. 100). In summary, then the available literature would suggest that even if some degree of recidivism-related change initially results from sexual offender treatment, that effect may diminish or is eliminated once treated offenders return to the community just as it does for most mental health problems.

Conclusions and Future Directions

Reducing or eliminating sexual offender recidivism is an important and desirable goal and one shared by all stakeholders relative to sexual offending. While short-term recidivism for adult sexual offenders consistently appears to be approximately 12–15 %, perspectives on long-term sexual offense recidivism indicate that sexual reoffending increases over longer follow-up periods to perhaps 40 % detected offenses (e.g., Hanson et al., 2003; Harris & Hanson, 2004; Harris & Rice, 2007). For persons already sanctioned at least once previously for sexual offending, this is a very high rate of violent criminal offending. There can be no question that given the severe consequences of sexual victimization, effective and enduring management of sexual offenders is of critical importance. Psychosocial treatments have long been considered a central component of accepted and implemented management strategies—for many practitioners in the field of sexual offender treatment, they have been perceived as *the* critical element of management. All stakeholders agree on the importance of effective management of sexual offenders for community safety; however, the degree to which psychosocial interventions matter by "working" (as well as other management mechanisms) necessarily must be demonstrated. Consequently, the determination of whether psychosocial treatments for sexual offenders have been empirically established as a mechanism to reduce future sexual offending is of critical importance.

Early in 2010, R. Karl Hanson sent an email stating: "I, for one, have done enough meta-analyses of barely acceptable studies. It is time to counter the political resistance to random assignment studies by getting ATSA to endorse a position statement supporting their use" (cited in, Rice et al., 2013). Subsequently, at Dr. Hanson's recommendation, the Executive Board of the Association for the Treatment of Sexual Abusers (ATSA) proclaimed "After 50 years, the field of sex offender treatment cannot, using generally accepted scientific standards, demonstrate conclusively that effective treatment are available for adult sex offenders" (ATSA, 2010b). More recently, in an editorial, Ho and Ross (2012) criticized public representations regarding the Sex Offender Treatment Programme in the UK and claims that the program "worked;" they wrote:

> Twenty years since the SOTP [in the U.K.] was launched, its efficacy has yet to be convincingly demonstrated…Interventions such as he SOTP are too important in terms of financial cost and cost to society for them not to perform as they are clamed to perform They are too important for the participant men themselves than for anything other than the highest standards of evidence underpin them. In the absence of an enormous effects size, encouraging pilot work and open studies should lead to independently conducted RCTs. (p. 5)

Clearly, at present, there can be little argument with that conclusion. The current review of the scientific evidence of sexual offender treatment is that, at best, minimal evidence currently exists to demonstrate that psychotherapy is effective at reducing sex offense recidivism or at changing sexual offenders in meaningful or substantive ways. The most optimistic perspective that could be gleaned from the existing studies is that the sexual recidivism of select, lower-risk sexual offenders may be lowered when they are treated in community settings; at the same time, as others have written, results could also be interpreted to mean that regardless of treatment, lower-risk sexual offenders (not surprisingly) generally have lower sexual offense rates. In contrast, for higher-risk sexual offenders who are treated in correctional settings, there is no data from controlled trials to suggest a desired reduction in sex offense recidivism can be attributed to psychosocial interventions. In addition, it remains unclear if sexual offender treatment is effective for different types of sexual offender and what, if any, elements of psychotherapy are particularly useful in impacting sexual offenders and sex offense recidivism rates. In actuality, this appears to be the increasing consensus among the experts in the field of sexual offender research.

Perhaps not unexpectedly, the conclusions of this chapter echo those that of several other reviewers of the sexual offender treatment literature. As Furby et al. (1989) stated in their early review of sexual reoffending in both treated and untreated sex offenders, "Many of recidivism studies reviewed here were, unfortunately, not very informative…" (p. 28). In 1999, Gallagher et al. wrote, "The literature on the efficacy of sexual offender treatment programs is inconclusive. The more exhaustive narrative reviews tend to conclude that little current is known due to the considerable methodological weaknesses of the individual evaluations" (p. 19). Hanson et al. (2002) concluded, "we believe that the balance of available evidence suggests that current treatments reduce recidivism, but that firm conclusions wait more and better research" (p. 187). Rice and Harris (2003) have written, "We suspect all would agree that very little knowledge has accumulated about several crucial matters…The dearth of knowledge about sexual offender treatment contrast sharply with the rapid expansion of knowledge in other areas" (p. 437). Noting that methodological factors had a significant effect on their results, Losel and Schmucker (2005) stated: "Bearing the methodological factors in mind, one should draw very cautious conclusions from our meta-analysis… We need more high-quality outcome studies that address specific subgroups of sex offenders as well as more detailed process evaluations on various treatment characteristic and components" (p. 138). Abracen and Looman (2004) opined:

> With reference to sex offender recidivism research, more generally it is quite clear that the quality of many research studies has, to date, been relatively poor…Regardless of the difficulty

> associated with finding statistical significance, there is little rational for poorly conducted studies. (p. 16)

Harkins and Beech (2007) wrote, "The effectiveness of sex offender treatment has been studied and reviewed extensively…in spite of great effort and numerous studies, this has yet to be conclusively demonstrated" (p. 37). Seto et al. (2008), in their consideration of RCT methodology for sexual offender treatment outcome studies, wrote: "It is possible that some adult sex offender treatments currently being offered are effective; it is also likely that some treatments are ineffective, or worse" (p. 253). Schmucker and Losel (2008) wrote that the field should remain critical of existing research results and that "In order to reach a more definitive answer on the questions' Does sexual offender treatment work?' we need more high quality studies" (p. 16). Hanson et al. (2008) wrote "Readers sympathetic to sexual offender rehabilitation may be content with the encouraging findings from weak research designs; however, skeptics will only be compelled to change their opinions by the strongest possible evidence" (p. 887). Over 20 years after Furby et al.'s (1989) SR, the IHE SR in 2010 concluded:

> …research on the efficacy/effectiveness of SOT interventions and programs has been slow to mature, and the results have been contradictory…the perceived efficacy/effectiveness and value of SOT program and the views on how best to manage adult male sex offenders have been inconsistent. (p. 32)

They reported that the current evidence showed a small statistically significant treatment effect but that "a lack of high-quality primary research studies…raise uncertainty about which of the available approaches work for adult male sex offenders" (p. 32). Rice and Harris (2013) summarized the current status of the sexual offender treatment outcome literature, stating "The most parsimonious interoperation of findings from weaker designs is that pretreatment differences and other forms of selection bias are responsible for apparent treatment effects" (p. 23). As a form of criminal recidivism, sexual reoffending appears to be a substantially more difficult problem to successfully address than general criminal behavior. Depending on how the data is viewed, to a certain extent, limited scientific data suggests that the reduction of future nonsexual criminal behavior via psychosocial interventions is somewhat more successful than the ability to show reductions in sexual criminal behavior by similar means. [However, most of those empirical results are based on largely CBT models following the RNR approach but are largely dependent on quasi-experimental findings and follow-up periods of 2 years or less (e.g., Bonta & Andrews, 2006; Landenberger & Lipsey, 2005; Latessa & Lowenkamp, 2006).] More generally, an increasing number of writers have raised concern about the indirect harm that can result from inaccurate conclusions drawn about treatment efficacy, noting that an ineffective treatment that is falsely assumed to be beneficial exacts various costs in terms of both expense and other resources and expectations of clients and other involved or affected parties.

In addition, a number of other key questions have yet to be answered and in some cases have yet to even be addressed. As previous reviews have pointed out, it is unclear what characteristics identify sexual offenders who might respond to psychotherapy initially and maintain any apparent gains at the end of such interventions. As Nunes et al. demonstrated, there are differences between group results and those for individuals. It is likely that particular individual sexual offenders are responsive to psychosocial interventions and do change as a result of them; the question is can those who do change be reliably identified and by what means. Certainly, on an individual level, any sexual offender who has participated in sexual offender treatment should be carefully and comprehensively evaluated to determine if there are substantive grounds in determining a measurable basis for judging treatment progress and potential treatment success. Are there differences in how paraphilic, psychopathic, and/or otherwise personality disordered sexual offenders respond to sexual offender treatment? In addition, it is unclear what elements of sexual offender treatment programs may make significant contributions to potentially positive outcomes for sexual offenders or subgroups of such offenders. To what degree do the intensity, length, and site of treatment, general client characteristics, general therapist characteristics, experience of therapists, the interaction of therapists and clients (and approaches), severity and psychosocial impairment of clients, as well as similar variables relate to the outcome of sexual offender treatment? Beyond what is currently known, are there other identifiers of sexual offenders that distinguish those who refuse, dropout of, or are terminated from sexual offender treatment?

With some distance and a dispassionate perspective, the lack of demonstrated efficacy for sexual offender treatment should not be surprising. Sexual offending lacks a detailed and scientifically defined etiology for either the initiation or maintenance of this particular type of criminal behavior. Both the integrated, multidimensional models of sexual offending lack specificity, and the available empirical studies of risk factors indicate relatively small contributions of multiple, cumulative risk factors. Further, as Hoberman (2013c) notes, the specific treatment elements and delivery of sexual offender treatment lack both an established theoretical and empirical basis; largely, the elements of sexual offender treatment were borrowed from treatments for other presenting problems, and few if any of the elements or delivery issues have been demonstrated to be effective in affecting robust behavioral change. In the context of the general literature on the effectiveness and efficacy of psychotherapy, a number of factors would strongly suggest that psychosocial interventions might have little effect on sexual offense recidivism.

The evidence suggests that psychotherapy is most effective at relieving personal distress, which may be lacking among many sexual offenders. If client variables contribute the most variance to psychotherapy outcome, the multiplicity of personological risk factors acting convergently and cumulatively would make it difficult to affect sexual reoffending. Further, given the likelihood of problem severity and interpersonal difficulties, including the strong association of maladaptive personality traits and disorders with such offending, would suggest that numerous therapy-interfering effects and the general difficulties limiting the change of core signs and symptoms would impose significant limits to potential positive outcomes from psychotherapy. The effects of mandated treatment and a generalized lack of motivation for behavioral change would also impact negatively on the potential "success" of psychosocial interventions. As several authors have noted, perceived high levels of criminogenic needs or risk factors are associated with poor treatment outcomes for sexual offenders. Conversely, the general lack of evidence for outcome effects from specific techniques or strategies would also direct that the varied programs of such techniques and strategies would not be key factors in leading to individual change for many sexual offenders.

The lack of available evidence for the efficacy of sexual offender treatment has a variety of implications for offenders, forensic/clinical practitioners, public safety, and the scientific field of sexual offender management. As Marques et al. (2005) indicated, "Questions about whether and when sex offenders can be treated are extremely important, not just to our field but to victims, policy makers and the public" (p. 104). In turn, this leads to a variety of potential overlapping decision points and courses of action that might be taken relative to the role of psychotherapy in the management of sexual offenders.

Unless evidence of psychosocial treatment effectiveness (defined by accepted scientific practices) is produced, the sexual offender treatment outcome field increasingly runs the risk of being further marginalized and discredited. Lilienfeld (2011) reviewed data that suggests that a large percentage of the public regard the general field of psychology's scientific status with considerable skepticism. Nasrallah (2013), the editor of *Current Psychiatry*, similarly suggests that "…psychotherapy has never been able to shrug off an unwarranted aura of fuzziness as a legitimate medical intervention…Psychotherapy is sometimes perceived as a scam –that is, a placebo packaged and propagated as treatment" (p. 18). In the face of a lack of a strong scientific basis, ongoing affirmation of the tenuous position that sexual offender treatment is effective for most sexual offenders runs the risk that the sexual offender field will become a poster child for "pseudoscience." It is notable that, in the 1980s, it was largely the American Psychiatric Association's decision or belief that sexual offender treatment was not effective that lead to the dismantling of earlier attempts to intervene with such offenders therapeutically and a shift to a relatively exclusive emphasis on correctional management for sexual offenders. As several writers have argued and has been demonstrated by the decreasing research and policy support for sexual offender treatment, there is great danger in promising results that may not be obtainable; the credibility of both practitioners and their professional organizations may suffer long-lasting damage in terms of public mistrust. Marques et al. (2005) stated, "Questions about whether and when sex offenders can be treated are extremely important, not just to our field but to victims, policy makers and the public" (p. 104). In 1999, Alexander wrote: "…public funding for sexual offender research and treatment has declined in the last decades. A poverty of research funds has hampered improved understanding of the effectiveness of various offender treatment interventions, perhaps due to the belief that no treatment is effective" (p. 102).

In a plenary address to the membership of the ATSA in 2005, James Breiling (a branch director of NIMH) strongly encouraged persons in the sexual offender field to confront the lack of empirical evidence regarding sexual offender treatment outcome research or risk losing further credibility with funding agencies and the general public. Dennis et al. (2012) were adamant that without consistent, methodologically sound research to demonstrate that sexual offender treatment is effective, there is a risk "that society [may be] lured into a false sense of security in the belief that once the individual has been treated, then their risk of reoffending is reduced. Currently, the evidence does not support this belief" (p. 28). ATSA too, in 2010, stated: "Community safety is better promoted by identifying treatments with strong evidence of effectiveness than by a proliferation of programs for which the efficacy is debatable" (ATSA, 2010a). Thus, currently, the question, "Does sexual offender treatment work?" cannot technically be answered, because the research base for psychosocial interventions for sexual offenders consists almost exclusively of methodologically limited studies. Moreover, the few available RCTs for such offenders have failed to show that sexual offender treatment decreases sexual offense recidivism rates or affects personal change related to such reoffending.

The present limitations of the available scientific study regarding the potential effectiveness of sexual offender treatment raise a number of practical questions. On the one hand, it might be considered a reasonable option to simply accept the lack of knowledge and the limitations of multiple aspects of individual change as a result of psychotherapy, at least for a select but large groups of such offenders and simply acknowledge that, to date, the efficacy of psychotherapy for sexual offenders has yet to be demonstrated; no robust scientific evidence yet exists that sexual offender treatment

"works." This reasoned conclusion suggests that, at this time, the most appropriate response to the lack of empirical evidence of sexual offender treatment effectiveness should be a greater emphasis on other aspects of social management, perhaps a containment strategy (e.g., see English et al., this volume) that does not accord psychotherapy a primary or central role in the management of sexual offenders. From this perspective, a decision that the extant failure to demonstrate a robust treatment effect for sexual offenders means that other management approaches should be accorded a larger role and appropriately funded as the primary mechanisms to manage sexual offenders. As Harris et al. (1998) opined, "to the extent that treatment fails to reduce recidivism, supervision (including denial of community access) has to take its place" (p. 104). This perspective would emphasize a need for further scientific study of and continued development of mechanisms for differentiating among sexual offenders to provide for the most accurate appraisals of risk and need for sexual offense recidivism. In turn, as risk and other assessments became more refined, they might provide that the basis for more comprehensive alternative management strategies could be directed at those sexual offenders with the highest risk and the greatest needs, without the assumption that systematic means existed to motivate, promote insight and understanding, and accompany psychological change for sexual offenders via formal psychosocial interventions.

Another option would also seem quite reasonable, namely, that new methodologically adequate studies of sexual offender treatments should be developed, funded, and studied toward the end of potentially establishing more definitive and positive results that psychosocial interventions can be effective—either by substantially reducing the future risk of sexual offense recidivism or by a more delimited goal (e.g., clear evidence of individual changes and some relatively rigorous form of harm reduction that would still be socially acceptable). This second alternative would advocate that the most likely means toward scientific and public credibility regarding the potential utility of sexual offender treatment are through applied science, as is the case with other severe presenting problems that threaten the well-being of self and others. Harris et al. (1998) wrote, "to say that treatments have not thus far been conclusively evaluated is not to say that they do not work" (p. 104)—or cannot work for that matter. Langstrom et al. (2013) offered the same observation as well as suggested that professional opinion (e.g., clinicians' judgments based on hope or wishes) was no substitute for evidence. However, Harris et al. also stated:

> It behooves those who provide treatment and supervision, especially when directly or indirectly publicly funded, to reduce the existing uncertainty about the effects of these interventions by conducting scientifically useful evaluations of the services provided. We believe that such evaluations should be mandatory for publicly funded offender treatment. (p. 107)

Thus, one appropriate practical conclusion of this, as well as most other reviews, is that the challenge remains for the field of sex offender research to empirically demonstrate that sexual offender treatment works (particularly for higher-risk sexual offenders) through multiple and repeated RCTs as for other significant social and medical problems. As Hanson (1997) pointed out over 15 years ago, "Independent replication is a foundation of scientific knowledge. It is only through the accumulation of consistent results from diverse studies that skeptics either become convinced or lose their own credibility within the scientific community" (p. 133). Similarly, Miner (1997) wrote, "Science is a process of replication, since any study has flaws. Knowledge is thus advanced through a body of research that builds on what preceded it, correcting the flaws of previous studies, while raising additional questions… (p. 103). It is ultimate, this quantitative accumulation of research findings that will provide scientific evidence of sexual offender treatment effectiveness" (p. 108). More recently, Schlank (2010) also stressed the importance of replication: "Any professional field that is based on scientific research must stress the importance of replication of studies, which can provide either verification or disconfirmation" (pp. 22–23) and noted that in many fields, researchers (and practitioners) will not even consider a study complete until it has been replicated several times.

As pessimistic as the available data are regarding the status of current sexual offender treatment outcome, the path to a more empirically based understanding of such interventions seems fairly obvious. Within the field, there is an increasing consensus as to what should characterize future research efforts. In fact, over the past 30 years, most researchers have consistently spoken of the ways to enhance the understanding and potential credibility of sexual offender treatment. Furby et al. (1989) stated in their early review of sexual reoffending in both treated and untreated sex offenders: "…Progress in our knowledge about sex offense recidivism will continually elude us until adequate resources of time, money, and research expertise are devoted to this issue…It is time that we give this issue the resources and attention it deserves" (p. 28). In 2005, Marques et al. indicated:

> Questions about whether and when sex offenders can be treated are extremely important, not just to our field but to victims, policy makers and the public. The only way to provide answers with confidence is to build a knowledge base on thoughtful and well-controlled studies of treatment effectiveness. (p. 104)

Craig et al. (2003) concluded: "Treatment studies should adopt well matched and randomized controls using appropriate and universal measures of recidivism" (p. 86). Seto et al. (2008):

> Only methodologically rigorous research will allow us to determine which is which…[we] want to identify and disseminate treatments that can effectively reduce the likelihood that sex

> offenders will do further harm, but we believe that only good science can inform good clinical practice and lead to the advancement of sex offender treatment. (p. 253)

Hanson (2014) has stated: "…we know very little about the effectiveness of methods used to rehabilitate sexual offenders…it is hard to make any strong conclusions about whether treatment works at all…This is a depressingly similar conclusion to that of …more than 20 years earlier. Knowing which treatment works for which type of sexual offender remains a distant dream" (p. 5). He states, "Although we, as service providers must believe in what we do in order to do it, we also need the humility to admit that we could be fundamentally mistaken. Consequently sexual offender treatment needs rigorous scientific scrutiny…" (p. 6). Referencing the large number of studies of risk assessment of sexual offenders and the hundreds of treatment outcome for general criminal offenders, Hanson (2014) stated: "What we need now are hundreds of new studies of sexual offender treatment outcome…" (p. 7). He advocated for the significance of evidence-based practice, noting that the growing interest in evidence-based practice in the large mental health field should be viewed as a sign of progress and for those who want science to influence sexual offender practice and should be viewed as a genuine force for the good. In short, further scientific study of sexual offender treatment is a necessary step for the field to advocate that such interventions should be an essential component of sexual offender management. The onus rests solely on the field of sexual offender research and management to establish that sexual offender treatment is clearly effective, particularly for the most high-risk sexual offenders.

Almost all credible researchers agree that the initial step to determining if sexual offender treatment can be effective in reducing sex offense recidivism is to systematically develop a body of methodologically sound RCTs of such interventions, preferably involving a relatively large number of subjects. Langstrom et al. (2013) concluded, "Based on the meagre results from our extensive systematic review, we concluded that there is an urgent need for well designed and well executed trials of treatment for adults who commit sexual offences against children" (p. 4). In their 2912 Cochrane Review, per Dennis et al. (2012), "We concluded that further randomised controlled trials are urgently needed in this area…" (p. 28). Rice and Harris (2003) stated, "…it is abundantly clear that any conclusions about the effectiveness of psychological therapy await many more random assignment studies" (p. 427). Similarly, Seto et al. (2008) declared, "In our view, RCTs are both ethical and necessary in order to prevent more victims of sexual violence and abuse" (p. 254). In addition, Hanson et al. (2009) wrote that:

> …strong studies are needed…we believe that an important requirement of strong research design is the experimenter's ability to determine participant assignment based on a procedure that controls for both measured and unmeasured features of the offenders (i.e. Random assignment)…Random assignment studies remain the best available alternative for minimizing participant election bias. Random selection is also one of the most ethically defensible methods of assigning individuals to treatment when demand exceeds supply or the relative superiority of alternate treatment is unknown. (p. 887)

Shortly after the publication of his 2009 review, Hanson indicated: "I, for one, have done enough meta-analyses of barely acceptable studies. It is time to counter the political resistance to random assignment studies by getting ATSA to endorse a position statement supporting their use" (Hanson, cited in Rice & Harris, 2013). In yet another recent review of sexual offender treatment, Kaplan and Krueger (2012) wrote: "…large, well-conducted randomized trials of long duration are essential if the effectiveness or otherwise of these treatments is to be established. Most of the studies upon which the knowledge base of the treatment of sexual offenders is based are seriously flawed. Overall, however, the evidence base for cognitive-behavioral treatment is extremely limited and empirical research focusing on effective treatment for this population is critically needed" (p. 295). Thus, investigations of the efficacy of sexual offender treatment must begin with RCTs, with largely similar offenders randomly assigned to one or more interventions and control groups of similarly motivated persons. Such studies must involve repeated, multi-method measures of likely psychologically meaningful risk factors. Offender subjects must be followed via survival analysis (with attention to attrition, reincarceration, and other types of reoffending) with any additional relevant experiences (e.g., additional treatment, correctional supervision) that must be accounted for as well. As part of its commitment to promoting evidence-based practices and high-quality research, ATSA (2010) has stated: "ATSA recognizes randomized clinical trials (RCT's) as the preferred method of controlling for bias in treatment outcome evaluations. ATSA promotes the use of RCT to distinguish between interventions that decrease recidivism risk of sexual offenders and those programs that have no effect or are actually harmful." There should be little doubt that RCTs are feasible for sexual offenders. Rice and Harris (2012) noted that there were 267 existing RCTs in the field of criminal justice in 1993 and 87 RCTs in correctional research alone as of 2005. They also noted that there have been several RCTs for adolescent sexual offenders (and of note, studies which have demonstrated the efficacy of one particular model of intervention). Consequently, Rice and Harris (2003) concluded: "It is abundantly clear that RCTs are feasible both ethically and practically in crime and justice fields in general, and in corrections, specifically" (p. 18). A number of such studies have been conducted such as those by Cullen et al. (2011) and Davidson et al. (2009). Further, Hanson et al. (2008) point out that other improvements to research study quality

could be implemented at relatively low cost, including reporting intent-to-treat analyses, using equal and fixed follow-up periods, scoring actuarial risk measures on the treatment and comparison groups, using statistical controls, and matching on risk-relevant variables. They also pointed out that "much less is known about the processes by which sexual offenders change. Studies frequently find that improvements on factors presumed to be criminogenic have no effect on sexual recidivism rates…" (p. 887). Such a perspective echoes that of Borkovec and Castonguay (1998) who wrote: "Creating increasingly effective therapies through between-group designs is best done by controlled trials specifically aimed at basic questions about the nature of psychological problems and the nature of therapeutic change mechanisms. Naturalistic research is important for external validity but is valuable only if it uses scientifically valid methods to address basic knowledge questions" (p. 1). Thus, sexual offender treatment approaches should be rooted in evidence-supported theories of sexual offending and initially determine if sexual offender treatment can be demonstrated through RCTs and several theory-supported models should be evaluated. Such methodologically rigorous studies are only the beginning by establishing internal validity. Subsequently, the heterogeneity of sexual offenders in relation to sexual offender treatment outcome as well as sets of components and parameters of sexual offender treatment can be rigorously evaluated. As with other disorders, methodologically sound investigations should target those criminogenic needs (or in the language of the larger treatment field, risk factors) in the context of evidence-based elements of effective psychosocial interventions. In addition to outcome studies, Hanson et al. suggested that researchers also focus on short- and medium-term changes on intermediate treatment targets and criminogenic needs; they noted that outcome research should help advance knowledge of the change process by examining the relationship between changes on more proximal treatment targets and more distal sex offense recidivism. Following this point, it becomes critical for further investigation into the effectiveness of different targets of sexual offender treatment and comparisons of different methods and approaches for affecting those targets. As with other recurrent, multidimensional problems targeted for change, multiple high-quality progression of methodologically refined studies of sexual offender treatment outcome will be necessary over time to best understand first whether treatment "works," and if so, what aspects of the therapist, client, and treatment program components contribute to effectiveness.

Despite the discouraging findings from scientific evaluations of sexual offender treatment programs at present, updated and innovative perspectives on treatment and on potentially effective approaches to the treatment of sexual offenders have continued to develop, many of which are reviewed by Yates (2015, this book). Such developments include the Self-Regulation (SR) Model (Ward & Hudson, 1998), Good Lives Model (GLM; e.g., Ward & Stewart, 2003), the integrated Good Lives/Self-Regulation Model (Yates & Ward, 2008), a "Strength-Based" Model of psychotherapy (e.g., Marshall et al., 2011), and the Recidivism Risk Reduction Treatment approach (3RT; Wheeler & Covell, 2013). Such approaches uniformly suggest that sexual offender treatment will be most successful when it is comprehensive and incorporates the management of predisposing, risk-related characteristics as well as encouraging the development of positive personal goals and healthy lifestyles. Particularly, given their "positive" approaches to the nature of offenders as individuals and to the goals and methods of therapeutic work, these developments appear to be heartening and inspiring to forensic/clinical practitioners. However, these newer perspectives on sexual offender treatment have and should be met with some significant degree of skepticism by others; 15 years ago, Quinsey et al. (1998) remarked "Overall, it seems clear that the field of sex offender treatment is changing without progressing" (p. 150). The promise of novel or presumed innovative approaches to sexual offender treatment must be put to the test of empirical investigations prior to unquestioned excitement and wide adoption. Both Quinsey et al. (1998) and Hanson (2003) have noted that these and previous novel sexual offender treatment models have been sequentially proposed (and others recommended for rejection) on exclusively or predominantly *nonempirical* or *theoretical bases*, in contrast to models of interventions for this group advancing progressively on the basis of scientifically sound appraisals. Most recently, Hanson (2014), in commenting on the lack of a scientific foundation for sexual offender, stated "The development of the [sexual offender treatment] field cannot be attributed to strong empirical evidence that such treatment is effective *…the changes in our treatment practices during my professional career have had only the lowest inspiration from research findings…It is hard to argue that we switched from aversive conditioning to relapse prevention (RP) and from RP to Good Lives because of any deep commitment to evidence-based practice*" (p. 3, emphasis added). Thus, to date, there are no RCTs of the Self-Regulation Model (SRM; Ward & Hudson, 1998), the Good Lives Model (GLM; Ward & Gannon, 2006; Ward & Stewart, 2003), the combined SR/GLM (Ward & Gannon, 2006; Yates, Prescott, & Ward, 2010; Yates & Ward, 2008), and Marshall et al.'s Strength-Based Approach model (SBA; Marshall et al., 2011) or Recidivism Reduction Therapy (3RT) (Wheeler & Covell, 2013); similarly, there is incomplete evidence that the each of the principles of RNR treatment for general criminal offenders applies to specifically sexual criminal offenders, particularly the risk principle. However, as noted earlier, an increasing number of sexual offender treatment programs in North America and the UK employ aspects of GLM, a

change in practice that is not based on scientific evidence. In part, this reflects a larger issue, a professional reliance on "unstructured clinical judgment," where clinicians overwhelmingly rely on their own beliefs and experiences in their clinical practice as opposed to research findings (e.g., Ogilvie, Abreu, & Safran, 2005; Stewart & Chambless, 2007). This is despite the caution of Langstrom et al. that "Professional *opinion* is no substitute for evidence" (p. 4, emphasis added). Consequently, there continues to be an increasing divergence between what has been (or has not been) scientifically demonstrated regarding sexual offender treatment and what forensic/clinical practitioners actually do with clients who have sexual offended. While intuitively appealing, newer treatment models and interventions (such as the GLM, SR/GLM, SBA, 3-RT, and other positive approaches, motivational interviewing, and treatment preparation) need to be subject to empirical testing to determine their relationship to sexual offender treatment outcome and individual change. Psychosocial interventions should not be abandoned at this point. Rather, as with other complex psychologically based presenting problems, the lack of scientifically demonstrated treatment outcome results should be the urgent impetus for increased study of psychosocial interventions for sexual offenders, informed by existing data and the principles of effective psychotherapy.

In the future, outcome studies of sexual offender treatment must be derived from more evidence-based principles and practices, including the value of careful identification and comprehensive, systematic evaluation of clinical expertise and patient characteristics, preferences, and circumstances (e.g., Spring, 2007). Primarily, treatment outcome studies of sexual offender psychotherapies must rely on RCTs, with similar offenders randomly assigned to one or more interventions and control groups of similarly characterized and motivated sexual offenders. Experimental interventions must be bona fide interventions, and given the current status of the field, it makes sense to study multiple psychosocial approaches in treating sexual offenders. RCT studies of treatments for sexual offenders should involve repeated, multi-method measures of likely psychologically meaningful risk factors. Subjects must be followed via survival analysis, with minimal attrition, overtime, and any additional relevant experiences (e.g., additional treatment, correctional supervision) that must be accounted for as well. Potential moderators and mediators of clinical change need to be further identified, monitored, and refined. Sexual offenders of differing levels of risk, particularly high-risk offenders, need to be the focus of outcome research. As well, it seems timely for the sexual offender field to reconsider what the essential focus/content of treatment approaches should consist of. The criminological literature has suggested that a focus on the so-called criminological needs as the most meaningful treatment targets; this parallels the broader psychotherapy field's increasing focus on personality issues or predisposing condition diatheses which seem to underlie the presenting problems of more psychotherapy-refractory clients; while these are similar, the former relies exclusively on the results of science, while the latter reflects both empirical research and clinical theory. Hanson et al. (2009) pointed out: "Studies frequently find that improvements on factors presumed to be criminogenic have no effect on sexual recidivism rates…" (p. 886). As a result, they advocated for changes in substance of sexual offender treatment programs, stating:

> …it would be beneficial for treatment providers to carefully review their programs to ensure that the treatment targets emphasized are those empirically linked to sexual offense recidivism. Examples of promising criminogenic needs include sexual deviancy, sexual preoccupation, low self-control, grievance thinking and lack of meaningful intimate relationships with adults…Outstanding questions remain, however, concerning potential gains from matching interventions to the needs of individual offenders and whether recidivism can be most effectively reduced by addressing certain combinations of needs. (p. 886)

As noted, both models of other presenting problems/mental disorders as well as sexual offending (e.g., the ITSO; Ward & Beech, 2006) increasingly highlight the potential significance of implicit psychological experiences and intra-individual content and process issues. Potential changes in such needs, implicit theories and issues, and other theory-based treatment-related factors must be tested for reliable, clinically significant, and valid change.

In addition to the focus of sexual offender treatment, treatment delivery issues also need to be investigated in a controlled systematic manner. Per the RNR model of correctional intervention, the importance of the relative intensity and duration of sexual offender treatment as well as responsivity dimensions for offenders with different levels of needs and risk must be carefully examined. Truly effective methods of changing offenders' interconnected thoughts, feelings/motivations, and behaviors need to be identified; the relative value of psychoeducational and experiential treatment tactics needs to be identified and refined; dismantling and recreating truly effective methods and strategies of sexual offender treatment should occur. While intuitively appealing, the so-called positive treatment models and interventions (such as the Good Lives approach, Strengths Approach, 3RT, motivational interviewing, and treatment preparation) must be subject to rigorous empirical testing to determine their relationship to the central outcomes in the treatment of sexual offenders: personal change and decreased sexual offense recidivism rates. Therapist, client, and process variables need to be carefully studied; particularly, for high-risk/high-need sexual offenders, it seems likely that they would benefit from particularly well-trained and experienced therapists and that this would likely be a cost-effective practice. In this vein, Marshall's (e.g., 2005) work regarding

the significance of clinician qualities in impacting sexual offenders seems increasingly important. However, first, the delineation and cultivation of effective psychotherapist qualities and knowledge specific to working with sexual offenders seem essential. Second, multiple investigators must systematically and empirically examine the empirical value of therapist qualities and knowledge. To the extent that the evidence that the therapeutic relationship or alliance is believed to be critical to treatment success, then controlled outcome studies involving enhanced therapist characteristics or therapist–client matching should certainly be conducted. At the same time, issues of treatment fidelity and the value of parameters of clinical supervision remain to be examined in relationship to the effectiveness of sexual offender treatment approaches. The relative contribution of individual and group psychotherapy separately and in combination (and the types of groups such as closed or "rolling") needs to be evaluated particularly in relationship to specific collections of presenting problems and other client dimension; as Hanson et al. suggested, it may be time to more explicitly match treatment approaches to the particular needs of specific offender clients. Ultimately, for the problem of sexual offending, as it would be any type of presenting problem, this is what Paul (1967) wrote over 40 years ago: "…the question towards which all outcome research should ultimately be directed is the following: *What* treatment, by *whom*, is most effective for *this* individual with *that* specific problem and under *which* set of circumstances?" (p. 111). However, the answers to those questions in regard to sexual offender treatment outcome will only be determined by the development of research programs of sexual offender treatment with diverse samples of sexual offenders that are controlled, comprehensive, and able to be replicated across settings.

A key issue for mental health professionals involved in the psychosocial treatment and management of sexual offenders is to come to terms with the role of scientific investigation and results regarding such treatment and the larger field of psychotherapy and mental health interventions. As noted earlier, there is tremendous public skepticism of the mental health field, particularly psychology; as Stanovich (2009) observed, "Most judgments about the field and its accomplishments are resoundingly negative" (p. 175). Lilienfeld (2011) points out that we ignore such skepticism at our peril, in terms of potential client's expectancies about possible improvement, third-party reimbursement, and government funding of significant research questions. Gaudiano and Miller (2013) point out that "Many psychotherapists are opposed to the idea of the specification of evidence-based treatments in principle, viewing psychotherapy at least as much art as science and preferring to rely on clinical intuition and experience instead of scientific evidence…" (p. 815). They note that most clinicians do not base their treatment decisions on "state-of-the-art" clinical research and that approximately 50 % reject the use of more formal, evidence-based treatment approaches and rely primarily on their own subjective clinical experiences. Lilienfeld et al. (2013) provides a wide-ranging analysis of the reasons why mental health professionals have been resistant to evidence-based practice and remedies to those issues. In effect, all of these apply to MHPs practicing in the sexual offender treatment field. As Dennis et al. argued, "…this weaker evidence (and the conclusions drawn from it) often leads to a more optimistic conclusion about efficacy than is warranted, and unfortunately becomes embedded in clinicians' consciousness. This may result in a belief that current approaches area more effective than the evidence suggests" (p. 28). They even noted that previous conclusions of earlier reviews of the limitations relative to the demonstrated effectiveness of sexual offender treatment and the repeated call for further research have typically been cushioned by misleading phrases such as the results are nonetheless "promising. More recently, Duggan and Dennis (2014) noted that there are over 2,900 RCTs of psychosocial interventions for Schizophrenia. Regarding the place of evidence in the treatment of sex offenders, they concluded":

> Although RCTs in any area of healthcare are difficult to conduct, other specialties have overcome the challenges that they present…It is clear that high quality evidence can be produced in most areas of healthcare, if there is the will to do so. For this to happen with respect to treatment for sex offenders, spurious impediments…must be set aside. Those who enter sex offending programmes, together with their past and potential future victims, should expect to be provided with treatments with a strong evidence base. Acquisition of this evidence must be a process, which includes, although is not confined to, RCTs. (p. 160)

Relative to this issue, it is striking that in the sexual offender field, mental health professionals readily accepted and utilized various structured risk instruments based on the finding that experimentally derived statistical information outperforms [pure] clinical judgment. Yet, in marked contrast, given a more striking lack of empirical data and justification for any psychosocial sexual offender treatment, mental health professionals in the sexual offender field have consistently defended their belief or faith in psychotherapy as a viable component of management to reduce sexual offending.

As an antidote to these issues, Lilienfeld (2011) argues that the mental health fields must "police themselves"; he specifically states that while thoughtful debates about the best means of operationalizing evidence-based practice should continue, "practioners with the applied fields of psychology (e.g. clinical, counseling, school) would be well advised to become less tolerant of pseudoscience and more willing to ground their practices in replicated research evidence" (p. 14). Actually, Andrews and Bonta (2006) offered a similar perspective regarding the study of criminal

behavior: "Unsparing criticism is a major source of advancement…all criticism, including criticism of theoretical and research-based assertions, is best combined with respect for evidence…" (p. 3). Placed in the larger national and international context of health economics and management, Baker et al. (2009) stated: "The current context of health care in American (and beyond) demands a higher level of accountability than in the past…the future of clinical psychology will be dictated largely by what data show regarding the relative cost-effectiveness of psychosocial and behavioral interventions compared with other competing intervention options in mental health care…Clinical psychologists must offer compelling evidence relating [to the criteria of such comparisons] if they expect their psychosocial and behavioral intervention s to have a fair chance of gaining widespread support, to be adopted in the health delivery system, and to be funded via health coverage mechanisms…" (p. 69). Baker et al. reviewed the history of the progress of medical care in the USA and offered a convincing argument that the increased, nearly universal acceptance of medical treatment is based on three sociopolitical changes: (1) the scientific grounding of medical practice in experimental study, primarily RCTs; (2) a greatly expanded body of science accompanied by increasingly rigorous training of physicians in evidence-based procedures and standards of practice; and (3) higher standards in training and licensure. Baker et al. note that physicians have almost exclusively positive views regarding experimental evidence such that it constitutes a touchstone regarding practice, and as a result, practice studies show that a very high percentage of medical patients receive interventions that are evidence based. In contrast, they demonstrate that psychologists and other non-medical mental health providers view science and research as having very little relevance to their practice activities and decisions. Moreover, they note that "Clinical psychologists often practice in a manner that *conflicts* with considerable research evidence or at least is not clearly supported by research evidence…practitioners often say they do not care, because they consider the available scientific evidence to be relatively uninformative or irrelevant to their practice decisions…" (p. 80). They argued that unless significant changes occur in the mental health profession's acceptance of a scientific approach to the treatment of mental health problems, MHPs risk being even more devalued and even further reduce in their roles in both the practice and policymaking about the utility of psychosocial interventions.

Thus, to continue to argue—and more importantly to *act*—as if psychotherapy has been empirically demonstrated to be effective at reducing future sexual offending is ultimately to risk the exclusion of such intervention modalities or treatment practitioners as one element in a broad approach to managing sexual offenders. Until strong empirical evidence exists that sexual offender treatment does significantly and differentially reduce sexual offense recidivism, several issues remain for the various participants and stakeholders. This is quite similar to the related field of psychosocial interventions for persons with ASPDa. Duggan (2008), an author of several Cochrane and related reviews of this Personality Disorder, concluded: "The implication is clear: that there is an imperative for scientists and clinicians to provide decision makers with the appropriate evidence to allow the latter to arrive at the best decision…we are in a weak position to influence the political process in the allocation of funds so that unless and until these areas are addressed, interventions for [criminal offenders] with ASPD are likely to continue to remain in a scientific limbo" (p. 2610). Several writers have suggested that the sexual offender field effectively becomes more accurate and honest in representing what sexual offender treatment might offer some sexual offenders. Another perspective to take regarding the lack of evidence of sexual offender treatment is to simply consider if one would recommend to others or choose for oneself a medical intervention that lacked one, let alone replicated, empirically demonstrated trials of its relative effectiveness. Over 15 years ago, advocating for a harm reduction approach to psychosocial interventions for sexual offenders, given the "not particularly optimistic" evidence for treatment success for sexual offenders, Laws (1996) stated:

> The domain of treatment provision is an imperfect one and we should openly acknowledge that…I believe we should stop using the words sexual offender *treatment* to characterize our work and substitute sex offender *management* instead, since it is actually more accurate…*Treatment* suggests sexual deviance may remit or be cured and so, like a treatment for a disease, establish expectations for success which are quite unrealistic… At bottom, our job in managing sexual offenders and reducing harm is, in reality, a sort of social policing…. (p. 246)

However, as Harris et al. (1998) wrote: "It behooves those who provide treatment and supervision, especially when directly or indirectly publicly funded, to reduce the existing uncertainty about the effect of these interventions by conducting scientifically and useful evaluations of the services provided. We believe that such evaluations should be mandatory for publicly funded offender treatment" (p. 107).

Recently, in the ATSA Forum, Pake (2010) opined that the state of science relating to the management of human behavior is not yet at a point when one can proclaim treatment success with any certainty, saying "It is currently impossible to support such a statement scientifically." Further, he notes that whether a sexual offender who has participated in treatment chooses to utilize understanding and learned skills necessarily remains at the discretion of the offender and no therapist can account for a particular offender's choice in any given circumstance. Pake concluded by stating: "By portraying treatment as successful, we offer a false sense of security. Portraying treatment as successful encourages non-clinical

partners in community risk management to perceive our efforts as having eradicated the potential for reoffending on the part of the treated sexual abuser. This is misleading. It leads one to question the profession's intellectual honesty."

Clinician's practicing non-forensic psychotherapy with clients who are independently choosing to engage in and pay for such treatment—for whom the only stakeholders are the client and the therapist—should be relatively free to engage in whatever procedures they mutually believe are in the client's best interest. However, the process of forensic clinicians providing forensic psychotherapy to anticipated or actual forensic clients involves other considerations, particularly the interests and support of other stakeholders—in most cases, the treatment is being funded by third parties (e.g., an agency acting on behalf of society) and the purpose of that psychotherapy is primarily public safety (which is the basis for the agency and/or public funding the treatment). For forensic/clinical psychotherapists in the community and institutions, what does one do in sexual offender treatment? Certainly, there are some sexual offenders who do and will benefit from psychotherapy such as those that are low-risk and presumably one-incident offenders. Psychosocial treatments of some type are likely effective for some specific offenders, but, at present, group data does not support this conclusion. Consequently, the degree to which a particular sexual offender will or does benefit from sexual offender-specific treatment, with or without additional psychosocial interventions, must be carefully considered. [Similarly, whether a particular sexual offender has benefited from psychotherapy cannot meaningfully rely on group outcome data, therapist ratings, or self-reported change but rather must be determined on some individual basis, with its own extensive set of "measurement" issues.] Given the apparent failure to demonstrate effectiveness for general CBT-RP-type sexual offender treatments—and by implication the component "modules" (e.g., Hoberman, 2015)—it appears critical for those who intend to or must provide psychosocial interventions to sexual offenders that they critically examine the components and implementation of their treatment. Clearly, for presenting problems like eating disorders and drug abuse, empirical evidence for the qualified efficacy of existing treatments exists, and both help-seeking and resistant clients are offered psychosocial interventions. Such interventions are necessarily based on demonstrated or hypothesized harm reduction for the individual client and not necessarily as a "cure" (albeit the risk or harm associated with eating disorders and most other presenting problems is largely to the client and not others). However, the "harm" dimension of those disorders relates to the client and not to others/society; harm reduction may be a useful concept for disorders that pose issues of self-harm. However, harm reduction may not be a sufficient outcome for sexual offender treatments as with other violent offenders. It is reasonable to ask that psychological treatments of persons with a demonstrated history and propensity for violent sexual offending against others be demonstrated to be substantively effective if they are to be accorded a primary place in the management of such offenders and/or funded by the public.

To the extent a sexual offender is motivated or can be genuinely influenced to engage in treatment (whether it be intrinsically or extrinsically), several practices seem reasonable. To begin with, there is an ethical and practical issue as to what type and degree of expectancy can and should be communicated to offenders who express interest in or are mandated for sexual offender treatment; an emphasis on collaboration; the relevance of the offender's motivation to be open, to learn, and to enact life changes; and an agreement by the psychotherapist to work empathically, respectfully, and collaboratively with the offender should provide an appropriate framework for potentially effective treatment. However, these practices need to be guided by scientifically informed data and then the clinical needs and responsivity issues of particular offender clients. In the absence of scientifically informed forensic/clinical practice, several questions exist for practicing clinicians who provide psychotherapy for sexual offenders. Harris et al. (1998) advocated as follows:

> The best option in these circumstances of relative ignorance is to adopt treatments that (a) fit with what is known about the treatment of offenders in general, (b) have a convincing theoretical rationale in that they are motivated by what we know about the characteristics of sex offenders, (c) have been demonstrated to produce proximal changes in theoretically relevant measures, (d) are feasible in terms of acceptability to offenders and clinicians, cost, and ethical standards, (e) are described in sufficient detail that program integrity can be measured, and (f) can be integrated into existing institutional regimens and supervisory procedures. (p. 104)

Similarly, Langstrom et al. (2013) wrote "Without specific guidelines for treating individuals at risk, the most ethically defensible position would be to assess the presence of treatable risk factors for sexual abuse of children, including concurrent psychiatric disorder, and offer individualised treatment" (p. 4). As with other presenting problems that lack of demonstrated effective interventions, offering psychotherapy should continue to be offered to offenders who appear genuinely and intrinsically motivated for such interventions. However, as forensic therapy, with the community as a significant "client" or "interested party," honest and accurate representations about the existing empirical evidence for such psychotherapies must be acknowledged; related concerns exist about who should bear the cost of unproven interventions. A related practical and ethical question concerns what practitioners can and do communicate to sexual offenders about the possible benefits of sexual offender treatment. Should offenders be provided with an accurate "likely no effect" or an "optimized" perspective on the likely effectiveness of such psychosocial interventions relative to their

expectancies of potential change? Is it ethical to induce a heightened positive expectancy for sexual offender treatment via motivational interviewing or other preparation in light of both the failure to demonstrate treatment effectiveness and the lack of empirical evidence that such theoretical notions themselves actually affect sexual offender treatment outcome? As with other presenting problems lacking demonstrated effective interventions, offering psychotherapy should continue to be offered to offenders who appear genuinely and intrinsically motivated for such interventions and for whom resources are available to fund their treatment. However, as forensic therapy, with the community as a significant "client" or "interested party," honest and accurate representations about the existing empirical evidence for such interventions must be provided; the failure to demonstrate efficacy of psychotherapies for enacting personal change in sexual offenders and decreases in sexual offense recidivism must be acknowledged so that policy makers and the public are informed about the potential value of resource allocation and the degree of community safety such resources might provide.

From a public policy perspective, the lack of an empirical demonstration of the efficacy of sexual offender treatment, particularly as forensic psychotherapy, raises several significant questions. Should treatment be mandated in the absence of clear demonstrations that sexual offender treatment "works?" Regarding the study of criminal behavior, Andrews and Bonta (2006) wrote: "…it views a reduction of the costs of both crime and criminal justice processing as highly desirable. We are particularly interested in reducing the costs of crime by reducing criminal victimization in the first place" (p. 3). To the extent that much of sexual offender treatment is provided by way of public funding for institutionalized offenders or social service benefits (and to a lesser degree by insurance funding), should demonstrated effectiveness be necessary to justify such funding? In the absence of objective evidence, should offenders themselves bear the costs of funding sexual offender treatment, given providers belief that such intervention is hypothesized to impact their lives in a positive manner? In addition, if, at best, such interventions can only offer some small degree of "harm reduction" in reducing the frequency and severity of sexual offending, is that a sufficient goal for public safety and for justification of the use of public funds to provide such interventions? To what degree does society have a right to demand evidence of a large effect for sexual offender treatment—a high degree of empirically demonstrated persisting change on the part of sexual offenders? Another perspective would suggest that if sexual offender treatment cannot currently be strongly relied on to clearly and consistently reduce sexual offense recidivism, then the management of sexual offenders should shift to other alternative practices. Over a decade ago, Harris et al. (1998) noted that, to the extent that treatment fails to reduce recidivism (the current state of science), "…supervision (including denial of community access) has to take its place" (p. 104). In addition to more intensive and long-lasting community management, other options to a reliance on psychotherapy as a primary management tool for sexual offenders might include utilizing insurance programs for sexual offenders to obtain coverage for liability relative to their risk for future sexual offending (e.g., similar to motor vehicle or malpractice insurance) or extend or indeterminate sentences for offenders with prior sexual offending history and so on.

All can agree that for all stakeholders, the prioritization for the prevention of sexual violence requires, even demands, increased time and resources be devoted to studying and innovating programs for reducing future acts of sexual offending by identified sexual offenders. Given the degree of public concern about sexual offending expressed by society and political entities, there should be no question that substantially increased funding of psychotherapy outcome studies for sexual offenders should occur, just as such expanded funding has increased for other identified public health problems which effect far fewer members of the community. The *potential* for psychosocial interventions to play a central role in facilitating understanding and change in sexual offenders clearly exists. However, only by *accepting* the reality of the current status of the field of sexual offender treatment can the scientific and larger public community *commit* to a reasonable process prioritizing and funding theorizing, testing, and refining treatment models, strategies, and tactics that might be shown to effectively assist sexual offenders in modifying their personal characteristics and social contexts in such ways that their risk for future sexual offending is eliminated or substantially reduced. Following the principles of EBP, it is critical that researchers and policy makers collaborate to develop, test, and assign resources to sexual offender treatment and that researchers and sexual offender treatment programs work collectively to execute standardized research studies that clarify the role that such interventions can play in the management of sexual offenders. Sexual offender treatment clinicians and program managers must be fully informed on the existing and evolving scientific research regarding the outcome and implementation of sexual offender treatment and be educated, committed to, and supervised in implementing best practices in clinical work with sexual offender clients. At the same, as with other presenting problems lacking demonstrated effective interventions, it is reasonable to continue to provide psychotherapy to offenders who appear genuinely and intrinsically motivated for such interventions; however, without demonstrated efficacy, funding responsibility may and perhaps should shift to sexual offenders themselves. For sexual offender treatment as forensic psychotherapy, with the community as a significant "client" or "interested party," honest and accurate representations about the existing empirical evidence for such interventions must be provided. The failure, to date, to demonstrate efficacy of

psychotherapies for enacting personal change in sexual offenders and decreases in sexual offense recidivism must be acknowledged so that policy makers and the large community are informed about the potential value of resource allocation. Finally, given its role as almost exclusively forensic psychotherapy, advocates of sexual offender treatment must be transparent about what is known about its efficacy so that realistic notions of its role in public safety (as well as personal change) can be taken into consideration relative to its role in the management of sexual offenders.

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Forensic Psychotherapy for Sexual Offenders: Likely Factors Contributing to Its Apparent Ineffectiveness

Harry M. Hoberman

Introduction

The key social policy question regarding providing psychotherapy for sexual offenders is simply does such treatment itself specifically lead to a significant and meaningful reduction in sexual offense recidivism? If such a finding has been scientifically demonstrated and replicated by independent researchers, then such a psychosocial interventions should play a central role in the management of sexual offenders. However, if not, until empirical evidence of its clear efficacy exists, very careful consideration should be applied to the role of sex offender treatment as a significant component in the containment of potential sexual dangerousness for sexual offenders. Instead, other alternatives to effectively reduce sexual offense recidivism must necessarily take on a more prominent role in the overall management of sexual offenders. Unfortunately, to date, psychotherapies have not been scientifically demonstrated to reduce sexual offense recidivism for sexual offenders as a group (Hoberman, 2015a). By 2010, the problematic status of psychosocial interventions for sexual offenders had become a significant enough issue that the Executive Board of the Association for the Treatment of Sexual Abusers (ATSA; 2010) proclaimed: "After 50 years, the field of sex offender treatment cannot, using generally accepted scientific standards, demonstrate conclusively that effective treatments are available for adult sex offenders." The goal of sex offender treatment is almost universally viewed as the reduction or elimination of sexual offense recidivism for public safety. Such treatment must almost always be considered "justice involved" or *forensic therapy*, that is, for the purpose of public safety, most commonly required by the legal system and typically funded by the public. As Prentky, Gabriel, and Coward (2011) wrote: "…the most compelling reason for treating sex offenders is reducing the likelihood that those offenders will reoffend and create additional victims. The primary goal of sex offender treatment is not to cure sexual offenders or to make them feel better but (a) to reduce the risk that they will reoffend, and (b) to assist with the optimal management of those sexual offenders who are in the community" (p. 117). In reviewing the results of both systematic reviews and meta-analyses, the most optimistic perspective that can be gleaned from the existing studies is that the sexual recidivism of select, lower-risk sexual offenders may be slightly lowered when they are treated in community settings; the available results could also be interpreted to mean that regardless of treatment, lower-risk sexual offenders, particularly those truly disturbed by their offending and motivated not to reoffend, generally are characterized by lower rates of sexual reoffending (not surprisingly). In contrast, for higher-risk sexual offenders who are treated in correctional and other institutional settings, there is no scientific evidence from controlled studies of psychotherapy to suggest that such interventions lead to a desired reduction in sex offense recidivism. In addition, it remains unclear if sex offender treatment is effective for different types of sexual offender and what, if any; elements of psychotherapy are particularly useful in impacting sexual offenders and sex offense recidivism rates (e.g., see Hoberman, 2015b).

While writers often cite short-term recidivism rates for sexual offenders as approximately 10–13 % for 5-year follow-up periods, scientific perspectives on long-term sexual offense recidivism indicate that *detected* sexual reoffending increases over longer follow-up periods to at least 40 % (e.g., Hanson, Morton, & Harris, 2003; Harris & Hanson, 2004; Harris & Rice, 2007). Further, such rates do not reflect the established finding that many or most acts of sexual offending are actually not detected or adjudicated as sexual offenses (e.g. reported to authorities, processed through the legal system or accurately characterized as sexual offenses

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by that system), whether committed against strangers or acquaintances. In addition, repeated victimizations of particular individuals by the same perpetrator are often counted as "one" offense. Thus, the probable or true likelihood of sexual reoffending appears relatively high, for persons already identified as having already committed a sexual offense. In addition, the consequences of attempted or enacted sexual offenses on both child and adult victims can be profound and long lasting. Given that there has been some demonstrated success in psychological interventions for general criminality and for select severe psychosocial problems (e.g., eating disorders, substance abuse), the fact that for most sexual offenders psychotherapeutic programs have not been shown to be effective indicates that psychotherapy cannot yet be considered a necessary let alone a sufficient component of sexual offender management. Thus, the current inability to demonstrate that psychosocial interventions can meaningfully reduce sexual offense recidivism among identified sexual offenders must be viewed as critical public health issue. In addition, given the advocacy for endorsing psychotherapy as a central management component of public policy for sexual offenders, it offers further "fuel" for the general public, funding agencies, and public policy-makers regarding the potential utility of psychological science generally and, more specifically, the value of psychotherapy.

The purpose of this chapter is to develop a perspective as to the variety of possible reasons why sexual offender treatment has yet to demonstrate its efficacy; various aspects of sexual offenders as clients, characteristics of clinicians who provide therapeutic services to such offenders, and the nature and delivery of psychotherapy for sexual offenders. In addition, findings that many or most of the specific components [e.g. strategies or tactics (skills)] of psychotherapeutic interventions that typically comprise the core of sexual offender treatments have no or little basis in scientific evidence has clear and pointed implications for the inability to rely on psychosocial interventions to reduce sexual reoffending the nature and first, the available psychotherapy literature generally and that for sexual offenders is reviewed. From this, it is apparent that most psychotherapies appear to be generally effective interventions for persons with mood and anxiety problems but less effective for persons with more chronic, entrenched behavioral problems. Client variables are identified as accounting for the largest portion of variance in general psychotherapy outcome. Further, most recent reviews [summarized by Hoberman (2015b) and others] indicate the efficacy of sex offender treatment has yet to be demonstrated by accepted empirical means; thus, to date, no or little scientific evidence exists that psychosocial interventions affect sexual reoffending among sexual offenders let alone produce meaningful personal change in such offenders. Second, a historical perspective is considered on the largely non-theoretical or nonempirical nature by which sexual offender treatment developed in North America. A historical review provides an important context for understanding problematic aspects of the development of and implementation of almost all current programs of sex offender treatment. Finally, a critical analysis of the client, therapist process, and specific treatment components of forensic sex offender treatment is provided identifying the striking degree to which few aspects of conventional and contemporary programs of sex offender treatment have been demonstrated to have any relationship to reductions in sexual offense recidivism. That is, the available evidence would suggest that, in particular, client characteristics and treatment components would either increase or have no effect on the likelihood of future sexual offending. Finally, the implications of the current state of affairs regarding the apparent failure to develop and demonstrate the efficacy of specific intervention programs are discussed and future directions are identified.

Summary of Psychotherapy Outcome and Sexual Offender Treatment Outcome

The three primary methodological components of psychotherapy outcome research generally referenced in that literature are the use of one or more control groups (relative to the treatment of interest), the random assignment of similar individuals to the specific treatment proposed and the control groups, and considering outcome for all persons assigned to the treatment condition (such as dropouts or treatment refusers) whether they terminate or complete treatment. First, one or more control groups are utilized with the expectation that a successful treatment approach will be distinguished in outcome from persons who did not receive the treatment of interest. Random assignment offers the potential for controlling the influence of any preexisting (known or unknown) differences that exist between comparison groups, given the possibility that pretreatment client characteristics might influence or determine the results of the study. Such a procedure provides the best means of reducing selection effects; such randomization represents a best practice for eliminating or reducing the possible influence of such extraneous factors, from demographic factors to problem severity. In that way, if differences between treatment and comparison groups are found, one can be much more certain that those differences have to do with the intervention and not some other factor. Only persons motivated for treatment and willing to be randomly assigned to a specific treatment of interest or control group(s) are included for a controlled study that employs random assignment. Such studies are designated as randomized control trials (RCTs), and they are the type of study that is relied on by various professional and administrative groups [e.g., the Federal Drug Administration (FDA) or the Center for Disease Control (CDC)] to determine if a proposed treatment is effective.

In addition, a third methodological dimension involves intent-to-treat analysis; the experimental or treatment groups consist of *all* persons originally assigned to that group, whether or not they complete the intervention. This third issue which relates to the degree to which persons are retained in and complete the assigned treatment is considered an important aspect of the outcome or results of the treatment comparison; a treatment that loses a significant number of participants but succeeds for some would not necessarily be considered a successful or effective intervention. Thus, for a number of pharmacological studies, persons assigned to an active drug condition may drop out because of undesirable experiences such as side effects. However, individuals who drop out of or are terminated from a treatment group are typically counted as part of the intervention group since that is considered a meaningful measure of the relative results of a particular intervention (what is referred to as intent-to-treat analyses, counting individuals who in effect reject the treatment). Generally psychotherapy treatment outcome studies are first conducted with relatively pure groups of motivated clients; consequently, persons with comorbid psychiatric conditions, particularly low intellectual ability, and other characteristics are initially excluded from study. The basic notion is to first conduct a simple test of a proposed psychosocial intervention to provide the best chance of it being successful, with the notion that later studies can examine the effects of potential moderating or mediating factors. As Howard et al. (1996) wrote given the high degree of experimental controls imposed by RCT design: "…it is quite rare that a randomized experiment fails to conclude that the experimental treatment works" (p. 1059). In contrast, in several domains of psychological problems, RCTs were not initially utilized, and positive effects of intervention were first reported (e.g., arthroscopic knee surgery for meniscal repair or crisis debriefing). However, once RCTs were applied, either no effect of the interventions or even negative effects were identified (e.g., Rice & Harris, 2012).

An enormous literature on psychotherapy outcome in general has accumulated and the current results can be summarized. Relative to control conditions, psychotherapy has been found moderately beneficial for persons motivated for change in their lives, particularly for persons who seek treatment primarily because they themselves are disturbed by moderate to high degrees of emotional distress (e.g., they "feel badly"). For many persons who seek psychotherapy for anxiety or depression, the effects of treatment appear to be somewhat enduring (e.g., albeit these have typically been relatively "pure" clients by virtue of exclusion criteria that screen out significant—and typical—comorbidity). In contrast, for persons seeking treatment to address more complex behavioral problems or with comorbid psychiatric conditions, there is little to some evidence for the relative effectiveness of psychotherapy typically for particular features of those conditions. In general, greater problem severity and chronicity, comorbid psychiatric conditions (and in particular, maladaptive personality traits), and functional impairment in everyday life were each associated with decreased response to psychosocial treatments. Researcher allegiance accounts for a significant amount of variance in outcome; those invested in a particular intervention are more likely to find it effective. There is *decreasing* evidence that *specific types* of psychotherapy produce differential degrees of improvement, including the treatment of emotional distress. Thus, most interventions are equally effective for persons with emotional distress; common or nonspecific factors appear to have a very significant effect on whether clients' "feel better" or are "satisfied" as a result of psychotherapy (e.g., positive expectancies for change, acceptance, therapist credibility). Conversely, there is a lack of specific evidence that decreased distress is mediated cognitively as cognitive-behavioral therapy (CBT) would suggest. Little superiority of CBT or other psychotherapies has been demonstrated for more severe and/or behavioral conditions or persons with multiple, comorbid psychiatric conditions. To be effective, psychotherapy needs to be provided in a sufficient dose relative to the severity of the individual's presenting problem; a greater number of and/or more severe problems require more intense and/or higher doses of psychotherapy. Clearly, client characteristics have the most significant influence on the outcome or benefit realized in psychotherapy. Therapist characteristics also impact the outcome of psychosocial treatment for common presenting problems, with particular personal qualities and professional practices more strongly related to outcome; in addition, some clinicians appear to be much more effective with clients than other therapists. As Lambert (2013) recently suggested, improvement from psychotherapy is a function of the following four factors to the indicated degree: client/life situation (40 %), common factors (30 %), client expectancy (15 %), and (specific) techniques (15 %).

Summary of Reviews of the Effectiveness of Sexual Offender Treatment

Hoberman (2015b) reviewed the various systematic reviews (SR) and meta-analyses (MA) of adult sexual offender treatment studies in the scientific literature. The majority of studies available in the sexual offender treatment outcome literature relied on nonrandom assignment of very select groups of subjects who were preselected to be low or moderate risk. Further, the great majority of such studies that utilized control groups relied on "incidental assignment" or assumed equivalence as control groups for treatment groups and contained a high percentage of higher-risk offenders. Effectively, only two RCTs were available for adult sexual

offender to provide a systematic evaluation of the efficacy of particular treatment programs or approaches.

In his meta-analysis, Hall (1995) found a "small" statistically significant effect for sexual offender treatment but that such treatments might be less effective with the more "severe" sexual offenders. He found that outpatient sexual offender treatment appeared more effective. Like Hall, Hanson et al. (2002) concluded from their meta-analysis that there was a "modest" advantage for the treated versus the untreated offenders and this finding was statistically significant. They also found that if only those studies that utilized random assignment of sexual offenders to treatment were examined, then no treatment effect was apparent. Hanson et al. (2002) noted that the treatment effects on sexual recidivism were smaller in the good-quality studies than in the weak studies. In addition, Hanson et al. identified a "robust" finding that sexual offenders referred to sexual offender treatment based on "perceived need" (e.g., higher-risk sexual offenders) had higher sexual offense recidivism rates than those with less need; they were less responsive to sexual offender treatment. The investigators concluded that "We believe the balance of available evidence suggest that current treatments reduce recidivism, but that firm conclusions await more and better research" (p. 186). However, in examining only the RCT studies, Hanson et al. (2002) found that no empirical support for treatment effectiveness for adult sexual offenders could be drawn from those studies.

Losel and Schmucker (2005; Schmucker & Losel, 2008) also "cautiously" concluded from their meta-analysis of *both* biological and psychosocial treatments that treatment studies suggested a small-to-moderate positive effect for sexual offender treatment. However, they noted that only 6 of 69 studies available were considered to meet the Maryland level 5 (highest) standard and that most of the studies included in their meta-analysis were of poor methodological quality. Losel and Schmucker (2005), Schmucker & Losel (2008) showed that larger effects of treatment were found more frequently in studies with small sample sizes and were strongly influenced by allegiance effects. In addition, they reported that the largest treatment effect was found for Maryland level 3 studies in which the equivalence of comparisons groups was assumed (e.g., lower-quality studies such as quasi-experimental designs). Their results were similar to those of the Hanson et al. meta-analysis where only incidental assignment ("assumed equivalence") showed an effect for sexual offender treatment. Schmucker and Losel (2008) found: "Restricting the analysis to a few randomized trials shows a comparable mean effect but it does not render it statistically significant" (p. 17). Similar to Hanson et al. (2002), Losel and Schmucker found that "obligatory" or "mandatory" participation in treatment resulted in no treatment effect; both meta-analyses found that "apparent" voluntary treatment was more likely to have positive results.[1] In contrast to Hanson et al. (2002), Losel and Schmucker found no differences between "current" and older sexual offender treatment programs. Another contrast between the Hanson et al. (2002) and the larger Losel and Schmucker (2005) meta-analyses was that the latter identified a trend for lower effectiveness in institution-based programs, whereas the former did not. Losel and Schmucker's (2005) finding was similar to what Polizzi, MacKenzie, and Hickman (1999) had concluded previously, namely, that "…the evidence is not strong enough to support a conclusion that [prison-based programs] are effective" (p. 357). They concluded "Bearing the methodological problems in mind, one should draw very cautious conclusions from our meta-analysis" (p. 135). Similar to Losel and Schmucker, Hanson, Bourgon, Helmus & Hodgson et al. (2008; Hanson, Bourgon, Helmus & Hodgson et al. 2009) found that approximately 80 % of included studies were characterized by weak research designs and that more positive results were associated with more methodologically flawed studies. They concluded that if only higher-quality studies were considered, it would be reasonable to conclude that there was no evidence that psychosocial treatment decreases sexual offense recidivism. The Institute of Health Economics (Corabian, Opsina, & Harstall, 2010) interpreted the available data to suggest that sexual offense treatment had been shown to provide "small" reductions in sexual offense recidivism. However, the SBU found that the scientific evidence was insufficient for determining whether that such treatment could reduce sexual offending. Finally, one of the most recent, most rigorous reviews of treatment, for both CBT and psychodynamic interventions with meaningful follow-up data, Dennis et al. (2012) noted that "…neither showed any benefit for the intervention. Thus, neither… appeared to reduce sexual recidivism" (p. 35). This finding was similarly confirmed by Langstrom et al. (2013). All of the systematic reviews and meta-analyses to date have concluded and emphasized that the field of sexual offender treatment has been characterized almost exclusively by poor-quality methodology (including lack of RCTs and small numbers of subjects), that the little information was provided about program integrity or about which elements of sexual offender treatment contributed to the outcome of the intervention, and that there remained a need for more research of higher scientific rigor. While some analyses/reviews suggested a positive effect for psychosocial sexual offender treatment, in all cases the effect was "small" and

[1] It should be noted that the criteria for definition of "voluntary" participation were not specified in either study. This is notable given the data that the majority of "voluntary" sexual offenders are likely to be under a legal mandate to obtain sex offender treatment either during or after incarceration.

the words utilized to describe the limited positive results for sexual offender treatments were "cautious" or "tentative". As Rice and Harris (2012) put it, "no one has seriously argued that the effects of [sexual offender] treatment are large" (p. 17). Further, as Kirsch and Becker (2006) noted, "…between 10 % and 30 % of treated offenders sexually reoffend within 5 years of their release" (p. 211). Regarding sex offender treatment, Prentky et al. (2011) stated: "Application of an evidence-based metric to assess treatment of sex offenders in prison yields underwhelming results …" (p. 128); they noted that the "evidence" part of evidence-based treatment is lacking.

Several issues qualify the poor results of the available SRs and MAs. The primary basis for an inability to demonstrate persuasive effectiveness for sexual offender treatment was the fact that, effectively, only two RCTs are available in the field. Only one of these RCTs—that conducted by Marques, Wiederanders, Day, Nelson, and Ommeren (2005) known as the Sexual Offender Treatment and Evaluation Project (SOTEP)—was recent and included CBT, relapse prevention strategies, and aftercare. [Obviously, neither of the two prominently referenced meta-analyses of psychotherapies for sexual offender treatment (e.g. Hanson et al., 2002, Losel & Schmucker, 2005) referenced this seminal study.] The remaining controlled studies did not randomly assign similar and motivated subjects to treatment and comparison groups. Rather, as noted, most available treatment outcome studies for sexual offenders relied on so-called incidental assignment, which as applied has not typically produced equivalent treatment and control groups (e.g., such control groups typically have contained sexual offenders who, a priori, were likely to be at higher risk for sexual offense recidivism such as a high percentage of potential treatment refusers or dropouts).

Methodological issues in sexual offender treatment literature include limitations of meta-analysis; inadequate length and methods of follow-up of subjects, including failure to utilize survival analysis in outcome measurements; posttreatment experiences such as probation and additional services; allegiance effects; extreme exclusion or restriction of subjects studied; and the failure to utilize random assignment of motivated subjects in well-controlled designs. Thus, at best, if one considers quasi-experimental research studies, a relatively small effect relative to decreased recidivism is demonstrated for treating low- to moderate-risk sexual offenders. However, if only higher-quality research studies (such as those involving RCTs) are considered, from an empirical perspective, no definitive scientific evidence has yet been presented that when sexual offenders are provided with psychotherapy those interventions associated with any reduction of sexual offense recidivism.

The largest problem with existing sexual offender treatment outcome studies is the failure to utilize RCTs. This has several components to it. To begin with, while in general RCTs, the subject sample includes persons motivated for the treatment of interest, in the sexual offender treatment field, at least two factors influence the nature of the offenders studied. First, many or most sexual offenders are not even offered the possibility of treatment. As Hoberman (2015b) reviewed, a number of the available studies have excluded various types of sexual offenders the opportunity to participate in the outcome study, including those deemed most "severe," more significant criminal history, persons who denied their sexual offenses, and other comorbid conditions (e.g., low intellectual ability). Effectively, it is very likely that the most high-risk sexual offenders are screened out and not even eligible for inclusion in sexual offender treatment outcome studies. Additionally, by only accepting persons willing to volunteer for sexual offender treatment, studies further excluded those sexual offenders unmotivated for psychotherapy, most of whom might also be regarded as high risk. Harris et al. (1998) have strongly argued that the utilization of persons who volunteer for and persist with treatment effectively screens out more higher-risk sexual offenders. As a result, sexual offenders who do "volunteer" for sexual offender treatment appear to be an unusual group of sexual offenders in some ways that have been identified and others that remain unknown. The available evidence demonstrates that sexual offenders who choose or self-select to participate in sexual offender treatment are a different group of sexual offenders from those who choose not to participate or those who are excluded from participating (despite the fact that many of those may be under some mandate to complete sex offender treatment at some point). Finally, almost all existing studies of sexual offender treatment excluded treatment dropouts from their treatment group (e.g., contrary intent-to-treat principles). In short, as a group, participants in sexual offender treatment outcome studies appear to be a distinct group, both at lower risk and perhaps more genuinely motivated for treatment. As writers (e.g., Marshall & Marshall, 2007) suggested, such exclusionary criteria should bias controlled outcome studies *in favor* of finding a treatment effect.

In contrast, the compositions of incidental comparison groups are in the opposite direction, namely, a greater proportion of higher-risk sexual offenders. Thus, in Hall's meta-analysis, several studies included offenders who either refused or quit sexual offender treatment. In the existing incidental assignment studies, researchers have resorted to various groups of offenders to serve as a "control" condition including identified treatment refusers, treatment dropouts, persons selected from a general group of sexual offenders, and/or general sexual offenders matched to a treatment group on one or more variables. Obviously, treatment dropouts and refusers reflect higher-risk groups for comparisons. However, it has been demonstrated that other incidental comparison groups are also problematic for determining if the treatment condition for sexual offenders is actually effective. If 2/3 or

5/6 of the general pool of sexual offenders do not volunteer for sexual offender treatment, that means the group of sexual offenders potentially available to participate in control groups is biased; they are much more likely to be unmotivated and higher risk. Consequently, when investigators select their comparison group from some set of sexual offenders, that comparison group will necessarily contain a significant portion of offenders who would be deemed higher-risk/more severe offenders, have multiple problems or comorbid conditions, would/did not volunteer for possible inclusion in a treatment study, would refuse treatment if included and assigned treatment, and/or would drop out from treatment—all subsets of sexual offenders who would likely carry a higher risk for sexual offender recidivism. Thus, a priori, even before the results were calculated, the comparison group(s) would be highly likely to be characterized by higher probabilities of sexual reoffending. In addition, Rice and Harris (2003) have pointed out that in several studies included in "incidental assignment," a *double error* was committed: offenders who refused treatment were not counted as part of the treatment condition (decreasing likely recidivism) but were counted as part of the control group (increasing recidivism). In effect, the "small" or "tentative" positive results sometimes attributed to reviews of sex offender treatment research studies are largely due to the fact that both initial (and probably truly or meaningfully) seeking and volunteering for sex offender treatment (e.g., not being mandated to obtain such intervention in relation to a criminal justice or other legal order) and persisting in such treatment serve as significant screen against the inclusion of higher-risk sexual offenders and in favor of lower-risk offenders. Consequently, sex offender treatment efficacy will be grossly overstated if those who do not volunteer for treatment, those who actively refuse treatment, and those would likely refuse if asked or dropped out of psychosocial interventions are not accounted for in study design and data analysis.

Summarizing the state of the scientific literature at the time, Rice and Harris (2003) concluded: "In our opinion, few useful scientific data on effectiveness can come from studies contrasting treatment completers with sex offenders not offered treatment because such contrasts almost inevitably entail non-comparable groups…The current empirical support suggesting beneficial effects of treatment rests on the use of non-comparable groups in which control subjects were of higher *a priori* risk." (p. 432, 437) In a later analysis some nine years later, Rice and Harris (2012) again concluded: "The most parsimonious interpretation of finding from weaker designs is that pre-treatment differences and other forms of selection bias are responsible for apparent treatment effects" (p. 22). Thus, even prior to implementing treatment, in incidental studies that find "small" differences between treated and untreated offenders, such differences should be expected based simply on the *likely preexisting differences in sexual offense recidivism rates* between those selected into treatment and "control" groups. That is, the preexisting risk-related differences between sexual offenders who volunteer for and complete sex offender treatment would lead to a reduced rate of sexual offense recidivism particularly when those volunteer/completers were compared to groups that included sexual offenders not offered such treatment (often for specific reasons related to presumed severity of pre-existing characteristics), who refused such treatment or who dropped out from such treatment. Given the selection factors in the SOTEP study were in favor of finding a positive result for the treatment group as suggested, it becomes even more significant that no finding of an effect for sexual offender treatment was obtained. Given the totality and coherence of the available information about sexual offender treatment, the most reasonable conclusion is that sexual offender treatment *does not* lower the rate of sexual offense recidivism below that of the average sexual offender, but rather that rates of sexual offense recidivism for *persons used as comparison groups are significantly higher than the average sexual offender*. Thus, the differences between treatment and control groups are not due to psychosocial treatment but *rather preexisting risk status*. Further, numerous studies have demonstrated that pretreatment assessments of sexual offenders are more predictive than posttreatment assessments relative to sexual offense recidivism, suggesting that little meaningful or substantive intraindividual change occurs for participants in sexual offender treatment. As Prentky et al. (2011) stated regarding the general results of sex offender treatment research and the specific findings of SOTEP: "Ignoring what is generally regarded as the gold standard is hazardous…We would argue that it is pointless to debate the superiority of the RCT design in the abstract without acknowledging the reliable findings on efficacy of prison-based sex offender treatment are compromised by innumerable methodological problems…the California Treatment Project was far more rigorously controlled and run and closer to expectation of how treatment in general should be delivered…" (p. 120).

Thus, unlike many presenting problems addressed with psychosocial interventions by mental health professionals, many sexual offenders apparently do not reduce their risk of sexual reoffending via participation in psychotherapy and, perhaps relatedly, do not evidence valid personal change. That is, psychotherapies are generally somewhat effective for persons with anxiety and depressive problems, and, while less effective, such treatments do appear to result in reductions in core signs and symptoms that are maintained over time of serious treatment refractory conditions such as eating disorders and alcohol and drug dependence. Given the status of the outcome literature regarding sexual offender treatment and its potential importance to offenders, the community,

and policy-makers, it seems useful to consider why this collective set of approaches have resulted in such limited results. A multitude of factors can be identified that appear to provide particular clarity for the failure to demonstrate the efficacy of psychotherapy with the group of individuals who commit sexual offenses.

History of Development of Sexual Offender Treatment

The manner in which the general principles and practices of sexual offender treatment were identified and implemented has important implications for its current status and bears consideration. Several authors have provided perspectives on the development of programs of sexual offender treatment or "rehabilitation" over the past 50 years (e.g., Laws & Marshall, 2003; Marshall & Laws, 2003; Marshall, Marshall, Serran, & O'Brien, 2011; Schwartz, 2003). As these writings make clear, it is particularly notable that much of what constitutes the elements and practices of sexual offender treatment was developed not from theory per se (e.g., a model of "why" individuals commit sexual offenses). Rather, it seems more correct to state that specific clinical strategies were "borrowed" from clinical applications already being implemented with other behavioral problems; those developers of sexual offender treatment largely emulated the current practices of treatment and applied them to sexual offenders. Alternately, when intervention strategies were derived from more theoretical perspectives, they were often not empirically demonstrated before being applied with enthusiasm. In addition, the histories of sexual offender treatment indicate that such interventions initially developed following the lead of institutional programs for other behavioral problems and only later, over time, were influenced by particular research efforts.

Schwartz (2003) noted that in the United States, most sexual offender treatment programs were initially developed and delivered in institutional settings and that "the treatment of sexual offenders has largely emulated the treatment approaches that were popular for the general population at that specific time" (p. 360). She reported that in the East Coast, the predominant interest in psychodynamic approaches focused on the exploration of early dynamics such as one's own traumas. In contrast, institutional programs on the West Coast developed highly confrontational group approaches that focused on breaking down denial and "resistive personality dynamics" as a means of accepting responsibility for one's behavior. In addition, Schwartz noted that West Coast models of institutional treatment of sexual offenders (e.g., Western State Hospital's sexual psychopath program in Washington State) were also characterized by a "structured self-help" model, which relied heavily on groups that were largely operated by the patients themselves (with therapists' roles ones of monitoring or facilitating the group process). Schwartz also noted that such group treatments of sexual offenders were influenced by the confrontational style common to substance abuse treatment programs at the time. As a result of these different perspectives, sexual offender treatment was initially implemented quite differently depending on the region of the country in which a program was located, and these differences continued up to the 1990s. In addition, Schwartz also noted that the Oregon State Hospital sexual offender treatment program established in the 1980s (for sexual offenders from the Department of Corrections who voluntarily transferred to the state hospital) also introduced the use of psychoeducational approaches, the penile plethysmograph, and behavioral techniques to institutional treatment programs. In short, the early institutional treatments for sexual offenders were largely group treatments (often of a confrontational nature), with an emphasis on "self-help" from fellow group members, supplemented by psychoeducational experiences.

A particularly interesting point made by Schwartz (2003) was that in Washington State and in Massachusetts, staff emerged from the first generation of institutional programs for involuntarily committed sexual offenders to establish private practices and community-based programs for sexual offenders.[2] Thus, Schwartz suggested that general sexual offender treatment in the United States effectively evolved from institutional programs developed for those offenders perceived to have more extreme problem behavior (e.g., those who were involuntarily civilly committed or serving lengthy criminal sentences) and then were applied to a more diverse population of sexual offenders who received treatment in varied community settings. However, according to Schwartz, key differences emerged in the delivery of treatment to sexual offenders in the community. While institutionally based programs historically devoted considerable time to direct treatment (10–12 hours per week) which was supplemented by a variety of other therapeutic activities, outpatient sexual offender treatment was often limited to one or two 1–2 hour sessions per week. As Schwartz pointed out:

> With up to 12 individuals in a group, there is little time for anything other than monitoring how participants have coped with risky situations during the past week. If one individual is in crisis, other members may have trouble finding any time to comment on their adjustment. There is also little time for formal skills training or teaching new members how to prepare a relapse prevention plan. (p. 365)

[2]It should be noted that most states eliminated these programs in the 1970s and 1980s because of the conclusion (primarily by psychiatrists) that sexual offenders committed to these programs were either "untreatable" or "not amenable to treatment" and should received disposition in the criminal justice system and not the mental health system.

One important element of sexual offender treatment did arise from a theoretical perspective. An important early and influential article was that by McGuire, Carlisle, and Young (1965). They suggested that "sexual deviations" were the product of accidental early sexual experiences that resulted in the later pairing of masturbatory activity and sexual fantasy, which in turn resulted in one or more sexual preferences. Further, they suggested that sexual fantasies might lose their potency (reinforcement potential) over time and result in the use of (increasingly) greater "deviance" in such fantasies to enhance sexual arousal. Per Laws and Marshall (2003), "the hypothesis was so appealing that it was rapidly accepted as doctrine and is still widely embraced nearly 40 years later. Acceptance of this theory demanded that the focus of treatment be directed at eliminating deviant sexual preferences" (p. 84). Consequently, a variety of aversion therapies for treating "sexual deviance" were developed involving administering a highly aversive stimulus in conjunction with stimuli depicting deviant sexual behavior or inappropriate sexual behavior itself. Bancroft (1974) reviewed various efforts to "decondition" deviant sexual behavior through pairing the experience of deviant sexual interests with various aversive stimuli (e.g., electrical shock, nausea-inducing drugs); he concluded that such tactics were effective in reducing deviant sexual arousal and behavior. Per early reviews, a belief developed that changing deviant sexual interests would "automatically" both eliminate such interests and result in the emergence of "appropriate" sexual behavior. However, Marquis (1970) advocated "orgasmic reconditioning," a process that involved having an offender masturbate to orgasm while either watching or fantasizing about normative sexual behavior with appropriate adult partners. He proposed that atypical sexual interests could not simply be eliminated but that individuals with such interests needed to have their sexual interests in appropriate objects encouraged and otherwise reinforced. Thus, an early emphasis from research settings but based on early behavioral therapy models suggested that the primary means of treating sexual offenders was through modifying what was viewed as ubiquitous presence of deviant sexual arousal.

Later in the 1970s, per Marshall's various writings, paralleling changes in the more general behavioral treatment of various disorders, there was an increased emphasis on cognitive aspects of treatment for sexual offenders. In one of the first uses of cognitive procedures, Cautela (1967, 1970) advocated the use of covert sensitization and reinforcement; thus, he suggested that "deconditioning" could be affected in the "head" of an offender by the "experience" of pairing deviant sexual images with aversive cognitive stimuli (e.g., embarrassing or negative imagery). Maletzky (1973) modified this procedure via "assisted" covert sensitization where noxious odors were added to the presumed aversive images that offenders reported pairing with deviant fantasies or images. "Satiation therapy" was developed as a procedure in which an identified "inappropriate response" (e.g., deviant sexual behavior or arousal) is eliminated by repeatedly eliciting that response until the desire for the stimulus itself is presumably eliminated via boredom. Marshall (e.g., 1979) reported controlled single-case experimental demonstrations for the effectiveness of a procedure identified as satiation therapy. This procedure involved the offender continuing to masturbate during the refractory period post-orgasm while asked to repeatedly experience his deviant sexual fantasies. The expectation was that the experience of boredom and/or a lack of arousal might "decondition" the association of deviant sexual arousal and reinforcement, thus leading to a potential reduction or even extinction of arousal to deviant sexual images and, subsequently a potential decrease in masturbating to such images. Per Marshall, O'Brien & Marshall (2009), the procedure was subsequently modified to one involving "verbal satiation" where clients would verbalize aloud "every variant they can create on their deviant images for no more than 10 minutes after 2 minutes post-orgasm" (p. 323).

In a significant expansion of sexual offender treatment, Marshall (1971) proposed that sexual offenders might lack critical social skills and recommended the expansion of intervention to include the teaching of such skills; Becker, Abel, Blanchard, Murphy, and Coleman (1978) later made similar suggestions. In addition, following after Meichenbaum (1974) and Beck (1975), treatment of sexual offenders began to address the hypothesized mediating role of cognitions such as attitudes and beliefs. Thus, over time, case studies and theoretical articles began to emphasize the inclusion of treatment targets such as social and assertiveness skills, empathy for victims, self-esteem of offenders, social cognitions, and "distorted" cognitions that might be related to offending. Additional behavioral targets presumed to be linked to sexual offending such as anger, substance abuse, and social skills deficits also became common intervention components of more comprehensive, multi-target CBT interventions. Based, in part, on broader *conceptualizations* that thoughts, emotional states, and behaviors hypothesized to be related to sexual offending, sexual offender treatment evolved to encompass teaching sexual offenders multiple cognitive and behavioral skills to identify and modify their sexually and otherwise deviant behaviors. Similar to other behavioral disorders or psychological conditions, the primary treatment of sexual offenders developed into "integrated" or "multifaceted" programs that included both cognitive and behavioral modules that were either presumed or theorized to reduce propensities for sexual offending (e.g., Becker et al., 1978; Brownell, 1980; Marshall, Earls, Segal, & Darke, 1983; Marshall & Williams, 1975). However, little or no primary scientific study of the actual effects of these various specific cognitive and behavioral modules on specific or general aspects of sexual offenders was conducted to serve as base

for incorporating such elements of interventions. That is, social skills training or cognitive modifications were not demonstrated to affect sustained changed in the thinking or social relations of sexual offenders. Thus, with almost no empirical foundation, primarily behavioral sexual offender treatment programs became cognitive-behavioral therapy (CBT) programs. That is, little basic research on the etiology or maintenance of theorized elements of sexual offending was available or initiated. Consequently, largely generic theories of possible etiological factors related to sexual offending guided the development of sexual offender treatment in the 1970s and 1980s. In turn, Marshall and Barbaree (1984) developed a thoughtful and more comprehensive model of the etiology of sexual offending. This particular perspective effectively provided further endorsement of CBT approaches as the treatment of choice for sexual offenders (e.g., Marshall, Jones, Ward, Johnston, & Barbaree, 1991).

Both Schwartz and Marshall and his coauthors have identified that "There can be little doubt that the most significant innovation of the 1980s was the adaptation from the addictions field of the relapse prevention model" (Marshall & Laws, 2003, p. 98). Marlatt's (1982) the relapse prevention (RP) model for the management of addictive behaviors was based on the observation that after the end of formal treatment, relapse rates among substance abusers approached 80 % within the first 12 months posttreatment. The theory was that for addictive and other presumed impulse control disorders, persons encounter "high-risk" situations and must be taught how to self-manage high-risk situations (e.g., so lapses into high-risk behavior did not become relapses). RP interventions offered substance abusers specific training in the identification of potential relapse signs and coping methods to interrupt a hypothesized chain of events (high-risk situations, leading to distress leading to failed coping) which lead to lapses or relapses of substance use. Per Marlatt and George (1984):

> RP is a self-control program designed to teach individuals who are trying to change their behavior how to anticipate an cope with the problem of relapse…[which] refers to a breakdown or failure in a person's attempt to change or modify any target behavior…Based on social cognitive principles, RP has a psychoeducational thrust that combines behavior skill-training procedures with cognitive intervention techniques. (p. 2)

Thus, RP was originally conceptualized as a *maintenance strategy* after a treatment program—to sustain the effects of a primary, efficacious treatment program—and *not* as a primary treatment. Based on the possibility that sexual offenders were similar to persons with addictive conditions, Pithers, Marques, Gibat, and Marlatt (1983) provided the first description of how Marlatt's RP model for management of addictive behaviors might be applied to the treatment of sexual offenders. It was hypothesized that if an offender learned self-management strategies to deal with risks or threats to maintaining abstinence (e.g., potential offense precursors), then sexual offense recidivism could be obtained. Of note, the success of RP was effectively contingent on a presumption that "successful" primary treatment had occurred for a sexual offender. As Kirsch and Becker (2006) noted, "RP assumes that sexual offending follows a predicable part in which covert planning and a series of seemingly irrelevant decisions set sexual offender up for risk for reoffending" (p. 210). However, they noted that at the time of its adoption, there was no theory or scientific evidence that particularly pathways were identified for sexual offenders.

At the time that RP was first applied to sexual offenders, no empirical studies of the RP model applied to sexual offenders existed. Rather, it appears that "face validity" of the model and ease of implementation guided the widespread adoption of the RP model. Thus, select state institutional treatment programs (e.g., in Vermont and California) made RP the centerpiece of multidimensional cognitive-behavioral programs for sexual offenders. Effectively, in those programs, sexual offender intervention became cognitive-behavioral relapse prevention (CBT-RP). In turn, the vast majority of institutional- and community-based sexual offender treatment programs relatively quickly and uniformly adopted the RP model as the center of their intervention programs. In 1996, Marshall suggested that the addition of RP was the most significant innovation in the treatment of sexual offenders. However, as Marshall and Anderson (1996) emphasized the implementation of RP, they also noted that its implementation was actually marked by differences and inconsistencies in programs said to be based on the RP model.

In Canada, general criminological principles have had a significant influence on the treatment of sexual offenders. Relying on the results of meta-analyses, Andrews and Bonta (1994, 2006) advocated for a model of intervention for general criminal offenders that has become known as the risk-needs-responsivity (R-N-R) model. This model proposed that interventions were most effective when they were directed at offenders with the highest risk and the greatest set of criminogenic needs in a manner responsive to the nature of the offenders. That is, providing the most intensive and broadest treatments to high-risk offenders, by means of targeting criminogenic needs (those functionally related to criminal offending), is viewed as particularly effective. In addition, it was argued that interventions be provided in a style and mode that is responsive to the offender's learning style and ability (typically CBT). Reviewing the extant literature,[3] Andrews and Bonta found that the more that interventions incorporated R-N-R principles, the greater the

[3]However, that extant literature was and continues to be based predominantly on quasi-experimental studies (not RCTs) and includes almost no studies with follow-up periods longer than 2 years.

later reduction in criminal recidivism. Hanson, Bourgon, Helmus & Hodgson et al. (2009) in a MA found statistically significant support for interventions for sexual offenders based on need and/or responsivity but not for risk; they could not identify any studies that utilized all three processes. Of note, Losel and Schmucker (2005) found that general interventions developed for general criminal offenders had no effect on sexual offense recidivism; rather, they found that only sex offender-specific treatments provided any positive results on such recidivism.

Wheeler and Covell (2013) developed recidivism reduction therapy (3RT) in response to their identification of the limitations of relapse prevention approaches and to incorporate what they viewed as "best practices" that have been identified by more recent clinical research. 3RT was developed to accomplish the following goals: (1) to address identified limitations of the popular—but insufficient—RP model for sexual offense treatment; (2) to explicitly incorporate the "doing what works" approach to sexual offense treatment (specifically the R-N-R model); (3) to employ dynamic risk assessment as the dominant conceptual framework for treatment planning and implementation; and (4) to utilize other existing empirically based practices and apply these to the behavioral, emotional, and cognitive deficits that are associated with sexual offense behavior. Viewing RP as based on the presumption that sexual offending was based on an avoidance-based coping strategy (e.g., to avoid negative emotional states) be ignored the rewarding dimensions of sexual behavior, 3RT includes increased emphasis on "approach-based sexual offending." It is one of the few contemporary models that is primarily directed at presumed skills deficits of sexual offenders and recommends contemporary CBT approaches to remediate those deficits.

A related set of developments in the theory and practice of sexual offender treatment occurred in the past decade as Yates (2014, 2015) has described. Both the self-regulation or pathways model (SRM; Ward & Hudson, 2000) and the good lives model (GLM; Ward & Gannon, 2006; Ward & Stewart, 2003) were originally proposed as complementary approaches to address problems inherent in the traditional RP approach. Recently, the GLM and SRM were themselves integrated into a comprehensive treatment approach (Ward & Gannon, 2006; Yates, Prescott, & Ward, 2010; Yates & Ward, 2008), and it has been claimed that the GLM and SRM offer a superior approach to interventions based on the R-N-R principles of Andrews and Bonta (2006). The GLM is based on an "approach" model that offers "a positive view of both the character and future responsibilities of sexual offenders" and suggests "…sex offender treatment should aim to identify and seek to achieve for each client a personalized good life" (Marshall et al., 2009, p. 11). The thesis of the GLM is that identifying and improving skills, attitudes, and behaviors that lead to a "good life" for a sexual offender (generally speaking) will necessarily ameliorate criminogenic needs.

Similarly, Marshall et al. (2011) offered a "strength-based approach" as another "positive" approach to treating sexual offenders. Per the authors: "Treatment…should develop or enhance the prosocial skills of sexual offenders so they will be equipped to pursue productive relationships and all the other features of a good life" (p. 25). Marshall et al. (2009) suggested:

> One of the major inferences we have drawn from the positive psychology movement for the treatment of sexual offenders concerns a shift in therapeutic attention (a) from the focus on the details of past offenses to the identification of areas of functioning that need to be enhanced; (b) from an exclusive concern about clients' deficits to a more strength-based emphasis; (c) from an elaborate detailing of potential future risks to the generation of future possibilities for a better life; and (d) from the production of an extensive lilts of situations, thoughts, feelings and behaviors to be avoided in the future to the development of approach behaviors that will enhance their life. (p. 19)

Collectively, these approaches share several values or perspectives: that sexual offenders are heterogeneous and have committed sexual offenses in the pursuit of different offense-related goals; that sexual offenders have the capacity to change; that sexual offenders can cultivate and develop strengths, a focus on what the offender will gain from treatment, particularly in terms of finding alternate means of reaching general goals; and that sexual offender treatment should be differentiated to address the particular offense pathway(s) of a sexual offender and the manner or degree to which sexual offending provides a means to obtain his particular goals and needs. Overall, these approaches as a group take a holistic and humanist perspective on psychotherapy with sexual offenders. They aim to provide sexual offenders with the skills, attitudes, and beliefs that will allow them to achieve greater life satisfaction by identifying goals and taking the steps needed to achieve them. However, to date, while there has been an extraordinary proliferation of professional writing on the purported value of GLM and strength-based approaches, there has been virtually a complete absence of traditional scientific evaluation of such theoretical models of treatment. In the one study that directly compared a GLM and an RP approach to the treatment of sexual offenders on probation—despite utilizing a variety of methods to measure change—Barnett, Mandeville-Nordin, and Rakestrow (2014) found "there is no great difference between the two types of program approach, in effecting change in those who, prior to treatment, are dysfunctional in various dynamic risk factors" (p. 30). They summarized their results: "The groups were compared on their level of psychometric change over treatment on individual measures, on measures grouped by dynamic risk domain, and on overall psychometric change,

using a variety of analyses, including examination of clinically significant change. There were no differences in amount of change over treatment or, for those deemed as requiring change, clinically significant change, by program approach, for the majority of the measures examined" (p. 3). This despite the GLM group was found to be less dysfunctional than the RP group. Further, there was no difference in attrition rates between the treatments despite the hypothesis that GLM treatment would be more engaging and motivating for sexual offender participants. Barnett et al. concluded that their study found "…there is no great difference between the two types of program approach, in effecting change in those who, prior to treatment, are dysfunctional in various dynamic risk factors. It appears that the GL approach may be better at helping those already functional before treatment, to sustain their functionality…" (p. 30).

More broadly, not one of these models have yet to be tested via RCT, so there is no rigorous empirical evidence that any of the newer, proposed theories of sexual offender treatment "work" or are effective at affecting change in sexual offenders, particularly in reducing future sexual offending.

Possible Factors Related to the Lack of Evidence of Effectiveness for Sexual Offender Treatment

The extant data suggests, at best, "small effects" of sexual offender treatment for low- to moderate-risk sexual offenders in nonrandomized controlled studies. In contrast, in the only relatively contemporary RCT study of sexual offenders, the aforementioned SOTEP (Marques et al., 2005) produced no significant differences for low- to moderate-risk sexual offenders. More broadly, per all recent systematic reviews (e.g., Dennis et al., 2012; Langstrom et al., 2013; Rice & Harris, 2012), given the absence of rigorous scientific studies available, the problematic nature of interpreting results of non-controlled studies, and the failure to demonstrate treatment efficacy in the only RCT, it seems clear that there is no empirical evidence that sexual offender treatment "works" for the typical sexual offender; sexual offender treatment as practiced appears to have few or no effects in terms of meaningful personal change for sexual offenders and/or reduced sexual offense recidivism. Nonetheless, sex offender treatment continues to be offered to stakeholders as a primary means for community safety; increasingly the value of such treatment is being advocated as the appropriate mechanism for improving dysfunctional aspects of the lives of sexual offenders. Given the rather dismal research findings for such a uniquely important group of criminal offenders, it is worth considering those findings and issues which appear most likely to contribute to the apparent ineffectiveness of sexual offender treatment to date as a means of both general behavioral change and reducing sexual offense recidivism. A substantial set of identifiable factors might be related to the failure to demonstrate efficacy for psychotherapy for sexual offenders.

Client Characteristics in Relationship to Psychosocial Treatment

Heterogeneity of Type and Severity of Predisposing Conditions for Sexual Offending: High Risk, Multiple Needs, and Varying Pathways to Sexual Offending

As noted earlier, the largest amount of variance in or contribution to general psychotherapy outcome in general is related to client characteristics; in their review, Bohar and Wade (2013) indicated that between 30 % and 87 % of the variance in general psychotherapy outcome is identified as related to the client. They suggested that rather than argued over whether or not "therapy works," the appropriate questions regarding treatment outcome is whether "the client works." It is important to acknowledge that sexual offenders as a group are ubiquitously characterized as heterogeneous, in terms of variability in their criminal history and the nature and degree of primary criminogenic needs (e.g., deviant sexual interests, antisocial and other maladaptive personality characteristics, and social relations). Some sexual offenders are identified by the known target or type of their sexual offense or sexual offenses (e.g., as rapists, child molesters, incest offenders, non-contact offenders, statutory rapists, and persons possessing child pornography). However, there is also significant crossover in sexual offending among a large minority of sexual offenders, so that a sizeable proportion of sexual offenders engage in multiple sexually deviant behaviors (Abel et al., 1988; Heil, Simons, & Ahlmeyer, 2003; Weinrott & Saylor, 1991). There is a subgroup of sexual offenders who would be described as having one or more paraphilic disorders (characterized by recurrent, intense sexual fantasies, urges, or behaviors involving something other than "sexual interest in genital stimulation or preparatory fondling with phenotypically normal, physically mature, consenting human partners" (American Psychiatric Association, 2013) that causes distress to the individual or harm to the person or others). A significant issue is that, apparently, a number of sexual offenders' sexual offenses are not predominantly the result of strongly or uniquely deviant sexual interests (or that current research methods have failed to accurately assess and identify the presence of deviant sexual interests). Consequently, at least per studies of sexual recidivists (e.g.,

Hanson & Bussiere, 1998; Hanson & Morton-Bourgon, 2004, 2005), there are apparently a relatively large group of sexual offenders who are characterized by a variety of personality and related conditions that singly or in combination result in sexual offenses, including repeated patterns of such offending. A large proportion of this second group is considered to be motivated by largely antisocial, unstable, narcissistic, or social personality characteristics (see Hoberman (2015a) for a discussion of nonsexual personality and other conditions related to sexual offending). Yet another group is a "mixed" group whose sexual offending is likely a function of interactions of deviant sexual interests and antisocial/psychopathic characteristics. In addition, most research indicates that a significant number of sexual offenders may be characterized by a high degree of psychiatric comorbidity (e.g., depression, anxiety, varied and multiple maladaptive personality traits, as well as intellectual limitations and learning disorders).

Conventionally, psychosocial treatments are directed at risk factors presumed to be causally related to the development and maintenance of a biopsychosocial problem; such factors have been identified by reviews of available retrospective data evaluation and field study of persons who have committed sexual offenses; they are derived largely from convenience samples. Relative to sexual offenders, there are no prospective studies of initiating etiological factors but only studies of risk factors for sexual offense recidivism that can provide some guidance toward relevant treatment targets; consequently, little, if nothing, is known about risk factors for initiating sexual offending. In addition, information exists about only those risk factors theorized to be related and measured that provide some basis for inferring that they are risk factors. Variables that were theoretically excluded or inadequately measured would not emerge as identified risk factors and/or criminogenic needs. Based upon the available scientific literature, particularly the three meta-analyses conducted by Hanson and associates (e.g., Hanson & Bussiere, 1998; Hanson & Morton-Bourgon, 2005; Mann, Hanson, & Thornton, 2010), there is no one risk factor that is uniquely and strongly associated with sexual offending. Rather, there are two predominant (relatively primary) sets of risk factors, deviant sexual interests/sexual preoccupation and nonsexual predisposing conditions, primarily antisociality, that are, relatively, most strongly predictive of future sexual offender. However, neither of these factors measured on its own accounts for a very large portion of the variance in sexual offense recidivism. In addition, there are other psychosocial risk factors that are predictive of future sexual offending but to a lesser degree. Consequently, at this time, it appears that sexual offending is the result of various accumulations of multiple predisposing factors, which presumably interact with one another in various ways to potentiate and mitigate their risk qualities. In addition, situational factors are also likely important, given the "if then" or "behavioral signature" nature of psychological-related risk factors (e.g., Mischel & Shoda, 1995, 1998; Mischel, 2004). Yates (2007) following Ward and Hudson (2000) has called attention to the limitations of traditional CBT-RP relative to the potential diversity of pathways to sexual offending, particularly offenders characterized by explicit approach goals, active planning of offending, and/or the active pursuit of deviant sexual interests. In a recent article, Kingston, Yates, and Firestone (2011) reported that so-called approach-automatic or approach-explicit pathways characterized approximately 64 % of sexual offenders. In short, while there are probably some commonalities of combinations of risk factors associated with sexual offending, in addition to likely differing across subgroups of sexual offenders (e.g., rapists, child molesters), they may also differ in potency/primacy at different times and situations; they may also differ both generally and across offenses in their "pathway" to sexual offending. Thus, the potential treatment targets for sexual offenders may differ significantly across types of offenders and within types of offenders. At best, only crude attempts have been made to differentiate potential subtypes and pathways of sexual offending.

In addition, it can also be argued that much remains to be learned about the etiology of the maintenance and repetition of sexual offending. To date, there are no meaningful prospective studies that have been conducted to identify risk factors for the initiation of sexual offending. It can be argued that, from a scientific perspective, virtually nothing is known about why particular individuals initiate sexual offending. Existing empirically studies have focused on sexual offense recidivism (repeated sexual offending) after detection and sanction for one or more sexual offenses. Thus, the three meta-analyses of risk factors for sexual offense *reoffending* are those of Hanson and Bussiere (1998), Hanson and Morton-Bourgon (2004), and Mann et al. (2010). Further, these studies individually and collectively indicate that no one risk factor or predisposing condition is determinative of sexual offense recidivism. Rather, maximum associations or correlations of identified risk factors are typically .30 or less and individually account for some small degree of variance (albeit similar to identified risk factors for other mental health conditions). To date, few studies have looked at cumulative sets of risk factors and their association with sexual offense recidivism and the degree of variance in sexual reoffending they account for. Consequently, empirically, while primary dimensions of sexual offense recidivism have been consistently identified, they do not yet provide a relatively comprehensive perspective on the primary main effects and/or interactions among multiple risk factors that underlie sexual reoffending. This degree of scientific impoverishment clearly

constitutes at least one obstacle toward developing an empirically based model or practice of sex offender treatment.

Empirically identified predisposing conditions or risk factors (criminogenic needs) and relative risk to reoffend are overlapping but also independent factors related to sexual offender recidivism. A key issue in the inability to demonstrate the effectiveness of sexual offender treatment may be that a significant proportion of sexual offenders are characterized by multiple cumulative or interacting risk factors such that many sexual offenders manifest a considerable and complex density of predisposing conditions that per models such as those of Malamuth and Knight exacerbate one another or function synergistically. Moreover, the nature of both the sexual dimensions of sexual offending (e.g., paraphilias and paraphilic disorder) and the nonsexual predisposing conditions as described by Hoberman (2015a) is such that they may be extremely difficult to change or modify; central motivators and multiple dimensions of disinhibition may represent conditions that, to date, are relatively impermeable to short-term change via time-limited psychosocial interventions and, if modified or managed temporarily, are highly likely to rebound from a modified to a risk-inducing state. The combination of constitutional or physiologically based conditions, conditions related to early adversity, and other personal elements that provide profound rewards and significant gratification may create very significant obstacles for changes as with other presenting problems. Several studies have now demonstrated that measures of criminogenic needs interact with and add incremental validity to measures of largely static risk factors (Hanson, Andrew, Harris, Scott, & Helmus, 2007; Knight & Thornton, 2007; Olver, Wong, Nicholaichuk, & Gordon, 2007); per Ward and Beech (2006), the types and set of variables measured by these instruments would reflect the current "state" status of more dispositional risk factors. A key difference between the current literature regarding psychosocial programs to reduce criminal recidivism and sexual offense recidivism is that for the former group, programs targeted at high-risk offenders are more effective than others, while per Hanson, Bourgon, Helmus & Hodgson et al. (2009), the risk principle was not demonstrated in their meta-analysis of sexual offender treatments. It is known that the presence of relative psychopathy and deviant sexual interests significantly increases risk for sexual offender recidivism (e.g., Hawes, Boccaccini, & Murrie, 2012); it is not known the degree to which the presence of the so-called dynamic duo affects the outcome of treatment. More generally, it is unknown what effect varied combinations of pretreatment predisposing conditions or risk factors (criminogenic needs) relate to sexual offender treatment outcome. As noted, Kingston et al. (2011) reported that approximately 64 % of sexual offenders were characterized by the so-called approach-automatic or approach-explicit pathways; their results also showed that offenders characterized by approach pathways scored approximately four times higher on a risk assessment measure and significantly higher on measures of dynamic risk factors. Yates et al. noted that offenders characterized by approach pathways would likely require different treatment approaches than those who showed more avoidant pathways and that even the two groups of offenders characterized by approach pathways would likely benefit from different treatment experiences.

In short, there appears to be one group of sexual offenders whose offending may be a one-time event or a time-limited episode with a particular child. However, a significant number of sexual offenders (e.g., as many as 40 % per Hanson et al., 2003; Harris & Rice, 2007) are identified as recidivists and offend against multiple and frequently diverse victims of different ages, gender, and relationship to the offender. To date, research has not identified a single predominant risk factor related to sexual offending but rather has consistently found that sexual offenses appear to be the product of an accumulation of multiple risk factors mediated by situational factors. In addition to predisposing risk conditions, offenders and temporal and situational factors also appear to manifest themselves in diverse "pathways" leading to particular or patterned forms of sexual offending. Thus, from several perspectives, there is a striking diversity and complexity among sexual offenders that, on its face, would create significant problems in developing a standardized treatment program that would adequately focus on the particularly psychologically meaningful risk factors of particular sexual offenders in relationship to the nature and diversity of their sexual offending.

General psychosocial interventions appear to be most effective for clients characterized by emotional concerns and less for those with serious behavioral problems. As the review of psychotherapy in general indicated, psychosocial interventions have a clear but small-to-moderate and time-limited effect for the majority of help-seeking clients, most of whom actively *seek* treatment for relief from negative affect and emotional distress or as a result of perceived impairment in important areas of their lives. For such individuals, many or most interventions, including attention-control conditions, have some positive effect, and most such clients are satisfied with the treatment that they receive. In contrast, the effectiveness of psychotherapy seems much less than the case for persons characterized by more severe and chronic problems, including those that involve maladaptive interpersonal behavior. The evidence reviewed for general psychotherapy indicates that both immediate and more distal outcomes after psychotherapy are considerably reduced by the presence of personality disorders or high levels of maladaptive character traits as well as by overall problem severity and chronicity and social impairment or dysfunction.

The Limitations of Effectiveness of Psychotherapy for Persons with Personality Disorders or Significantly Maladaptive Personality Traits

While CBT has been demonstrated to be at least as effective as other specific forms of psychotherapy in RCTs for mild-moderate depression and anxiety disorders, it has not fared as well with disorders of greater severity or chronicity. Lynch, Laws, and McKenna (2010) in a meta-analysis of well-controlled RCTs found that CBT was not effective in reducing symptoms or preventing relapse for schizophrenia or in reducing relapse in major depression or bipolar disorder. Even in the treatment of major depression, they found that the effect size for reducing symptoms was small. Similar results have been found for persons with comorbid psychiatric conditions and/or high symptom severity. In a Cochrane Review, Hunt, Siegfried, Morley, Sitharthan, and Cleary (2013) included 32 RCTs and found no compelling evidence to support any one psychosocial treatment over another for clients to remain in treatment, to reduce substance use, or to improve mental state in people with serious mental illnesses. In their review, Bohar and Wade (2013) concluded that empirical evidence indicated that severity of symptoms, comorbid diagnoses (largely personality disorders), and functional impairment led to poorer prognosis for treatment outcome. Similarly, previous reviews of Lambert and Ogles (2004) and Clarkin and Levy (2003) had also reported that persons with primary or secondary characterological issues or personality disorders showed less enduring change and were at higher likelihood of relapse. Similarly, Tyrer and Mulder (2006) has pointed out that the "complexity" and severity of a personality disorder (the former defined in terms of meeting criteria for more than one personality disorder and the latter in terms of the possibility of severe disruption to both individual and to many in society) were robust predictors of negative outcome. Thus, in general, the presence of significant maladaptive personality traits or personality disorders is consistently identified as psychotherapy interfering and psychotherapy-effectiveness threatening condition.

Given the repeated findings that personality disorders, particularly antisocial personality disorder, are the second most prominent risk factor or criminogenic need for sexual offenders (e.g., Hanson & Bussiere, 1998; Hanson & Morton-Bourgon, 2004; Mann et al., 2010), such results suggest that the presence of such conditions limits or qualifies the potential for strong effects of psychotherapy with sexual offenders. In 2007, Duggan reviewed treatment for criminal offenders and concluded that such interventions were not informed by relevant scientific findings…. "We have very limited scientific evidence for effective interventions in offenders with Anti-Social Personality Disorder from the mental health field" (p. 2610). A National Institute for Health and Clinical Excellence (NICE) review of "Interventions for People with Anti-Social Personality Disorder" was published in 2009. It identified that "The evidence for the treatment of the constructs of antisocial personality disorder is extremely limited and does not support the development of any recommendations" (p. 177). This NICE report noted that psychological interventions for such persons "were poorly researched and direct evidence on the treatment of this population is scarce." The NICE report also pointed out that previous reviews had failed to identify any high-quality evidence for people receiving treatment for antisocial personality disorder (e.g., Duggan, Huband, Smailagic, Ferriter, & Adams, 2007; Salekin, 2002; Warren, McGauley, & Norton, 2003). The NICE review was a relatively broad review that considered not only interventions that targeted ASPD itself but also those that targeted symptoms or behaviors associated with the diagnosis (such as anger, impulsivity, and aggression) as well as interventions for offenders regardless of diagnosis. Thus, the NICE review suggested that there was limited support for "the use of group-based cognitive and behavioural interventions for non-offending populations with antisocial personality disorder in the community" (p. 190). They also found that psychological interventions for drug abuse (e.g., opioid dependence) indicated that substance abusers with comorbid antisocial personality disorder could benefit from treatment, particularly through the use of contingency management. The NICE review concluded that there "appears to be modest evidence of the effectiveness of group-based cognitive-behavioural skills interventions, delivered in the community and institutional settings, in reducing offending for adults in the criminal justice system" (p. 181). The review noted that such programs have a "small but positive effect" on general recidivism but also identified that younger adult offenders do not appear to respond to such interventions.

More recently, Gibbon et al. (2010) conducted a Cochrane Review of psychological interventions for antisocial personality disorder. They examined 11 studies involving 471 participants but noted that data were available from only five studies involving 276 participants with antisocial personality disorder; only two studies focused solely on an ASPD sample. Each of the 11 studies utilized different psychological interventions, and only two studies reported on reconviction and one on aggression. They concluded that they

> were unable to draw any firm conclusion from the evidence available. Although several studies looked at treatments to reduce drug or alcohol misuse in people with Anti-Social Personality Disorder, few studies focused on treating the disorder itself. Only three studies reported outcome measures that were originally defined in the review protocol as being of

> particular importance in this disorder (reconviction and aggression). Nonetheless, there was some evidence that a type of treatment known as contingency management (which provides rewards for progress in treatment) could help people with anti-social personality disorder to reduce their misuse of drugs or alcohol. Further research is urgently needed to clarify which psychological treatments are effective for people with this disorder. This research is best carried out using carefully designed clinical trials. Such trials should focus on the key features of Anti-Social Personality Disorder. To be informative, they need to be carried out with samples of participants of sufficient size. (p. 2)

Per Gibbon et al: "The current review concluded that good quality evidence favoring any psychological intervention for ASPD is virtually non-existent…The results of this review are that there is insufficient trial evidence to justify using any psychological intervention for those with a diagnosis of ASPD" (p. 35). Gibbon et al. noted that persons with ASPD were "a notoriously difficult group to retain in treatment, as they tend to be treatment-rejecting rather than treatment seeking" (p. 35). Most recently, Gibbon et al. (2011) reported on their analyses and noted that there were few studies of psychotherapy with ASPD that focused on outcomes such as reconviction, aggressive acts, or other rule breaking and that "No effect was found on these behavioral manifestations of the disorder in any of the psychological trials…" (p. 57).

Several reviews of treatments for adults with borderline personality disorder (BPD) found somewhat similar results. First, Binks et al. (2006) conducted a review of both clinical and cost-effectiveness; they concluded:

> The overall efficacy of psychological therapies is promising; however, at this stage the evidence is inconclusive. The cost-effectiveness of the intervention in six RCTs examined, however, does not support the cost-effectiveness of DBT although potential is suggested. There is a need for considerable research in this area. This research should involve appropriately powered head-to-head RCTs of psychological therapies…. (p. iii)

A Cochrane Review (2006) of psychotherapeutic interventions for BPD (Binks et al., 2006) concluded: "There were generally too few studies to allow firm conclusions to be drawn about the value of all the other kinds of psychotherapeutic interventions evaluated. However, single studies show encouraging findings for each treatment that was investigated, both 'comprehensive' and 'non-comprehensive' types. More research is needed" (p. 2). Second, a NICE review (2009) examined seven RCTs of dialectical behavior therapy (DBT; e.g., Linehan, 1993) and found that treatment "showed some effect on anxiety, depression and symptoms of borderline personality disorder, although the evidence quality was moderate" (p. 154). In addition, treatment showed some benefit on the rate of self-harm and suicidal ideation and service utilization. They pointed out that DBT retained clients in treatment compared to treatment as usual. The NICE review found: "There is very little evidence for the efficacy of individual psychological interventions in the treatment of people with borderline personality disorder because almost all studies are uncontrolled" (p. 141). Overall, the review found weak evidence of cost-effectiveness for psychosocial treatment of persons with BPD, stating that the available data did not allow for a firm conclusion. Binks et al. (2006) concluded: "This review suggest that some of the problems frequently encountered by people with Borderline Personality Disorder may be amenable to talking/behavioural treatments but all therapies remain experimental and the studies are too few and small to inspire full confidence in their results. These findings require replication in larger 'real world' studies" (p. 1). Brazier et al. (2006), in a systematic review on the cost-effectiveness of psychological therapies based on RCTs, concluded: "The mixture of results for the four trials of DBT, plus the high levels of uncertainty and the limitations of the analyses, do not support the cost-effectiveness of DBT, although they suggest that it could have the potential to be cost-effective. The results for [Mentalization Partial Hospitalization] are promising, although again surrounded by a high degree of uncertainty, and for [Manual Assisted Cognitive Behavioral Therapy], the analysis suggests that the intervention is unlikely to be cost-effective. There is a need for considerable research in this area. Of note, client centered therapy was not effective, suggesting that the simple application of common factors of psychotherapy was not sufficient for persons with significant maladaptive personality characteristics." Kliem, Kröger, and Kosfelder (2010) conducted a meta-analysis of DBT, including both RCTs (5) and other methods of evaluation ($n=2$); they included only those studies that included the four required components of DBT: individual therapy, group format training, consultation team, and telephone or staff coaching. Of approximately 500 subjects, 25 % dropped out before the end of treatment. They found small positive effects when DBT was compared to other specific treatments for BPD and larger effects for comparisons with treatment as usual; however, the global effects of DBT decreased at follow-up suggesting that more research is needed to improve the transfer to daily life. Further, no control was available across studies for the impact of utilization of psychiatric interventions (e.g., medications) or of other psychosocial treatment in parallel to DDBT or during the follow-up period. Stoffers et al. (2012) in the most recent Cochrane Review concluded that there are "indications of beneficial effects" for both comprehensive psychotherapies and non-comprehensive psychotherapeutic interventions for BPD core pathology and associated general psychopathology. Some modes of therapy were better at reducing select symptoms such as anger and suicidal behavior, while others were better at keeping clients in treatment. However, Stoffers et al. noted that none of the treatments had a very robust evidence base, and there are some concerns

regarding the quality of individual studies. They suggested that the current findings support a potentially important role for psychotherapy in the treatment of people with BPD but clearly indicated a need for replication

Given the poor findings of psychosocial interventions on adults with PDs, it should be noted that the available evidence concerning the psychosocial treatment of general criminal offending in adults is mixed. Various writers (e.g., Andrews & Bonta, 2006; Andrews, Bonta, & Hoge, 1990; McGuire, 2004) have claimed that CBT-based criminogenic treatment programs have a positive effect in reducing future reoffending. Although there are a limited number of RCTs with longer-term follow-ups, Andrews and Bonta (2006) showed that the relative short-term success of interventions reported for general criminal offenders had a *small-effect size*, which approximately doubled when incorporating all three elements of the R-N-R model. Recent meta-analyses by Landenberger and Lipsey (2005) and Latessa and Lowenkamp (2006) of broadly defined moderate-intensity CBT programs for general criminal offenders claimed clear evidence of effectiveness in terms of general criminal recidivism. Similar to the earlier meta-analyses, they found that it was CBT programs set up for research or demonstration (as compared to "real-world" practice programs) that produced larger reductions in recidivism. However, several significant methodological issues regarding the findings by Landenberger and Lipsey were acknowledged by the authors: a relatively small number of the included studies utilized a RCT design, the typical length of follow-up was *short term* (e.g., 78 % had just 12 months and *only* 7 % were even 2–3-year follow-ups), and treatment dropouts or refusers were not "counted." In addition, no information about additional posttreatment factors that might have influenced outcome, particularly intensive supervision or additional prosocial programming, was noted. For *short-term follow-up* (and not necessarily involving survival analysis), Landenberger and Lipsey found that CBT reduced recidivism; however, when they studied intent-to-treat analyses and treatment dropouts were included in outcome recidivism, the effect size of treatment was diminished. Further, while Landenberger and Lipsey concluded that while CBT is capable of producing reductions in general recidivism, "The amount of high quality research on CBT in representative correctional practice is not yet large enough to determine whether the impressive effects on recidivism found in this meta-analysis can be routinely attained under everyday circumstances" (p. 14). In addition, Latessa and Lowenkamp (2006) have also noted that the "integrity" with which psychosocial intervention programs are implemented for criminal offender is as important as the R-N-R dimensions; they have emphasized that a significant portion of psychosocial interventions for criminality are poorly implemented by inadequately trained and supervised staff. Thus, while a number of writers have suggested that the potentially positive findings of psychosocial interventions for general criminals might apply to sexual offenders, those findings are not overwhelming in and of themselves and lack generalizability. In particular, they are characterized by the same methodological weaknesses thought to plague the sexual offender outcome literature. To be clear, despite claims that CBT R-N-R treatment reduces criminal recidivism, there are few RCTs generally and fewer RCTs that have significant follow-up of reoffending (e.g., more than 12 months); there is an absence of definitive evidence that psychosocial interventions have long-term effects on reducing general criminal recidivism. Both from the perspective of theory and from the differential findings for the efficacy of sex offender treatment, valid arguments can be made that, most, many or a substantial group of sexual offenders might well represent a unique subgroup of criminal offenders who do not respond meaningfully to time-limited CBT interventions. This might be related to the potentially elevated presence of sexual preoccupation or deviant sexual arousal or other elevated dimensions of predisposing nonsexual conditions related to sexual offending.

In subgroups of criminal behavior that share some commonalities with sexual offenders, the results of the meta-analyses are not impressive in the reduction of symptomatic behavior and/or recidivism. Regarding drug treatment of incarcerated criminals, in their meta-analysis, Mitchell, Wilson, and MacKenzie (2012) found:

> Seventy-four evaluations met our eligibility criteria. The overall average effect of these programs was approximately a 15 to 17 % reduction in recidivism and drug relapse. The effectiveness of such programs, however, varied by program type. Therapeutic communities had relatively consistent but modest reductions in recidivism and drug relapse. Counseling and narcotic maintenance programs had mixed effects. Specifically, counseling programs on average reduced recidivism but not drug relapse, narcotic maintenance programs had sizeable reductions in drug relapse but not recidivism, and boot camps had negligible effect s on both recidivism and drug relapse. (p. 6)

However, Mitchell et al. noted methodological weaknesses characterized studies with more positive results (including publication bias in the studies of therapeutic communities), some evidence that aftercare was useful in maintaining treatment gains when they occurred, and that voluntary participation was associated with greater gains. They also concluded: "there is a lack of understanding concerning which particular components of treatment programs are most important, and which combination of components are most effective. Further, the general methodological weakness of this area of research leaves findings vulnerable to alternative explanations (i.e., reductions in recidivism could be due to factors other than the intervention)" (p. 30).

Babcock, Green, and Robie (2004), in a meta-analysis of male batterers or domestic violence perpetrators, reported:

> This meta-analytic review examines the findings of 22 studies evaluating treatment efficacy for domestically violent males. The outcome literature of controlled quasi-experimental and experimental studies was reviewed to test the relative impact of Duluth model, cognitive-behavioral therapy (CBT), and other types of treatment on subsequent recidivism of violence. Study design and type of treatment were tested as moderators. Treatment design tended to have a small influence on effect size. There were no differences in effect sizes in comparing Duluth model vs. CBT-type interventions. Overall, effects due to treatment were in the small range, meaning that the current interventions have a minimal impact on reducing recidivism beyond the effect of being arrested. (p. 1023)

Similarly, in a systematic review of court-mandated batter intervention programs, Feder and Wilson (2005) found that mean effect for victim reported outcomes was zero (compared to "official reports") and that where positive results for interventions were obtained, methodological problems were manifest (e.g., comparisons of an intervention with dropout group) in studies that found more positive results. They concluded that the results of their review "raise concerns regarding official reports. The findings, we believe, raise doubts about the effectiveness of court-mandated batterer intervention programs" (p. 239).

Finally, Hockenhull et al. (2012) looked broadly at intervention strategies for populations at high risk of engaging in violent behavior. While they noted some short-term evidence for effectiveness of psychosocial interventions in the context of high heterogeneity of results, they concluded: "Improvements are needed in the design quality of future research studies. Of particular note is the relative dearth of RCTs, especially in the evaluation of non-pharmacological interventions. Furthermore, RCTs themselves should be improved by extending the study follow-up period wherever possible." They also noted: "Design quality overall also remains relatively low and reflects the dominance of a pragmatic approach. Until the research effort becomes more homogeneous and well designed, any results from pooling studies will be limited in the robustness of results" (p. 5).

Specifically, writers have also raised issues regarding the implications of providing sexual offender treatment for persons with high or even elevated levels of psychopathic traits. Per Hare (2003), the mean score on the Psychopathy Checklist Revised (PCL-R; 2003) for a criminal offender is approximately 22, approximately three times the rate of the average male in the community; thus, while not all sexual offenders exceed the various cutoffs for being designated as a "psychopath," the great majority are characterized by a degree of psychopathic traits much higher than the average individual in the community. Hemphill, Hare, and Wong (1998) and Hemphill, Templeman, Wong, and Hare (1998) found that psychopathy as measured by the PCL-R contributed to the risk of criminal and violent recidivism when utilized as a continuous measure. In fact, surprisingly, survival analyses for persons rated either "medium" or "high" on the PCL-R were not clearly differentiated from one another; both of these groups showed similar recidivism rates and patterns. Thus, a moderate degree of psychopathy has significant implications for personality and predisposition for violent behavior; it also has implications for treatment. Nonspecific factors on the part of a person particularly the capacity for some degree of social bonding and intimacy are of particular importance in the initiation and maintenance of psychotherapy. Sexual offenders, particularly those with some degree of psychopathy, may be relatively unaffected by social bonds and intimacy. They may not view their sexual offending as a problem (except that they were detected and received consequences), and their distress is primarily with their condition of confinement or restrictions. Thornton and Blud (2007) identified a set of other issues that would likely compromise the effective treatment of more psychopathic sexual offenders: failing to give accurate, personally relevant accounts of the past history and functioning (motivated by "duping delight" and indifference to deceit); having bogus intentions (using language to manipulate others, easily agree to change their future behavior); disrupting group processes; experiencing treatment as just another opportunity to con or dominate; for those more psychopathic persons with "fragile narcissism," the likelihood that contemplation of being in need of personal change would be deeply threatening; inability or reluctance to taking responsibility for their own actions manifests as lack of insight into identifying aspects of themselves that might need to change; inability or difficulties in bonding to therapists or other group members; boredom proneness, impulsivity and disregarding commitments; and complaisance with rules and group expectations. Skeem, Polaschek, and Manchak (2009) identified that a higher degree of psychopathy was associated with a slower response to treatment, required more intensive treatment (but typically received less for various reasons), and show short treatment duration and premature termination. They also pointed to one of their studies that showed that "treating psychopaths is painful for treatment providers…and clinician's perceptions that offenders had made limited progress in mastering the skills need to overcome drug problems" (p. 370). However, they found that PCL-R scores did not relate to ratings of offender status at the end of treatment or did not moderate the effect of the intensity of treatment on general recidivism. Relative to the earlier findings that treatment might make persons with elevated psychopathic traits worse, Skeem et al. (2009) wrote: "In our opinion, the results are more likely to mean that subjecting high-risk offenders to intensive, radical, involuntary treatment makes them more likely to recidivate violently than leaving the alone. They stated: 'In sum, these studies indicate that psychopathic individuals are difficult to treat and often do not receive much treatment-points that few would contest'" (p. 366). Their review did find that more psychopathic offenders required more intensive,

higher doses of treatment and pointed to research that showed similar findings. However, Skeem et al. noted that none of the available studies of the effect of psychopathy on treatment outcome were RCTs and that with both general and high-risk criminal offenders, there was a pronounced gap in knowledge about the mechanisms by which appropriate treatment works. They also called attention to the issue of generalizability of psychosocial interventions with high-risk sexual offenders. They noted that, more generally, offenders with mental disorders "are particularly likely to fail community supervision, even when provided with 'state-of-the-art' mental health treatment…" (p. 376), thus raising the question as to whether even validated correctional treatment programs can reduce recidivism rates per se. They summarized the extant literature, stating first "In conclusion, little is known about whether intensive programs targeting high-risk violent offenders can reduce risk" (p. 375). They continued, "Yet even with general offenders, knowledge of the mechanisms involved in rehabilitative change, risk reduction and desistance remain largely unknown. With high-risk offenders, there is simply a need for more carefully designed program outcome studies, and as with general offenders, investigations must follow of what changes and how. There is much still to do" (p. 380).

Thus, for those sexual offenders with significant characterological traits, personality disorders, and/or elevated psychopathy, such characteristics are generally associated with a diminished treatment response, and a lack of effectiveness of sexual offender treatment fits with the larger treatment literature. The available evidence is that it appears very difficult to change well-entrenched attitudes, cognitions, and behaviors, particularly when those mentally/emotionally driven behaviors are particularly rewarding from both an immediate sexual nature and more general psychological nature.

Motivation for Sexual Offender Treatment or Not

In general, very few individuals enter treatment unless they perceive an advantage to themselves (e.g., relief of intense distress, everyday impairments, and so on) and without the expectation that an intervention will benefit them. The research literature on self-control, executive functioning, and self-regulation all highlight that both general ability and motivation are critical for purposeful, goal-oriented behavior, particularly other-oriented behavior or more abstract social goals; self-regulation fails more for "have to" behaviors than for "want to" ones (e.g., Hoberman, 2015a). Bohar and Wade's (2013) review of client characteristic and psychotherapy suggested that client involvement and engagement are particularly strongly associated with treatment outcome and that persons who are more internally motivated for personal change are those clients who are most likely to change. Thus, per Bohar and Wade's (2013) review, studies have shown that high levels of personal distress may be the best predictor of psychotherapy outcome; the less satisfied with one's "life," the greater the degree of change is to be expected from treatment. In addition, even among persons who make active, voluntary choices to participate in psychosocial treatment, the issue of reluctance or resistance to enact personal change has been and remains a prominent phenomenon that clinicians, particularly forensic clinicians, must acknowledge and address. Mahoney (1991) identified five perspectives on such "resistance" to psychological change in psychotherapy among persons who "choose" to engage in such treatment: (1) motivated avoidance as out-of-consciousness conflict between desire for change and desire for the status quo; (2) motivational deficits (as identified in many theories of learning) due to insufficient incentives and/or inadequate reinforcement available for change; (3) ambivalent choice as a result of variation in immediate and delayed consequences (e.g., the consequences of hard work may be aversive or even just neutral but ultimate effects may be highly positive); (4) psychological reactance involving perceptions that freedom to change exists but reactance results when that perceived freedom is eliminated or threatened; and (5) normative self-protection in the sense that resistance to change may reflect often "out-of-awareness" comfort with one's identity or life conditions and/or anxiety about the challenge and unknowns of enacting personal change. In short, there are numerous perspectives and bases for "ordinary" persons who chose psychotherapy but are characterized by mixed feelings, some conscious and others not perhaps, about the idea and process of changing and the uncertainty of what may result from possible change.

Consequently, the motivation and various aspects of resistance of sexual offenders to seek and participate in sexual offender treatment might be expected to play a significant role in the outcome of interventions. Yet, at best, it is unclear if sexual offenders are truly distressed by their sexual offending behavior and/or "want" sexual offender treatment. To what degree are sexual offenders troubled by the effects of their offending behavior on others and/or intrinsic (self-generated or "internalized") motivation to seek personal change or management strategies to prevent future sexual offending? Do sexual offenders seek treatment on a truly voluntary basis because they themselves are distressed by their sexual offending or impaired by their thoughts, feelings, or behaviors? Is the primary motivation for a significant subset of sexual offenders to relieve the upset caused by dispositions involving limits on their personal freedom? In reviewing the available studies of sexual offender treatment, it seems clear that a very significant number of sexual offenders do not evidence clear motivation both before and after sexual offender treatment; that is, they appear disinterested, reluctant, or unwilling to initially engage in treatment; even persons who

complete sexual offender treatment often manifest low motivation and compliance when that treatment ends. In an early review of sexual offender treatment in Canada, Wormith and Hanson (1992) noted, "Previous studies have indicated that between 40 % and 70 % of sex offenders do not consider themselves in need of treatment" (p. 193). Levenson and D'Amora (2005) acknowledged: "It is true that researchers and practitioners recognize that many sex offenders will not seek treatment voluntarily *because they enjoy what they are doing and do not want to stop*" (p. (referring to sexual offending, p. 147), emphasis added). That is, it appears that for a significant number of sexual offenders, general criminal as well as specific sexual offending is ego-syntonic; they do not experience significant or any distress with their behavior and do not view it as problematic (e.g., except regarding the consequences for themselves when they are detected and punished). From a "common sense" perspective, it is hard to understand why someone who feels comfortable with their maladaptive behavior, does not view their behavior as "wrong" relative to its effects on others and is not distressed by their offending behavior per se would experience much meaningful, self-generated motivation for change. Regarding sexual offenders, Marshall et al. (2009) wrote: "It is now acknowledged that offenders cannot be assumed to be intrinsically motivated to change when they enter a treatment programme. They may well be entering treatment for extrinsic reasons only, particularly if the programme is located in a penal institution, or if attendance is mandated as part of parole" (p. 335). Later, Marshall et al. (2011) opined: "Very few of these men are self-referred; most have gone through a lengthy process of being reported, investigated, charged with an offense, tried in court sentenced, and then imprisoned or court-ordered to treatment" (p. 40). It is notable that in a generally well-regard study involving a comparison of specialized sex offender treatment to nonspecialized treatment, the authors indicated that higher-risk sexual offenders appeared more likely to choose the less demanding treatment option (McGrath, Hoke, & Vojtisek, 1998).

This raises specific questions about the motivation of sexual offenders as well as more general questions about why persons characterized by various problematic behaviors don't change. Ultimately, as Levenson and D'Amora (2005) point out, mandated interventions create opportunities for change and ultimately the offender must choose whether or not to engage in treatment and make a commitment to personal change. Yet, similar to Mahoney, Arkowitz and Lilienfeld (2007) noted that resistance to self-change in the face of personal distress or impairment or potential harm to others may be relatively common. They pointed to significant portions of the general population who repeatedly resist changing behaviors that are potentially harmful to themselves (e.g., smoking, overeating) and/or others (binge drinking). Further, they highlight that even when people have sought and received treatment for medical problems, as many as 50–60 % do not subsequently follow their treatment regimen. Arkowitz and Lilienfeld suggest that many people are pulled in two directions, with motivation both to change and to maintain the status quo. They also identify that faulty beliefs about the possibility of change or the degree of change possible and the multiple psychological functions that undesirable behaviors may serve all may act as forces that interfere with self-change. In a related manner, Tyrer et al. (2003) have suggested that persons with personality disorders may be divided into those who are "treatment rejectors" as opposed to "treatment seekers." In fact, McMurran, Huband, and Overton (2010) provided a systematic review of non-completion of personality disorder treatments. In 25 studies, they found that the median non-completion rate was 37 % (range 15–80 %); non-completion was associated with adverse outcomes. They found that client "needs" associated with non-completion included narcissism, "complexity" of personality disorder traits, impulsivity, low depression, substance abuse, and lower levels of problem-solving and general functioning.

However, historically, as reviewed by Tierney and McCabe (2002) and as Marshall et al. (2011) indicated, both data and the perception of sexual offender treatment professionals is that a uniquely significant proportion of sexual offenders are essentially unmotivated for change. Studies such as Grubin and Gunn (1990) found that in one sample most sexual offender did not wish to participate in treatment; for rapists, 73 % indicated that they did not want or need treatment. Prentky et al. (2011) noted that expressed motivation of treatment among incarcerated sexual offender began to decline in the 1980s and has continued into the 2000s; they cited research that only half of sexual offenders surveyed indicated a desire for treatment. However, the general psychotherapy literature indicates that motivation is best understood as a complex and systemic issue involving interactions between personal, environmental, and temporal factors; motivation has been conceptualized and measured in various manners. As Tierney and McCabe pointed out, decisions to participate in sexual offender treatment can be related to avoiding incarceration, to presenting oneself in a positive light for the benefit of probation and parole decisions, or simply to obtain some personally valued outcome (as opposed to for the protection of others). Alternatively, they note that some treatment programs target the most motivated sexual offenders for treatment because they are considered to be the most likely to attempt to change their behavior. Tierney and McCabe opined:

> …It is potentially dangerous to assume that a high level of motivation necessarily results in a change in sexual offending behavior. While motivation is a necessary condition for treatment participation, treatment completion and behavior change, it is not a sufficient condition for change. (p. 122)

Prentky et al. (2011) stated that, in contrast to standard mental health treatment, "…it is most often the case that sexual offenders have not freely chosen to be in treatment. They are placed in treatment by the court as part of an agreement to avoid going to prison, as part of a prison-based treatment program or civil commitment program, or as part of a release condition after serving their sentence. Although offenders may 'volunteer' for a prison-based treatment program, with the understanding that such participation will be looked up favorably by the court and/or the paroled board, such participation is often prompted by motives other the desire to be in treatment. The net result is that sexual offenders are a captive population of 'clients' who, for the most part, enter treatment with little or no desire to be there" (p. 118).

Among studies that have examined sexual offender's motivation for treatment (e.g., Abel, Becker, Cunningham-Rathner, Mittelman, & Rouleau, 1988; Miner & Dwyer, 1995), dropout rates from 35 to 54 % from voluntary outpatient sexual offender treatment programs have been reported; such high dropout rates have implications for offender motivation for change. Kaplan (1990) reported that 50 % of incarcerated child molesters were not motivated to seek counseling for their sexual offense during their stay in prison, and while under parole supervision; 80 % believed that counseling was not needed. As Marques et al. (2005) found, initially only approximately 1/3 of the eligible inmates who were incarcerated for a sexual offense even volunteered to participate in the interview for the project. Later, an additional 21 % of those who had volunteered for sexual offender treatment withdrew prior to the beginning of treatment. Further, Marques et al. also found that 18 % of the small group of sexual offenders that did volunteer for and were assigned to receive sexual offender treatment did not complete program (27 voluntarily withdrew and 10 were demitted because they presented as "severe management problems in the hospital"). Shaw et al. (1995) found a poor relationship between expressed willingness to participate in sexual offender treatment and treatment success. Of 114 offenders accepted into sexual offender treatment, only 16 completed the program with "a good prognosis." They found that 86 % of offenders admitted to a correctional treatment program were either terminated during the evaluation stage for unwillingness to cooperate during treatment or discharged for incompletion of treatment modules or inappropriate behavior. They concluded willingness to participate in treatment was not necessarily predictive of a good treatment outcome. Further, Marques et al. (2005) also noted that they had "some participants were quite comfortable just 'programming,' attending treatment activities but not really making the commitment to change that is important to the RP model…" (p. 100). Thus, in SOTEP, a considerable number of sexual offenders offered treatment refused, others who were assigned to such treatment dropped out or were demitted, and additional others remained in treatment but made little commitment to change. All of these types of sexual offenders must raise significant questions about the role of motivation to pursue or complete sexual offender treatment. More recently, in their review, Larochelle et al. (2011) indicate that between 15 % and 86 % of sexual offenders who enter sexual offender treatment do not complete it, either as a result of dropping out, expulsion, or another arrest or conviction. Relative to results from SOTEP, Mann and Marshall (2009) wrote: "It is now acknowledged that offenders cannot be assumed to be intrinsically motivated to change when they enter a treatment programme. They may well be entering treatment for extrinsic reasons only, particularly if the programme is located in a penal institution, or if attendance is mandated as part of parole" (p. 325).

The issue of motivation for sexual offenders in relation to treatment is confounded by various factors; external mandates and recommendations and administrative selection are operative, and the former interacts with self-selection for sexual offender treatment. Jones, Pellissier, and Klein-Saffran (2006) found that important predictors of "self-selection" into a correctional sexual offender treatment program included higher scores on motivation, previous sexual offender treatment, a greater number of sex-related victims, and a greater number of sex-related convictions. However, the best predictor of volunteering for treatment was if a judge had recommended sexual offender treatment. Thus, self-selection or "volunteering" for treatment was strongly associated with a judge's recommendation. They concluded that a judge's recommendation at sentencing was a key factor in persons entering sexual offender treatment. However, while self-reported motivation was a predictor of treatment entry, it was unclear what the determinants of this factor were. A key construct may be reactance—persons who are particularly sensitive to interpreting external direction as a threat. Beutler et al. (2011) in a meta-analysis found that clients who were high in reactance did poorly in treatments that were more directive (e.g., CBT). Another treatment-related consideration related to motivation is the degree of denial which characterizes sexual offenders; Marshall, Eccles, and Barbaree (1993) wrote: "Well over half the sexual offenders in Canadian penitentiaries deny, upon entry to the system, that they committed the offense for which they are incarcerated. Many of the respondents minimize the nature of their offenses" (p. 447). They also noted that even among those who admitted their offenses, a number claim that simply having been adjudicated will be sufficient to prevent sexual reoffending. A few years later, Marshall (1999) indicated that more than 60 % of potential sexual offenders in their setting would be excluded from treatment if they denied or minimized their offending history, "among whom are the most dangerous" (p. 230).

Empirically, both meta-analyses of risk factors for sexual offense recidivism (e.g., Hanson & Bussiere, 1998; Hanson & Morton-Bourgon, 2004) found that measured offender motivation was unrelated to sexual reoffending per se. A question may be raised about motivation during and after treatment for sexual offenders. Barrett, Wilson, and Long (2003) found that per clinician records, sexual offenders' motivation in treatment "increased" from entry to end of institutional treatment; however, subsequently "motivation decreased for all types of sexual offenders upon community release" (p. 279). They reported "preliminary evidence" that an underlying paraphilic motivation to commit sexual offense against children might affect a sexual offender's motivation to change his sexual behavior. In their follow-up of reoffenders in the SOTEP study, Marques, Nelson, Alarcon, and Day (2000) reported that almost no individuals admitted to making a commitment to abstinence regarding sexual offender; all of them reported that they had been very motivated to change when they began treatment "but most were unable to sustain their motivation over time." This accords with Stirpe, Wilson, and Long (2001) who found that sexual offenders, particularly higher-risk ones, reported greater difficulty maintaining motivation for personal change and against sexual reoffending when returned to the community.

Almost no studies have examined any sexual offender's intrinsic or self-reported motivation to seek treatment. There are no known investigations of the reasons sexual offenders might be willing to participate in sexual offender treatment and/or change their behavior related to sexual offending nor are there studies of the relationship between "expressed" or "perceived" motivation to change sexual offending behavior and actual behavior change. The issue of motivation for involvement in sexual offender treatment and commitment to significant change remains an important issue to understand particularly in light of the question about treatment effectiveness. Knowing that an offender had technically "completed" sexual offender treatment provided no additional information to risk assessment by an actuarial measure.

Mandated or Coerced Treatment

Beyond individual sexual offenders' self-assessment and self-motivation for treatment, a related and highly relevant issue for the lack of demonstrated effectiveness of sexual offender treatment is the degree to which such interventions are mandated or coerced. The issue of the effect of mandated treatment has been somewhat controversial. It seems clear that many or most sexual offenders seek treatment under some condition of external pressure or contingencies: per a court order, as an alternative to incarceration, as a condition of parole or probation, and as a condition of child protective services or from family pressure, among others. Generally speaking, all of these conditions provide "external" or extrinsic motivation to seek treatment; there is a secondary reward or gain for pursuing intervention. As noted, Marshall et al. (2009) wrote that a significant portion of sexual offenders entered treatment "for extrinsic reasons only particularly if the programme is located in a penal institution, or if attendance is mandated as part of parole" (p. 335). Terry and Mitchell (2001) suggested that sexual offender treatment is largely characterized by "indirect coercion," where the belief is there is no choice to enter a treatment program because without the treatment there will be adverse consequences. That is, it would appear in almost all instances of sexual offenders participating in sexual offender treatment, there is indirect coercion where significant portions of treatment-participating sexual offenders believe that to reject treatment will result in adverse consequences. Thus, as Jones et al. (2006) showed, judicial recommendation for sexual offender treatment was strongly associated with sexual offenders "volunteering" for treatment. Obviously, mandated treatment does not only occur for sexual offenders. Rather, persons with severe and chronic presenting problems of serious harm to self (e.g., suicidal clients or persons with eating disorders) are also mandated for treatment, including hospitalization, for stabilization; however, such clients appear to respond much more favorably both acutely and over time to treatment mandates.

As previously noted, Losel and Schmucker (2005; Schmucker & Losel, 2008) found that only sexual offender treatment programs involving some type of "voluntary" participation showed a significant effect; programs that involved "a more or less coerced treatment" did *not* show an effect. Relative to correctional samples more generally, Parhar, Wormith, Derkzen, and Beauregard (2008) conducted a meta-analysis of 129 studies regarding the degree of offender coercion in treatment and its relationship to treatment effectiveness. They reported: "In general, mandated treatment was found to be ineffective in several analyses, particularly when the treatment was located in custodial settings, whereas voluntary treatment produced significant treatment effect seizes regardless of setting" (p. 1109). Further, "This implies that if offenders are being required by courts to attend treatment in custody settings the treatment is likely to have no effect and cost the criminal justice system and the courts both time and money" (p. 1127). They found that both mandated (ordered) and coerced (negative consequences if not done) treatments did not lead to effective interventions. In contrast, for specific recidivism (including sexual offender recidivism), voluntary (non-mandated, non-coerced) treatment in the community was associated with positive effects. In contrast, for specific recidivism, the greater the degree of mandated and/or coerced treatment, the smaller the treatment effect. Parhar et al. raised the question of whether it is ethical to insist that offenders participate in interventions

that have not been demonstrated to be effective. The Parhar et al. study suggests that any correctional sexual offender treatment program that consists of largely mandated and/or coerced offenders will not likely be effective.

As Levenson and D'Amora (2005) pointed out: "Ultimately, clients always have a choice about whether or not to enroll or participate in treatment, and the court not the treatment program, imposes the consequences of those choices" (p. 146). Since many sexual offenders who do pursue sexual offender treatment do so only under explicit or implicit judicial or similar pressure, it seems reasonable that such participants in sexual offender treatment might actually be disinterested in (unmotivated for) sexual offender treatment and either pursue treatment for secondary gain or wish to drop out of treatment. However, since "formally" dropping out of sexual offender treatment may result in sanctions or loss of desired opportunities, sexual offenders who attend treatment may not formally dropout bur rather passively attend to "completion." Rather, like Marques et al.'s (2005) participants, they may elect to sit through treatment but with little genuine commitment to the proximal or distal goals of sexual offender treatment.

Therapist Issues

As in more general psychotherapy outcome studies, the experience and skills of therapists may be a critical variable in sexual offender treatment. Marshall (e.g., Marshall, 2005; Marshall et al., 2009) has suggested that the influence of the therapist accounted for between 40 and 60 % of the benefits of treatment with sexual offenders, at least based on incidental assignment or non-controlled studies. In particular, he has suggested the tone of the treatment or therapists to offenders is critical to positive outcomes. As noted, Schwartz pointed to the sexual offender treatment field's adoption of a confrontational approach common to substance abuse programming in the 1970s. Marshall et al. (2011) have criticized the role of confrontation in sexual offender treatment; Marshall, Fernandez, Serran, Mulloy, and Thornton et al. (2003) reported that various therapist characteristics such as empathy; warmth; respectfulness; a positive, rewarding style; and a challenging or direct approach are associated with greater treatment change. However, Sandhu and Rose (2012) reported: "Due to methodological limitations of the studies, no conclusive evidence was found for the contribution of therapist characteristics to treatment efficacy" (p. 269). However, they did find the evidence suggesting those therapist characteristics "seem likely" to have an important impact on the process and outcome of sexual offender treatment. They indicated that the clinical challenge was to determine how therapist factors interacted with offender characteristics and "particularly, factors related to individual offending dynamics" (p. 281). It seems beyond dispute that sexual offenders would and do prefer positive attitudes and behaviors on the part of their therapists; however, the specific links and mechanisms by which those dimensions are related to subsequently reducing sexual reoffending or stable personal change among sexual offenders remain unclear.

In his more recent writings, Marshall has also emphasized the importance of the therapeutic alliance, typically citing relatively older studies in the general psychotherapy literature. Kozar and Day (2012) concluded there was currently insufficient evidence to support the view that the therapeutic alliance impacts "either directly or indirectly on treatment outcomes" for violent offenders (including sexual offenders); Beyko and Wong (2005) found no significant relationship between sexual offender treatment non-completion and therapeutic alliance in a small sample. Per Lambert and Ogles (2004), the importance of the alliance is a necessary but not sufficient condition for change in general psychotherapy. Similar to Marshall, they view the therapeutic alliance as a manifestation of the critical role of common factors in effective psychotherapy. However, based on their review of the current research literature, they determined "…we simply do not know enough yet about the therapist factor to specify when and how it makes a difference, nor when it matters more than technique" (p. 168). Similarly, Crits-Christoph, Johnson, Connolly Gibbons, and Gallop (2013) concluded: "Despite extant research, there are mixed reviews on the importance of the therapeutic alliance in treatment outcome;" they pointed to a recent meta-analysis that found a "small to moderate relationship between the [therapeutic] alliance and therapeutic outcome (r =. 27)" (p. 302). Challenging the conventional view of the role of the therapist-client relationship, Crits-Christoph et al. pointed to research that suggests that early positive change in symptoms is the *cause* of an improved "therapeutic alliance" as opposed to the converse process. Somewhat similarly, per Bohar and Wade's (2013) review, successful therapeutic alliances may be more driven by client behavior, so that clients who were motivated, engaged, and "present" in therapy elicited similar qualities in response from clinicians. They noted that studies have shown that successful clients were active in building rapport with therapists via their own prosocial behaviors (e.g., being appreciative and accommodating of their therapist) and that client contributions to the alliance were significantly correlated with outcome as opposed to therapists' contributions. In short, Bohar and Wade's review of client characteristics clearly showed that the nature of the client and the quality of a client's participations in treatment—and its effect on the therapist—played the most important role in making psychotherapy effective and leading to positive outcomes. For many reasons, the nature and characteristics of sexual offender treatment client and therapist would seem especially important in sexual offender

treatment, even more important than in general psychotherapy. To date, no RCT study has been conducted regarding the nature and role of the therapeutic alliance in relationship to sexual offender treatment—let alone for any therapist variable—in interventions for sexual offenders. Consequently, no rigorous empirical data has been collected to support or direct the role of therapist behavior and/or therapist-client relationships in sexual offender treatment.

Several writers have raised issues about the dilemma of developing dual relationships in mandated treatment that include almost all sexual offender treatment programs (e.g., Gannon & Ward, 2014; Ward, 2014). In both of these commentaries, it is noted that a dual relationship exists for therapists in forensic or "justice involved" treatment programs: such clinicians are presumed to balance the needs and interest of the offender client and the potential future possible harm to the community. Such a problem is framed as an important ethical problem. Among other areas, Gannon and Ward (2014) argue that collaboration, exploration, reflection, and supportiveness of the offender client are key aspects of developing a therapeutic alliance and that the role of contemporary correctional (or like) mental health practitioners threatens or undermines the potential potency of the therapeutic alliance because of their involvement in security-management and punishment-focused tasks. They appear to suggest that unless there is a clear situation of threat to another's imminent safety, the protection of the alliance is relatively paramount. A more general concern for mental health professionals providing "justice involved" sexual offender treatment is that the focus and accurate record-keeping of an offender-client's work and disclosures in treatment necessarily raises concerns about the ability to be honest and transparent when such behavior may lead to undesired consequences such as elevated risk assessments and/or extended detention. Such dual relationships are not unique to sexual offender treatment; similar situations exist in other court-mandated treatment experiences such as repeated alcohol-related infraction programs and domestic violence/batterer programs as well as court-ordered treatment for parents, children, and families in the course of a high-conflict divorce. In each of those cases, the protection of others and/or the best interests of children govern the nature and degree of disclosure of what emerges in therapeutic encounters. Hanson (2014) too has minimized the significance of the dual role for therapists treating sexual offenders in conventional treatment programs, stating: "The therapists' dual rule (as authority and helper) is explicit and, I would add, largely unproblematic, likening the role to other dual functions in society such as 'boss–employee, teacher–student, and most basically, parent–child'" (p. 4). Along these same lines, relative to the issue of court-ordered child protection and custody-related psychotherapy—what they term "forensically informed treatment"—Greenberg and Gould (2001) elaborated on the "treating expert," writing: "The psychologist is mindful of the limitations and biases that may be present in data generated in treatment and interprets and communicates such information conservatively. The psychologist may track clients' behavior and response over time and use such information to guide treatment or communicate it to the forensic evaluator or other professionals" (p. 477). Thus, dual relationships are not uncommon in other areas of court-related treatment in the context of potential or likely dispositional evaluations. Thus, there appear to be no simple solutions to the dual relationship in forensic psychotherapy where the primary goal (and typically the basis for funding the treatment) is increased and enduring public safety by means of facilitating the offender-client to be open and transparent about their general personal experiences and criminogenic needs and the degree to which such offenders are motivated and able to make substantive and valid cognitive, affective, interpersonal, and other behavioral changes.

Several issues concerning those who provide psychotherapy to sexual offenders raise questions about the potential for effectiveness of treatment. Per McGrath, Cumming, Burchard, Zeoli, and Ellerby (2009), as many as 38 % of residential programs for adult sexual offenders in the United States had clinical services provided by persons with bachelor's degrees or less level of formal education and 45 % by persons with master's degrees. It is unclear what type of training in the research and clinical literature such providers possessed. Anecdotally, in institutions, persons serving as therapists often lack extensive general and sexual offender treatment-specific training, and there appears to be a striking instability in treatment personnel, in both community and institutional settings. Yet as Skeem et al. (2009) note, given the findings that intervention programs in correctional settings are frequently or commonly delivered in a manner not in conformance with the stated treatment principles or protocol, there appear to be significant issues with treatment integrity and the quality of psychosocial treatment provided.

A related issue is the degree to which sexual offender treatment program clinicians know and follow the currently available scientific information about sexual offenders and sexual offender treatment. Generally speaking, based on their use of risk assessment measures, clinicians in the sexual offender field appear to have accepted the scientific evidence that actuarial measures are empirically more accurate than clinical judgment (e.g., that science is superior to clinical intuition); they have relatively adamantly rejected the lack of scientific evidence about psychosocial sexual offender intervention. For psychotherapists in general, Ogilvie, Abreu, and Safran (2005) showed that 86 % rated their ongoing experience with their clients as "most helpful," while only 29 % reported "research publications/presentations" as most helpful. Thus, these therapists greatly valued their own perceived experience as of much greater utility than available research

on psychotherapy. Studies show that sexual offender treatment psychotherapists believe in the efficacy of sexual offender treatment at a rate far disproportional to the science reviewed above. Thus, 80–90 % of such clinicians believe that treatment in outpatient or prison treatment "would be effective in reducing child sexual abuse" (e.g., Fortney, Baker, & Levenson, 2009). Given the state of research reviews and the ATSA statement, it is striking that it appears the great majority of sex offender treatment clinicians believe relatively strongly that psychosocial treatments for sexual offenders "work." In contrasting the ready acceptance of the empirically demonstrated risk assessment instruments, this strong convictions regarding sex offender treatment would seem to be a prime example of cognitive dissonance (e.g., Festinger, 1957) and confirmation bias: privileging (even seeking out) beliefs that are in accord with preexisting beliefs while selectively ignoring or devaluing the disconfirming scientific data that continues to accumulate. Further, there has been a consistent finding in the general treatment outcome literature that researcher/therapist allegiance accounts for a significant amount of the perceived outcome in treatment studies that find particular interventions effective. Thus, the inadequacy of the methods of intervention and the inability of clinicians to meaningfully gauge the quality of learning, internalization of constructs, and application in often artificial settings may also compromise any potential that current sexual offender treatment interventions have to offer, particularly with offenders participating in treatment under mandated and/or coerced conditions.

In addition, to being misinformed about the degree to which treatment reduces risk of sexual offense recidivism, one must also wonder about the degree to which clinicians providing sexual offender treatment view their own capabilities at affecting change in their clients. Regarding self-perceived efficacy, in general, clinicians overestimate their capabilities in the treatment role relative to other psychotherapists. As in other professions, Walfish et al. (2012) found that 25 % of mental health professionals rated their skills to be at the 90th percentile when compared to their peers and none viewed themselves as below average. They also showed, as per similar studies, that clinicians tended to overestimate their rates of client improvement. This is a general phenomenon among psychotherapists. Chevron and Rounsaville (1983) conducted an evaluation of different methods of assessing psychotherapy skills and found poor agreement among different assessments of therapist skills based on varied data sources. They also noted important aspects of treatment sessions may be distorted by therapists' reports. Their study found that only supervisor's ratings of therapists were associated with client outcome and that therapist's self-ratings were not. This becomes even more problematic in the context of how psychotherapists guide their actual work in treatment with clients. Castonguay et al. (2010) found little overlap in the types of treatment-related activities reported as helpful by client and therapists; the results suggested that what therapists believe to be useful with regard to change may be substantially different than what clients believe or experience such that clinicians, generally, may not fully understand their client's experience of psychotherapy. In a related manner, citing a variety of earlier studies, Hanson and Harris (2000) noted: "Experienced clinicians are frequently unable to differentiate between sexual offenders who benefited from treatment and those who did not…" (p. 7). Yet Ogilvie et al. (2005) showed that therapists rated their "ongoing experience with clients" as most helpful (e.g., 86 %) relative to research publications and presentations (e.g., 29 %). That is, in general, psychotherapists are much more likely to rely on their own beliefs about psychotherapy and their perception of their history of providing treatment than what scientific study has demonstrated to be related to effective or efficacious psychosocial interventions. However, if psychotherapists of sexual offenders are not able to differentiate those sexual offenders who are actually benefiting from psychosocial interventions from those who are not, then relying on their own perceptions of ongoing experience with those clients may be profoundly significant both in the actual accomplishment of personal change and/or the nature of mistaken presumptions of reduced propensities for sexual offender recidivism.

Further, increasingly questions arise about the relative proficiency or competency of persons employed in therapeutic roles in forensic treatment settings and the importance of therapeutic expertise. Gannon and Ward (2014) make a strong argument that "psychological expertise is becoming frequently overlooked within correctional services…" (due in large part to economic pressures and limited resources) leading to the use of paraprofessionals or relatively inexperienced clinicians (e.g., trainees or unlicensed practitioners). However, Gannon and Ward note:

> Research clearly indicates that effective treatment outcome is related to the skills and competencies of the treatment provider…Consequently, it is hard to see how those with little or even no psychological training hold the technical and interpersonal expertise required to engage in the series of complex and dynamic tasks required to implement flexible, cognizant, and reflective EBP treatment that is matched to client need and grounded in knowledge of the research evidence base pertaining to assessment, formulation, treatment strategies, and ethical decision making. Most notably, the employment of some staff in psychological programing (i.e., correctional officers) may even make one aspect underpinning EBP—that is, the development of a trusting therapeutic relationship-extremely difficult. (p. 441)

Relative to psychotherapy in general, Lambert and Ogles (2004) opined, "It is conceivable that therapists with appropriate styles or skill should improve the outcome for severe cases considerably" (p. 177). They suggested that more experienced and well-supervised therapists might have

greater impact on clients with personality disorders and other more severe disorders. Similarly, Marshall et al. (2011) noted that it should be obvious that some clinicians are more effective than others, stating: "Effective therapists need to have a strong foundation in the empirical literature as well as to possess a specific set of characteristics that have been found to embody a good therapist" (p. 63). Consequently, without clinicians with demonstrated personal qualities, knowledge, and skills and demonstrated effectiveness across various dimensions (similar to state-of-the-art risk assessment measures), the potential outcome of sexual offender treatment may be significantly compromised. In this light, it is notable that more generally, Krause, Lutz, and Saunders (2007) suggested that rather than specific treatments, specific therapists should be "empirically certified" as effective in their actual practice. Additional factors, beyond inexperience and inadequate training and professional experience, concern the apparent high rate of turnover among "justice involved" treatment programs, both those that provide more intermediate and more extended sexual offender treatment.

In short, while therapist variables may be significant in the potential efficacy of sexual offender treatment, there are also many concerns that therapists are not adequately educated, trained, or informed about sexual offender treatment specifically or psychotherapy generally which might significantly undermine the potential influence of sexual offender treatment programming. Sexual offenders as a group may represent a group of clients that is particularly heterogeneous, complex, and characterized by multiple problems and needs, many of which appear to be relatively enduring or persistent. Contrary to what others have suggested, it may well be the case that a substantial subset of sexual offenders are distinctly different from the general criminal offender and not responsive (in terms of reduced sexual offense recidivism) to the standard R-N-R model of intervention. Given the degree of diagnostic comorbidity and the frequent density, persistence, and range of criminogenic needs, it seems quite reasonable to conclude that sexual offenders constitute a particularly difficult group to provide effective treatment for and that the potential for effective treatment may lie in funding highly competent, experienced clinicians who have the requisite competence/expertise and are appropriately compensated to remain in their positions for more extended periods of time.

Nature of Treatment Delivery

Increasingly sexual offender treatment is provided through CBT the use of relatively standardized intervention programs as in other areas of "mental health" or "behavioral problems", CBT is the dominant model of intervention. CBT targets emotions by providing the means to changing cognitions (thoughts) and behaviors that are contributing to the presenting problems. Via self-monitoring exercises, CBT initially emphasizes increasing awareness of how situations, thoughts, and feelings interact and lead to problems. Further, largely based on a premise of skills deficits or misapplication, CBT focuses on understanding, learning, and building (developing) sets of skills that allow an offender to change their behavior, thinking, and feelings as a means of managing their presenting problem.

In sexual offender treatment, the presentation of "packages" of "skill" or "topic" modules of largely manualized CBT interventions is clearly the normative practice. Various agencies and individuals have developed and marketed treatment manuals or workbooks that provided relatively prescriptive programs of intervention strategies; it appears that many community- and institutional-based programs center their treatment for sexual offenders on such manuals and workbooks, with the notion that participants filling out the worksheets and verbalizing the information that they have received and their "feelings" and "insights" groups represent meaningful intervention. CBT-RP is typically delivered in a group format and as a structured treatment package (e.g., often with a specified numbers of sessions for a particular module or treatment strategy). It can be argued that in applying these manuals, given the psychoeducational thrust of CBT-RP for sexual offenders, treatment may be a matter of group leaders telling offenders what the treatment concept or skill is, having group members write down their version of the treatment concept in a workbook/worksheet (and perhaps apply it to themselves), and then taking turns in group to verbalize the treatment concept. Such verbal statements and repetition provide little in the way of establishing understanding, internalization, or ability to apply the concept or skill; there appear to be no studies linking the nature of verbalized information and feelings in treatment settings either to behavior outside of the therapeutic environment, let alone the community; there are no studies demonstrating that any of these behaviors or their quality or nature is related to reduced sexual offense recidivism. As Schwartz pointed out, after between session updates or persona crises, "There is also little time for formal skills training or teaching new members how to prepare a relapse prevention plan" (p. 365). In addition, many sexual offenders appear to possess low levels of psychological mindedness, namely, the capacity for self-monitoring, self-reflection, introspection, and personal/interpersonal insight; they are often generally alexithymic or have a relative inability to identify and describe their feelings or internal motivations (often except anger). As noted, they may experience their maladaptive personality characteristics and other predisposing conditions as well as their sexual offending as ego-syntonic. Consequently, the initial element of CBT, identifying relevant thoughts and feelings, may be a challenge for sexual offenders to begin with.

In addition, to the apparent degree that sexual offenders may be characterized by a variety of skills deficits related to coping with negative affect, prosocial, intimate interpersonal relations, and distorted thinking or problematic schema, psychotherapy may represent a considerable challenge to understand and effectively practice multiple new skills. For criminal offenders generally, Andrews and Bonta (2006) reported that treatment methods most useful involve training and modeling of appropriate skills by therapists, graduated behavioral practice, behavioral rehearsal (role playing), extensive coaching and feedback (from therapists and/or group members), and positive reinforcement of skills that appear to become more successful. Generally, CBT emphasizes the repeated practice of these skills both in and outside of therapy. Per MA, homework assignments and compliance both show effect sizes equal to or greater than that for psychotherapy generally (e.g., Kazantzis, Deane, & Ronan, 2000). However, both in institutional- and community-based treatment, real-time limits may limit skills acquisition and practice (particularly the latter) so that skills are neither well learned let alone mastered. As noted, little or no information exists to validate that such skills are truly learned, generalized, or related to sexual reoffending. Consequently, the time necessary for effective skills acquisition and practice across all the relevant treatment needs of persons with multiple criminogenic needs or risk predisposing conditions may be quite extensive and require frequent and lengthy treatment sessions, particularly if conducted via group treatment. Marshall et al. (2009) have emphasized that, generally, interventions for sexual offenders should have a strong skills-building focus. "More time and energy should be devoted to developing skills than to simply raising awareness of risk factors" (p. 335). They also stress the importance of attempting to generalize newly acquired skills to situations outside of therapy rooms. In particular, Fernandez, Shingler, and Marshall (2009) have emphasized the need to "put behavior back" into CBT to facilitate the potential acquisition and maximal generalization of treatment gains. Other criticism of manualized treatment focuses on the limits such methods place on a clinician's ability to provide individualized treatment geared toward a particular offender's unique psychologically meaningful risk factors and/or long-term risk vulnerabilities. Further, along somewhat related lines, in contrast to presenting problems of emotional distress or "problems in living," time-limited, modularized psychoeducational, or worksheet-based approaches for sexual offender treatment may be particularly inadequate interventions for moderate- and high-need sexual offenders relative to their ability to attend to, meaningfully comprehend, and repeatedly practice novel, alternative ways of dealing with themselves and the world over sufficient period of time that the new behaviors become validly adopted and well consolidated and acquire habit strength. They may also be problematic for those offenders with significant issues in social relationships (e.g., both anxiety and dominance). In addition, from a behavioral or CBT perspective, skills training and meaningful acquisition for persons with significant and broad deficits will always represent a considerable challenge and require considerable time.

Consequently, particularly structured treatment programs (particularly those delivered in groups)—"one size fits all"—may be inappropriate for the heterogeneity of sexual offenders found in both community and residential settings. However, Mann (2009) has strongly advocated for the flexible use of treatment manuals, arguing that they enhance treatment integrity and fidelity, keep intervention focused on relevant (e.g., criminogenic) goals, and limit the effects of biases and knowledge deficits associated with "therapeutic artistry." While treatment manuals may be an important component of outcome research, Mann noted that manualized treatment can be applied in a more flexible, individualized manner within a given treatment protocol and that flexibility can itself be manualized. However, it is unclear to what degree this has happened in extant sexual offender treatment outcome studies. Mann has argued that evidence base supporting treatment manuals in correctional programs is "convincing" and that the possible disadvantages can be remedied. Given the psychological complexity of a significant number of sexual offenders and the multiple, cumulative predisposing conditions that lead to particular sexual offending, it is possible that more individually tailored interventions might produce larger positive outcomes. It may be the case that sexual offender treatment has rarely been delivered in a manner that was optimized to particular sexual offender "needs" to the point of an individual actually mastering an understanding of and application of particular intervention elements. Clearly, the standardization of interventions is both significant and necessary if treatment elements or programs are to be funded, studied, and adopted by third-party payers. However, to date, there is no RCT comparison of manualized treatment versus individualized or even "treatment as usual" by clinicians for sexual offenders.

In part, a primary aim of manualization, both in research and clinical settings, is to ensure some uniformity and quality to treatment, in part by reducing idiosyncratic therapist effects, and to "correct" for inadvertent therapist omissions. In such manners, treatment manuals can serve to promote treatment integrity and fidelity and, as a result, overall quality in treatment provision, in much the same way that structured risk assessment measures serve to correct for the limitations of pure clinical judgment. Skeem et al. (2009), in writing about interventions for criminal offenders, noted that the quality of treatment as measured by provider training, implementation monitoring, and provision of treatment in research settings has been found to be associated with

reduced recidivism. Program integrity appears to be associated with program effectiveness in terms of outcome. However, they also noted that the vast majority of correctional programs lack program integrity and may amount to little more than "correctional quackery." Skeem et al. indicated that there was credibility to the concern that most programs as the implemented were unlikely to be effective. Relative to sexual offender treatment, as with general criminal offender treatment, to date, there has been little to no study of treatment fidelity or integrity; it is actually unclear as to whether treatment programs are being implemented as "intended" or prescribed. This poses another issue that may well relate to the finding that sexual offender treatment efficacy has yet to be demonstrated.

Beyond the primary use of manualized or otherwise standardized treatment programs, over 90 % of community and residential programs rely primarily on group treatment, primarily for cost-effectiveness. Consequently, there are limits to how individualized treatment can be relative to sexual offenders with different sets of criminogenic needs or risk factors; it is argued that this is particularly true for manualized treatment programs. Sexual offender treatment is typically provided in a group format of mixed sexual offenders, meaning persons who have offended against minors and those who have offended against adults are treated in the same groups. Individual therapy is relatively infrequent outside of private practice settings. Of 112 studies, only two were reviewed by Hanson et al. (2002), and Losel and Schmucker (2005) found only eight studies that utilized exclusively individual therapy and another eight that used primarily individual treatment program. While some writers have suggested that group treatment can instill hope and provide social support (e.g., Harkins & Beech, 2007), arguments have been made that group treatment can lead to less individualized treatment, particularly for mixed groups of offenders and those which rely on treatment manuals (e.g., Marshall & Marshall, 2007). Unfortunately, no direct RCT comparisons apparently exist of group versus individual sexual offender treatment programs or more or less manualized interventions.

It is also unclear as to how much time sexual offender treatment programs devote to didactic elements (e.g., teaching) as opposed to open group discussion of either offender—generated issues or topics/issues related to the particular focus of the treatment session are on a given date. As Schwartz (2003) pointed out:

> With up to 12 individuals in a group, there is little time for anything other than monitoring how participants have coped with risky situations during the past week. If one individual is in crisis, other members may have trouble finding any time to comment on their adjustment. There is also little time for formal skills training or teaching new members how to prepare a relapse prevention plan. (p. 365)

There are no RCTs comparing group versus individual treatment, either with or without a manualized approach to intervention. In addition, it is left for group leaders to decide (or not) whether or not individual group members had learned or mastered a treatment construct. Largely, in typical clinical practice, "outcome measurement" appears to be confined to therapists determining "acceptable" responses in workbooks/assignments and the relative ability of the sexual offender to articulate some understanding of the concepts in group interaction and/or crudely apply those generic concepts to their stated versions of their sexual offending history or sometimes just their most recent offense. Generally, research has shown that therapists' ratings of clients' progress are significantly greater than what their clients report or what is reported by client's significant others (e.g., Hill & Lambert, 2004); this is likely to be even more pronounced in forensic therapy settings, where there is significant potential secondary gain for sexual offenders who present as reflecting positive treatment behavior and apparent treatment gains. Further, in their review, Hill and Lambert concluded that therapist ratings of treatment outcome and global ratings of change are associated with the "perception of greater effectiveness" of treatment compared to more specific measures and more distal measures.

Clearly, the dose of psychotherapy is likely an important factor. Per McGrath et al. (2009), the typical community sexual offender treatment program in 2009 reported program length of 24 months (albeit with a large standard deviation of 14 months). In contrast, residential programs reported program length of 29 months (with a remarkably large standard deviation of 28 months and a median of 18 months). As Schwartz (2003) noted, the likelihood of significant cognitive, emotional, and behavioral change is unlikely when interventions are brief, the exposure to substantive content is limited, and the opportunities for experiential practice are inadequate. Particularly for sexual offenders with entrenched cognitions, attitudes, behavior patterns, and/or atypical sexual interests, affecting changes in those domains may take a substantial amount and intensity of clinical time over an extended period of time. In contrast, interventions with limited sessions over several months may provide very inadequate exposure for all but the most low-risk/low-need sexual offender. In 2003, Schwartz called attention to key differences between institutional and community programs relative to the factor of time or dose of treatment. She noted that community-based outpatient groups typically consisted of one 90-minute session once a week often with as many as 12 participants in the group. She notes that, practically speaking, such may leave "little time for anything other than monitoring how participants have coped with risky situations during the past week" (p. 365) or addressing specific crises. Further, Schwartz commented

that with such limited contact time, there is typically little opportunity for meaningful intensive skills training or for teaching new members how to prepare a relapse prevention plan. In contrast, she noted that institutionally based programs might be in a position to devote much more time to treatment, offering "between 6 and 10 hours of direct treatment supplemented by a variety of other therapeutic activities" (p. 365). McGrath et al. (2009) confirmed that most community programs met once per week, while residential programs had approximately four sessions per week. The median number of hours to complete sexual offender treatment was 140 and 316, respectively, in community and residential programs. Thus, in providing largely group treatments, the amount of time available for individual participants in sexual offender treatment may be quite limited given the limited weekly hours, the size of the groups, and the variety and severity of individual's issues and problems that characterize a sizeable number of sexual offender treatment participants. The disparity of treatment time and dosage between community and residential types of treatment (e.g., increased) raises questions about the findings from several SRs and meta-analyses that institutional programs have worse outcomes in terms of sexual offense recidivism rates. This raises significant questions about the requisite duration and dosage of time necessary for moderate- and high-risk sexual offenders to meaningfully change. Further, in contrast to general criminal offenders, Hanson, Bourgon, Helmus & Hodgson et al. (2009) found that the risk principle (e.g., more intense services to high-risk offenders) did not lead to more positive outcomes. As Harkins and Beech (2007) noted, "little work has been conducted on the relationship between dosage of sexual offender treatment according to risk level and recidivism" (p. 624).

Little Evidence Exists That the Specific Components of Sexual Offender Treatment Are Efficacious

Perhaps the most significant factor in the failure to demonstrate efficacy of psychosocial sexual offender treatment is that little or no empirical evidence exists that most of the specific core targets and the component tactics, strategies, and methods employed in such interventions are themselves effective. The historical perspective on the development of sex offender treatment and the results of the most recent survey of sex offender treatment programs (McGrath et al., 2009) both indicate that currently, the great majority of such programs consist of multicomponent elements that target specific areas believed or assumed to be related to sexual offending. Consequently, the effectiveness of these programs must strongly rely on whether or not these areas are related to sexual offending and/or whether the specific interventions have an actual effect on the select targets; by actual effect, there should be scientific evidence affirming that these treatment components have an intended (or even unintended) effect on sexual offenders that leads to a reduced likelihood of sexual offense recidivism. If this were not true, then there would be little basis to expect that sex offender treatment would be effective, except perhaps for effects from the so-called common factors. As Baker, McFall, and Shoham (2009) point out:

> Scientific plausibility refers to the extent to which an intervention makes sense on substantive bases and whether there is formal evidence regarding its mechanism…the absence of a demonstrated or plausible specific mechanism of action, especially for a psychosocial intervention, leaves open the possibility that the intervention may merely be capitalizing on nonspecific credible, ritual, or placebo effects. (p. 72)

Unfortunately, virtually all available evidence suggests that little or no most current treatment targets or intervention strategies have any empirically demonstrated basis; that is, little or no evidence indicates that these components of sex offender treatment programs have a clear, defined, and lasting effect on sexual offenders and/or if they are actually associated with decreased sexual offense recidivism. Given the lack of scientific evidence for the effectiveness of sexual offender treatment, both the common treatment targets and methods of such treatments may be "off target" or irrelevant to the goal of reducing sexual offense recidivism (as opposed to just inadequately implemented).

Historically, almost all sexual offender treatment programs have been institutional (primarily correctional) or community agency based in nature; the available data indicates that very few sexual offenders receive psychotherapy in private practice settings. Per a recent survey (McGrath et al., 2009), 92 % of sex offender treatment program for adult males identified cognitive-behavioral therapy (CBT) as one of their top three influences; relapse prevention (RP) was the next most common selection.[4] Approximately 50 % of both residential- and community-based programs endorsed psychoeducational methods as a primary model, which was a decrease from previous surveys. Thus, most current sex offender treatment programs in North America utilize CBT and RP for sexual offenders (e.g., Marshall, 1999; McGrath et al., 2009). McGrath et al. (2009) identified the common treatment targets and treatment methods of sex offender treatment found in most community and residential sex offender treatment programs in the United States. They are listed in Tables 1 and 2. In addition, the Center for Sexual

[4]In recent years, sex offender treatment programs have increasingly endorsed some use of the GLM and/or SR models of treatment, but no empirical studies of the outcome of these models have been conducted.

Table 1 Most common core treatment *targets* for residential and community programs (McGrath et al., 2009)

Core treatment targets	Adult males (%)
Residential programs	
Offense responsibility	91
Social skills training	91
Victim awareness and empathy	87
Intimacy and relationship skills	84
Problem solving	79
Emotional regulation	64
Arousal control	59
Offense-supportive attitudes	54
Self-monitoring	49
Family support networks	47
Community programs	
Victim awareness and empathy	93
Offense responsibility	92
Intimacy and relationship skills	91
Social skills training	88
Problem solving	80
Arousal control	69
Emotional regulation	66
Self-monitoring	56
Offense-supportive attitudes	54

Table 2 Most common *components* of sex offender treatment in the United States (from McGrath et al., 2009)

Core treatment components	Adult males (%)
Residential programs	
Relapse prevention	92
Assault cycle or offense chain	92
Cognitive restructuring	91
Sex education	72
Motivational interviewing	61
Client's victimization/trauma	60
Therapeutic community	47
Victim clarification	39
Schema therapy	9
Community programs	
Relapse prevention	96
Assault cycle or offense chain	92
Cognitive restructuring	90
Client's victimization/trauma	78
Sex education	74
Victim clarification	69
Motivational interviewing	46
Therapeutic community	14
Schema therapy	9

Offender Management (CSOM, 2008) of the US Department of Justice presents an online curriculum for the "Elements of Sex Offender-Specific Treatment."[5] The curriculum is based on an early survey of sex offender treatment program conducted by McGrath et al. from 2003. It provides

> a framework for thinking about sex offender–specific treatment. It particularly deals directly with a topic of great interest to those involved in community supervision—addressing offender denial. It also covers techniques for addressing cognitive distortions with respect to consent to sexual activity, and speaks to increasing victimization awareness and the steps that follow disclosure of a full sexual history. Additionally, participants are introduced to the four domains of treatment: sexual interests, distorted attitudes, interpersonal functioning, and behavior management.

However, as the systematic review of treatment for adult sexual offenders by the Institute of Health Economics (IHE) in Canada (e.g., Corabian et al., 2010) noted: "There also remains much disagreement concerning what are the most useful components and elements of sex offender treatment program that would ensure meaningful rehabilitation for convicted adult male sex offenders and limit the number of future victims" (p. 39). It can be argued that currently, minimal empirical evidence exists to support either the core treatment targets or the methods involved in sex offender treatment. It is important to recall that much of what is identified as sex offender treatment was either "borrowed" from existing treatment models or practices for other behavioral problems (e.g., modification of cognitive distortions, social skills training, relapse prevention) or theoretically based on early behavioral conceptions of the potential etiology of deviant sexual interests. Unlike other problems targeted by or addressed by psychotherapy, there was little scientific investigation (or demonstration) that specific interventions had particular short- or long-term effects on sexual offenders and/or that scientifically demonstrated interventions were then incorporated into sex offender treatment programs.

Rice and Harris (2003) opined:

> …we suspect all would agree that very little knowledge has accumulated about several crucial matters. Thus, there is no information about what aspects of treatment (teaching social skills, versus exploring the offense chain, versus practicing relapse preventions strategies) might produce reductions in recidivism. Anyone attempting to start a treatment program would find little or no empirical foundation from the sex offender treatment literature. This dearth of knowledge about sex offender treatment contrast sharply with the rapid expansion of knowledge in other areas. (p. 437)

[5] http://www.csom.org/train/treatment/long/index.html

In fact, Hanson, in his series of meta-analyses of risk factors for sex offense recidivism, has demonstrated that various components of CBT-RP sex offender treatment programs (at least as measured) *do not* appear to empirically be related to sexual offense recidivism. Initially, Hanson and Bussiere (1998) examined the role of "clinical presentations" to sex offender recidivism. They found that motivation for sex offender treatment, denial of the adjudicated sex offense, degree of empathy for victims, and length of treatment showed no relationship to later sexual reoffending. Later, in their updated meta-analysis, Hanson and Morton-Bourgon (2005) similarly found that similar variables of clinical presentation were unrelated to sex offender treatment outcome; (low) motivation for sex offender treatment, denial of the adjudicated sex offense, degree of empathy for victims, loneliness, and low self-esteem were also found to have no relationship to later sexual reoffending. In addition, poor progress in sex offender treatment, measured at the end of such intervention, was unrelated to sex offender treatment outcome. Hanson and Morton-Bourgon stated: "…most [sex offender treatment] programs direct considerable resources toward characteristics that have little or no relationship with recidivism (e.g., offense responsibility, victim awareness, and empathy)" (p. 1159). In a later meta-analysis of sex offender treatment, Hanson, Bourgon, Helmus & Hodgson et al. (2009) continued to emphasize:

> Many of the factors targeted in contemporary treatment programs do not [target criminogenic needs]. Offence responsibility, social skills training, and victim empathy are targets in more than 80 % of sexual offender treatment programs…yet none of these have been found to predict sexual recidivism…. (p. 886)

Thus, Hanson and Morton-Bourgon wondered: "An important question is whether programs that target the major predictors of sex offender recidivism (e.g. lifestyle instability, deviant sexual interests, or sexual preoccupations) are more effective than programs that target" (p. 1159). Hanson, Bourgon, Helmus & Hodgson et al. (2009) emphasized that attention to the need principle would motivate the largest changes in interventions currently given to sexual offenders, such that an empirical association with sex offense recidivism would be a minimum criterion for a factor to be considered a criminogenic need. They suggested that without a focus on empirically identified criminogenic needs, psychotherapies for sex offenders might not be effective interventions.

It should be noted that the shift to more multidimensional, multicomponent cognitive and behavioral treatment strategies (e.g., targets) and tactics (for optimal implementation) in the treatment of sexual offenders was not based particularly strongly in either theory or scientific evidence. Rather, it reflected both a more general change in treatment methods for a variety of mental health conditions and/or social problems from the CBT perspective (providing a broad "shotgun" set of therapeutic components) and a non-empirically rooted belief that particular treatment targets might be related to sexual offense recidivism for most sexual offenders. Consequently, it is perhaps not so surprising how little science exists to support particular goals (targets) and methods (components) common to sex offender treatment programs. With virtually no exceptions, the available research finds almost no scientific research specifically linking a specific treatment area or method commonly utilized in sex offender treatment to changes in its psychosocial target.

Concerning the acceptance of responsibility of an offender's history of detected sexual offenses, Marshall (1994) found that 32 % of a sample of sexual offenders significantly minimized elements of their sexual offending, while another 31 % completely denied having sexually offended. Thus, well over 60 % of those sexual offenders, to a large degree, started treatment without accepting responsibility for having sexually offended. Prentky et al. (2011) reported that acceptance of responsibility for adjudicated sexual offending has actually decreased significantly over time; acceptance of responsibility dropped from 90 % of sexual offenders receiving treatment in the 1960s to only 50 % in the 2000s. Consequently, for most sexual offender treatment programs, offense responsibility (involving sexual offending disclosure and accountability) has been a primary aspect of sex offender treatment programs; per McGrath et al. (2009), approximately 90 % of sex offender treatment programs identified this as a key and most common treatment target. They found that over 1/3 required an offense disclosure "very consistent with official records" and over 40 % required an offense disclosure "reasonably consistent with official records" (p. 66). Per CSOM's Web-based treatment curriculum overview:

> Denial is a major concern because most sex offender treatment is predicated on the offender's admission that he committed sexual assaults and that these behaviors are a problem for him… If a convicted sex offender assumes the position in treatment that he did not commit any sex crimes, then whenever issues are discussed in treatment group meetings, such as cognitive distortions, deviant arousal, and offense cycles, the denying offender simply states that these concepts don't apply to him. This precludes his addressing his problems, and often interrupts the therapeutic process for the other sex offenders in the group who are admitting their sex offense histories. A corollary concept related to the importance of sex offenders' taking responsibility for committing sexual assaults is that by implicitly acknowledging that they chose to commit sexual assaults, they can make other choices, namely not to commit future sexual assaults. Sex offender treatment emphasizes that people can change; failure to admit problems provides no impetus to change…Therefore, before sex offender treatment can be effective, the offender must admit his offense history, at least in part…We view treatment of denial essentially as pre-treatment; not all sex offenders need it. However, those who do must substantially abandon their denial in order to benefit fully from sex offender treatment.

However, as noted, the Hanson et al. risk factor meta-analyses in 1998, 2004, and 2005 each found that denial

(albeit, measured in various ways) was not correlated with sexual offense recidivism. However, Levenson and Macgowan (2004) found denial to be inversely related to engagement in treatment.

Ware and Mann (2012) raised questions about the necessity of offense disclosure and focused on denial and minimization as the opposite of such offense responsibility. They argued that there was no well-articulated model of change for taking responsibility for one's sexual offending and that denial and excuse-making could be viewed as normal behavior. They also indicated that a lack of acceptance of responsibility for sexual offending was implicated in particularly high rates of treatment attrition, noting that there might be significant "costs" to the offender relative to self-esteem and loss of social support for such "confessions." Conversely, several reasons support that sexual offenders provide a full and detailed disclosure of their history of sexual offending. It is difficult to conceptualize many psychotherapy situations where individuals enter treatment but do not acknowledge that they have a "problem." To the degree that such persons deny that a problem exists (e.g., persons with eating disorders or substance abuse/dependence which are ego-syntonic), the initial focus of treatment is addressing that "resistance" so that treatment toward a healthier lifestyle can begin. This would seem particularly significant for forensic therapy, where a client is also the community interested in the protection of the client or society at large. Given the diversity and crossover for a significant number of sexual offenders, a full disclosure of sexual offending history can elucidate the range and dynamics of sexual offending.

From a CBT-RP perspective, full disclosure of sexual offending allows the development of "offense *chains*" and the potential *variety* of behavioral signatures of sexual offending for a particular offender (especially given the demonstrated crossover and overlap of significant numbers of sexual offenders' victims and/or offense type). In many respects, such offense chains are similar to the products of self-monitoring of presenting problems where clients are expected to create a behavioral analysis of situations and associated cognition, emotions, and behaviors that lead to particular behaviors or other consequences. Such a self-monitoring promotes awareness of the predisposing and situational factors related to a presenting problem. As noted, in sex offender treatment, offenders are typically expected to develop a detailed analysis of the sequence of events leading up to one or more sexual offenses, including associated thoughts, feelings, and behaviors and to examine the chains and their components to determine what set of conditions were "high risk" for them. Such offense chains provide a basis for creating an individualized focus of treatment for the sexual offender (including identifying components critical to relapse prevention efforts, situational cues/antecedents, motivational factors, and historical and potential consequences of sexual offending). Such a focus seems necessary as a key means to identify a relatively complete set of criminogenic needs to be addressed in treatment. Even Ware and Mann "suggest…that therapists focus on using disclosure of offenses as an information gathering strategy that ultimately informs case conceptualization" (p. 286) so that factors related to sexual offending can be identified as treatment targets (e.g., criminogenic needs) and provide the basis for what they identify as "active responsibility" toward future life change. Further, from both a forensic and public safety perspective, obtaining a relatively correct and comprehensive history of an individual's sexual offending seems quite necessary in order for a comprehensive, individualized risk assessment and related management strategies; sexual offending history has consistently been identified as one of the best predictors of sexual offense recidivism per the various meta-analyses of risk factors for sexual reoffending. In addition, studies have demonstrated that the inclusion of self-reported sexual offense history is an independent predictor of such recidivism (e.g., Hanson, Steffy, & Gauthier, 1993). Thus, from the perspective of forensic psychotherapy, with its strong emphasis on community safety and decreased future sexual offending, complete disclosure and acceptance of responsibility by offenders regarding the scope and variety of sexual offenses appears necessary to understand the nature of their risk for recidivism and to provide meaningful information to direct the specifics of psychosocial interventions. It also provides a metric for sexual offenders to come to terms with the need and nature of sex offender treatment and for their actual self-motivation relative to commitment to personal change for the sake of community protection.

As noted, the one key area of sex offender treatment that was theoretically derived was the belief that deviant sexual arousal represented a conditioned association that paired a past event or mental representation (typically accidentally) with a state of sexual arousal (e.g., McGuire et al., 1965); the mental representation when experienced then became sufficient to produce a state of sexual arousal which would be reinforced via masturbation to that cognition. Deviant sexual fantasies, urges, and even behavior were thus believed to be derived from or originate from previously "learned" sexual interest in acts or memories that came to be associated (via conditioning) with sexual arousal. As a result, the original treatments for sexual offenders were primarily applied behavioral techniques that attempted to alter or "modify" deviant sexual interests by either eliminating the reinforcing aspect of the deviant fantasy/arousal (and to "normalizing" or changing the deviant fantasies or arousal to more "appropriate" stimuli). As Rice, Harris, and Quinsey (2001) noted, reconditioning of deviant sexual arousal was the one element common for virtually all psychosocial treatments for sexual offenders. Even more recently, such techniques (broadly identified as arousal control or modification) have been

central, substantive components of current CBT treatment for sexual offender (per McGrath et al., found in approximately 60–70 % of US treatment programs in 2009). However, the relevance of conditioning (as the cause of sexual offending) and behavioral modification of sexual interests and arousal patterns (as an intervention for sexual offending) has been questioned. O'Donohue and Plaud (1994) concluded that, due to the methodological problems of available studies, the basis was "tenuous" for asserting the existence of relationships between habituation, sensitization, classical conditioning, operant conditioning, and sexual behavior. Laws and Marshall (2003) observed that while the theory that sexual preference (e.g., deviant sexual interest) developed via behavioral conditioning was an appealing one, it had never been supported by more than anecdotal evidence. Marshall himself (1971) had first pointed out that even eliminating deviant sexual interests and adding procedures to enhance appropriate sexual interests was not likely to guarantee the development of nondeviant sexual interests. Relative to the various methods proposed to alter deviant sexual interests (e.g., masturbatory reconditioning, aversive therapy, covert sensitization), Laws and Marshall (2003) noted that "there was limited evidence on the long-term effects on overt behavior of these techniques…there was, and continues to be no evidence of enduring changes in sexual preferences as a result of these simple behavioral approaches…" (pp. 86–87).

In a review of the available studies of arousal control, one finds that almost all were case studies, few if any involved comparison treatment conditions or no treatment groups, and none followed "treated" sexual offenders for any significant length of time. Almost all studies relied on the self-report of the sexual offender that his deviant sexual interests had changed as a result of intervention. Thus, even early proponents of such interventions such as Laws and Marshall (1990) stated that the evidence advanced in support of most methods of masturbatory reconditioning was then "weak" and Marshall and Pithers (1994) noted that most strategies to alter deviant sexual interests had limited empirical support.

Covert desensitization or covert sensitization has been and continues to be the most popular approach used in an attempt to modify deviant sexual arousal (e.g., McGrath et al., 2009). This procedure involves having a client imagine enacting preferred deviant sexual behavior and then immediately imagine a very undesirable or aversive consequence or image. However, per Marshall et al. (2009), it is noted that clients report that after repeating imagery consequences several times, the aversiveness of that stimuli dissipates or is lost. Further, Marshall et al. noted that despite its popularity, "there is little in the way of supportive evidence for the covert sensitization" (p. 321). At the same time, Marshall in various forums (e.g., Marshall et al., 2009, 2011) has continued to advocate for the technique of masturbatory satiation as efficacious. However, a review of the available research literature would indicate that little empirical evidence, let alone robust scientific evidence, exists to substantiate this intervention strategy as particularly effective, certainly based on controlled studies utilizing a meaningful follow-up period. Even Marshall et al. (2009) wrote: "What is most clear from this review of behavioural procedures is that far more research is needed to generate confidence in their utility. This is particularly pressing given that so many programmes employ these techniques. It is time that clinicians made the effort to collect data in their use of behavioural procedures aimed at enhancing appropriate sexual al interests and decreasing deviant interests" (p. 324). Overall, no RCTs or other types of controlled studies have demonstrated enduring or long-term change in deviant sexual interests as a function of any masturbatory reconditioning. To date, at best, the value of such treatment components is unknown.

Social skills training also became an important component of sex offender treatment. Marshall (1971) is credited for advocating that simply reducing deviant sexual arousal was insufficient as treatment and that it was important to facilitate the acquisition of social skills to enable offenders to obtain the capabilities for age-appropriate sexual partners. Similarly, Abel, Blanchard, and Becker (1978) included social skills training as part of a comprehensive approach to treating sexual offenders and conducted limited research into social skills in relation to sexual offenders (e.g., Barlow, Abel, Blanchard, Bristow, & Young, 1977). McFall (1990) also discussed enhancing social skills as a component in the treatment of sexual offenders. Per CSOM,

> Generally speaking, the belief is that if offenders can learn to live more functionally in the world of adults, they will find life more satisfying, thereby diminishing their likelihood of reoffending. This is not to suggest that a lack of social skills is either the primary reason why people commit sexual assaults, or even that poor social skills have been associated with sex offender reoffense risk. However, intimacy deficits and conflicts in intimate relationships have in fact been found to predict sexual recidivism. Thus…the case for criminogenic needs in the area of social skills training for sex offenders is less clear.

However, little useful research exists regarding social skills deficits or issues related to sexual offending in general.

Stermac, Segal, and Gillis (1990) in their review of the available research at the time concluded: "Although a number of controlled studies have examined the social skills and interactions abilities of sexual offenders, a clear pattern of deficits has not emerged for either rapist or child molesters… It is clear…that further work in the area of social skills and social perception needs to be carried out" (p. 155). Mann et al. (2010) found that social skills, as measured, were not

empirically associated with future sexual offending. Regarding social skills, Marshall and Eccles (1991) noted that while such components had been a part of sex offender treatment for 20 years, "the evidence for such deficits is rather thin" (p. 72). Hanson et al. (1993) found that enhanced social skills did not show a positive association with treatment. More recently, Ward, Polaschek, and Beech (2006) reported: "as yet there is no evidence that social skills training can, on its own, reduce sexual offender' risk" (p. 184).

Following Beck (1975), Abel et al. (1978) began assessing and targeting so-called cognitive distortions as part of a treatment package for child molesters. Segal and Stermac (1990) and Murphy (1990) also discussed the role of cognition and modifying cognitive distortions in sexual offenders. At that time, the term cognitive distortions included a variety of references, including beliefs about potential victims, denial, minimization, and justification for sexual offending. Salter (1988) strongly advocated the value of strongly confronting "cognitive distortions, rationalizations and excuses for offending" (p. 114). It notable that even then Murphy reported on research that indicated that sexual offender's cognitive distortions appeared to change as the result of other components of treatment. More recently, Maruna and Mann (2006) have argued that there are many different views of cognitive distortions regarding sexual offender and that most phenomena regarded as distortions (e.g., denial, excuses, justifications) may not have a causal role in sexual offending.

In addition, Shingler (2009) reviewed studies that showed that "thought monitoring" or "thought suppression" appears to be *problem-exacerbating* for sexual offenders, both by priming thinking and *increasing* targeted intrusive thoughts (e.g., rebound thinking). Per Mann and Marshall (2010) and Marshall et al. (2009), recommendations are to target schema-related beliefs and offense-supportive attitudes as filters on processing confirming and disconfirming evidence about potential victims. However, generally, there is little evidence that schema change actually occurs as a result of cognitive therapy and that only minor cognitive changes typically follow "experimental" behavioral changes that result in disconfirming "evidence." Longmore and Worrell's (2007) review of CBT generally reported: "…these findings reveal a worrying lack of empirical support for some of the fundamental tenets of CBT. There is a paucity of evidence that cognitive interventions forming the core procedural aspects of CBT are differentially effective in reducing distress. Further, there is a lack of evidence that their effectiveness, such as it is, is mediated cognitively…" (p. 185). If cognitive therapy does not provide the mechanism of change for depressed or anxious clients, is it reasonable to expect it to serve as a powerful means of reshaping sexual offender's offense-supportive attitudes and self- and other schema? Clearly, there is no meaningful data on the actual change in sexual offender's information processing, cognitive distortions (automatic thoughts), or (meta) cognitive schemas as a result of treatment (e.g., in a controlled manner), whether such changes are enduring and in what manner they are related to sexual offense recidivism.

A related issue concerns victim empathy (VE); most sex offender treatment programs emphasize the significance of offenders either gaining or, at least, learning about VE. Mann and Marshall (2009) review various studies and concerns regarding VE. They note that empathy has a number of components and is a multidimensional construct. Further, they point to a lack of research support (including the Hanson meta-analyses) that sexual offenders, as a group, actually lack empathy. Finally, they also noted that offenders often indicate that they possess empathy for others in general but not for their specific victims. However, they also indicate that anecdotally both clinicians and offenders often report that empathy interventions can be a critical aspect of sex offender treatment. Mann and Marshall recommend that "Empathy work should…be a very specific, targeted activity for each offender…" (p. 333). Brown, Harkins, and Beech (2012) noted that research linking empathy to sexual offending and/or to treatment outcome has produced mixed findings. In their study, they found that victim-specific empathy improved from pretreatment to posttreatment and related to overall treatment change. A small group of offenders, whose victim empathy scores deteriorated from pretreatment to posttreatment, had higher rates of sexual recidivism compared with the rest of the sample. However, Brown et al. found that generally there was no reliable pretreatment to posttreatment changes noted on general empathy scores nor was any relationship found to sexual recidivism. This study found limited sexual offense recidivism, so it is unclear what self-reported victim-specific empathy score change scores have to sexual offense recidivism. Generally, it is unclear as to whether empathy-target interventions are actually related to self-reported empathy scores or that the various forms of general or victim empathy, as measured to date, show little or no relationship to sex offender recidivism.

RP is directly premised on the notion that high-risk situations and/or negative emotional experiences/stresses trigger sexual reoffending. Both independently and in conjunction with RP, it has been theorized that sexual offending might be a coping strategy for experiencing the range of negative affect or that sexual arousal might be related to such affect such that sexual offending represented a means of coping with experienced distress (e.g., Cortoni & Marshall, 2001; Serran & Marshall, 2006). Coping strategies of various types have been utilized in sex offender treatment as a means of providing skills in managing negative affect. However, McCoy and Fremouw (2010) reviewed the evidence for an association between negative affect and aspects of sexual offending and found that the available studies do not support such relationships (in part due to methodological limitations). Both

approach pathways of the SR model are predicated on offenders pursuing sexual offenses with purpose and, in many cases, anticipation of pleasure and sexual gratification (e.g., Yates & Kingston, 2006). Serran and Marshall (2006) reported: "… research remains unclear as to the processes that move offenders from affect states and poor coping to abusive acts" (p. 121). In a related manner, Nezu, Dudek, Peacock, and Stoll (2005) found that social problem-solving skills were unrelated to sexual offending, at least among offenders identified as child molesters There are few or no direct tests that coping or problem-solving skills of sexual offenders change as a result of sex offender treatment or that related changes are associated with sexual offense recidivism. Again, no direct tests of sex offender treatment approaches involving coping strategies or problem-solving skills relative to other approaches or control conditions have been conducted, let alone any other controlled investigations. Thus, it is unknown if encouraging the development of coping skills is advantageous or even meaningfully adopted by sexual offenders. More generally, a meta-analysis of problem-solving therapy showed that such interventions were relatively effective for various mental health problems compared to placebo but demonstrated no specific effectiveness relative to other bona fide treatments; in addition, it was unclear if such interventions lead to solving more real-life problems over time (Malouff, Thorsteinsson, & Schutte, 2007), suggesting that such interventions have generic effects and lack ecologically valid results.

As noted, at one point in time, RP was considered the most significant advance in the field of sex offender treatment. RP typically involves the identification of "high-risk conditions" (e.g., situations, feelings, expectancies) presumed to be associated with a reoccurrence of a particular problem behavior and the specific challenges for a specific individual relative to refraining from the behavior; individuals are subsequently taught a range of coping strategies specific to their sexual offending history to decrease the probability of "relapsing by attempting to commit another sexual offense." RP, by nature, should be a largely idiographic process directed by a careful case-formulation of a particular sexual offender's available history of prior sexual offenses. However, RP per se was never systematically scientifically investigated as a stand-alone or even as an added component for a sex offender treatment program. The emphasis or inclusion of RP in sex offender treatment has been criticized on a number of grounds and by various authorities. Ward, Hudson, and Siegert (1995) first criticized the redefinition of a lapse, and incorporating the issues of the "problem of immediate gratification" into the RP model created theoretical confusion and was not supported by then existing research. Ten years later, Wheeler, George, and Marlatt (2006) argued that the modifications of formulations and application of RP "have generally failed to characterize sexual offense relapse cycles accurately and comprehensively" (p. 233), noting that in particular the modifications failed to specify the nature of the abstinence violation effect's occurrence and influence in the offense cycle. They pointed out that available data collected from sexual offenders "indicate that the current model of RP for sexual offenders is indeed incomplete if not inaccurate" (p. 245).

Irvin, Bowers, Dunn, and Wang (1999) conducted a MA of RP, almost all of which dealt with substance abuse. Their results indicated treatment effects were strong and reliable for alcohol and drug abuse (but not smoking), particularly as measured by participants' self-report. Of note, RP appeared to have more impact on improving psychosocial function than actually reducing substance/alcohol use. In addition, their measured effectiveness was greatest at the end of intervention and weaker at more distal points following intervention. More specifically, the explicit RP treatment and aftercare program of SOTEP can be viewed as strong evidence that RP may not be an effective element in sex offender treatment. Marshall et al. (2011) stated, "[The] rejections of RP now seem justified given the clear failure of a well-designed evaluation of a model RP program" (p. 11), referring to SOTEP. [Per the most recent Cochrane Reviews, a similar finding was reported regarding the treatment of bulimia nervosa and related eating disorders as well (e.g., Hay et al., 2009).]

Marshall et al. (2009) have argued that the weakness of RP interventions is that offenders are required to generate potentially long "lists" of avoidance plans at the expense of expanding their behavioral repertoire to "fulfilling" or "enjoyable" behavior. Marshall et al. suggested that RP is essentially an avoidance model (offenders are taught to avoid stimulating situations that might provoke or elicit sexual reoffending) and CBT is largely framed as a deficit model where missing cognitive and behavioral skills are introduced and practiced as a means of addressing presenting problem behaviors (e.g., Marshall et al., 2003, 2011). He and his collaborators have suggested that sexual offenders are more likely to actively participate in sex offender treatment when provided approach goals as opposed to avoidance goals. They pointed to a study by Mann, Webster, Schofield, and Marshall (2004) where two groups of offenders were compared: those treated in programs that emphasized the RP (avoidance plans) approach and those who were focused on generating individualized approach goals. This latter group was seen as more engaged and open in treatment, as well as more motivated to avoid reoffending. Intuitively, the notion of offering primarily or exclusively "approach" goals is appealing, from the perspective of both clinicians and sexual offender clients. However, given the available evidence about the presentation of denial/minimization and general lack of motivation for self-change and sex offender treatment among sexual offenders, a basic but unanswered question is

to what degree sexual offenders generally are interested in approaching some goals and what those might be (beyond liberty). An additional question would be, assuming that approach goals were developed and through some psychological means and methods secured, to what degree would it make a significant difference to sexual offender recidivism and broader prosocial change. There is evidence that offenders prefer treatment that affects an orientation toward the GLM but no evidence that a GLM orientation toward treatment results in different outcomes for offenders exposed to it as opposed to CBT "as usual." Thus, Barnett et al. (2014) compared GLM to a traditional RP program in the community. While offenders appeared to prefer the GLM model, "There were no differences in the amount of change over treatment or…clinically significant change" (p. 1). Harkins, Flak, Beech, and Woodhams (2012) had reported similar findings. To date, there is no demonstrated scientific evidence demonstrating that any of the more novel treatment approaches "work" in terms of reducing sexual offense recidivism and offer evidenced benefit for either the sexual offender or society.

In short, when commonly identified components of a comprehensive sexual offender treatment program are considered, a review of the available scientific literature provides little support for the likely efficacy of these specific components to impact presumed treatment targets. Thus, little empirical evidence of the general or sexual offender-specific effectiveness of offense disclosure, modification of deviant sexual arousal, social skills training, changes in cognitions, affective training (e.g., victim empathy), and relapse prevention can be found in the available research literature regarding psychosocial interventions.

Further, as Hoberman (2015b) noted in his review of treatment efficacy of sex offender treatment, published scientific studies to date have almost never shown that posttreatment scores or change scores in most measures of treatment targets are associated with a decrease in sexual offense recidivism. In the general psychotherapy literature, specific components or programs of intervention appear to have similar results for treatment outcome (e.g., Lambert & Ogles, 2004; Wampold, 2001); however, they have similar positive results, particularly in modifying affective states. Wampold (2001) has repeatedly called attention to the common elements of psychotherapy as associated with positive changes in outcome measures for most persons who choose to enter such interventions. As Lambert and Archer (2006) concluded: "Psychotherapy can be efficient, especially for patients who are not severely disturbed" (p. 126). In contrast, no specific or nonspecific component of sex offender treatment has been established to have a demonstrable effect on personal change or reducing sexual offense recidivism. Rice and Harris (2003, 2012) noted available data regarding the nature of sexual offender treatment has shown little or no detectable specific effect on outcome. Similarly, Marshall et al. (2011) noted that "…there is presently a dearth of studies showing that specific treatment procedures aimed at modifying criminogenic features…actually achieve the sought-after goals… There is, then, an urgent need for more thorough detailed evaluations of the effectiveness of treatment to change specific criminogenic features across most clients and to determine which of these changes is essential to reduce future reoffending" (p. 45). Further, most sex offender treatments emphasize skills education and skills training. However, without considering motivational and other responsivity issues, there appears to be no empirical data regarding the length of time that is necessary for offenders to actually learn and understand those skills and practice those skills to proficiency within a therapy situation, let alone to consistently generalize such skills outside the therapy or classroom. As Marques et al. (2000) indicated:

> It is easy to write down 'I would recognize and defeat that cognitive distortion by telling myself it is wrong to think about a child that way.' It does not follow, however, that the individual could do that quickly and effectively in a high-risk situation. There was a strong consensus among SOTEP clinicians that more actual practice of identified coping skills was needed. (p. 327)

Finally, Marshall et al. (2009) stated "…it is…irresponsible to continue with irrelevant goals or involve counterproductive approaches…" (p. 342).

Are Treatment Targets Accurate or Understood in Sexual Offender Treatment?

A significant reason that treatment components (and their package into sexual offender treatment programs) may not be particularly successful with sexual offenders might be that they do not meaningfully address those factors that either "cause" and/or maintain sexual offending. That is, current sexual offender treatment targets may not appropriately or adequately represent those conditions that are the basis for sexual offending. Hanson and Harris (2000) wrote: "When the specific goal is to prevent sexual offense recidivism there is almost no empirical foundation for identifying treatment targets or determining whether interventions have been successful…" (p. 6). Treatment targets must be identifiable and mutable—they must be subject to potential change via one or more specific interventions or manageable within particular contexts. Typically, treatment targets are hypothesized to be related to causal risk factors (e.g., Elwood, 2009; Kraemer et al., 1997); they must not just be associated or correlated with an outcome such as sexual offending but precede the event, show some significant strength of a connection, and, typically, exist on a gradient where the greater the presence of the risk factor, the more likely the outcome of interest (e.g., sexual offending). Hypothesized risk factors can be

identified on a theoretical basis and on an empirical basis. Regarding the latter, effectively, no prospective studies have been conducted to examine psychosocial and other characteristics that might be related to the onset of sexual offending. However, at least three meta-analyses of empirically identified risk factors for sexual reoffending have been conducted (Hanson & Bussiere, 1998; Hanson & Morton-Bourgon, 2005; Mann et al., 2010). Of note, no specific risk factor has been demonstrated to correlate more than approximately .30 with sexual reoffending, suggesting that such variables do not account for more than 9 % of the total variance in their association with sexual offender recidivism. The so-called dynamic duo—deviant sexual interests and antisocial history/status—are the two primary psychosocial clusters predictive of sexual offense recidivism, apparently with both of those dimensions representing "motivators" toward sexual offending and the latter also representing varied dimensions of disinhibition (e.g., Hoberman, 2015a). However, based on available empirical evidence, even those persons identified as high on both of those dimensions are not necessarily detected for future sexual offending.

The finding that risk factors consistently identified via scientific study do not show an expected strength of association (either individually or in combination) may have its roots in several things. First, while an extensive history of theories about sexual offending exists (e.g., Ward et al., 2006 for a review of such theories), to date, no empirical evidence has been collected to validate one or more specific theories. Consequently, the field of sexual offending is currently based on and working with unvalidated theories. There has been a progressive movement to broader and more comprehensive theories of sexual offending to best capture the heterogeneity of sexual offenders. Ward and Beech (2006) identified genetic determinants and neurobiological functioning, in interaction with environmental contexts, as leading to three compromised systems of neuropsychological functioning: motivational emotional, action selection and control, and perception and memory. When dysfunctional, these systems of neuropsychological functioning are viewed as manifesting themselves as "clinical states" or exemplars (e.g., Ward & Beech, 2015). Somewhat similarly, Mann et al. (2010) used the term "psychologically meaningful risk factors" (PMRF) to refer to individual's *propensities* that become manifest in particular situations or contexts, such that risk factors for sexual offending may only become observable when and after a potential sexual offender encounters particular environments/situations and triggering cues. *If* the offender with underlying PMRF—underlying causal predispositions or propensities—encounters particular stimuli, *then* sexual offending may be more likely to occur.

In their most recent publication, Ward and Beech (2015) criticized Mann et al. and the larger domain of dynamic risk factors (e.g., presumably changeable ones; see Hoberman, 2015). They made the distinction between the descriptive aspect of identifying the so-called dynamic risk factors and the explanatory or etiological aspect of causal risk factors. Ward and Beech argued that such examples or exemplars do not necessarily provide a clear *explanatory* model that delineates sets of interactions among the key psychological, social, and biological constructs and the common trajectories of such constructs and problem clusters. They stressed the importance of an etiological model, which provides "guidance concerning how the causal aspects of dynamic risk factors interact to actually generate observed clinical features and subsequent sexual offending…" (p. 10). Ward and Beech raised concerns that, in effect, lists of identified correlates or even prospective risk factors do not, in and of themselves, provide causal explanations of the diversity of sexual offending. They stated:

> In summary, we have argued that in the current state of research dynamic risk factors are really hybrid concepts containing "symptom" or phenomena aspects and etiological aspects. In our view, the conflation of the descriptive and explanatory elements within a single concept is confusing and runs the danger of derailing research and practice into dead ends. We have argued that viewing the descriptive aspects of dynamic risk factors as attributes of an exemplar(s) and introducing a separate explanatory phase of research that concentrates on developing causal explanations of the exemplar and its associated phenomena and course are ways forward. (p. 12)

Thus, Ward and Beech recommend that beyond just identifying clinical phenomena that are effects of presumed causal processes (e.g., risk proclivities), it is necessary to *explain* the occurrence of such phenomena (e.g., clinical attributes) and their interrelationships for sexual offending for an individual and/or subgroups of sexual offenders. In short, Ward and Beech caution against assuming that presumed risk factors may be only descriptive and not necessarily explanatory relative to the underlying processes that lead to sexual offending. Thus, one potential issue is that the putative risk factors for sexual offending are inadequately conceptualized or operationalized despite the empirical association identified by the meta-analyses.

Another related issue concerning potential targets for sexual offender treatment interventions has to do with, in effect, measurement issues. Available methods of quantifying risk factor do not "capture" its presence or the degree of it presence. For example, while deviant sexual interest may be inferred from behavior or identified by self-report by an offender, some or many sexual offenders may not choose to share the range and degree of atypical sexual interests for various reasons, including social desirability. No consistently reliable and valid means exists to determine the actual nature of an individual's potentially diverse sexual thoughts, fantasies, or urges. Similarly, likely antisocial attitudes may

be problematic to accurately assess because such cognitive-affective characteristics are not easily measured, particularly by self-report; persons who are not psychologically minded or for whom those attitudes are ego-syntonic may not be likely to endorse such attitudes or social desirability may affect accurate self-disclosure. Similar factors may compromise the ability or willingness of individuals to identify dysfunctional or deficient problem-solving, emotional-management capacities, or the multiple social schema that impact their ability or willingness to engage in more intimate social relationships. More broadly, if, as Mann et al. (2010) have suggested, psychologically meaningful risk factors are enduring propensities that are "activated" by particular stimuli or contexts, then individuals may manifest decreased awareness of those propensities or fail to perceive the contextual nature of their own predispositions. Finally, it is worth emphasizing that the findings that certain psychosocial conditions have not, to date, been empirically identified as risk or causal factors for sexual offending may not mean that such conditions do not matter relative to sexual offending. Rather, they or their functional elements may simply be difficult to measure by observation and/or reliant upon accurate self-report by individuals, who for various reasons are unable or unwilling to identify the presence or degree to which they are characterized by conditions.

A final consideration for treatment targets for reducing sexual recidivism regarding has to do with presumed "malleability" of so-called dynamic risk factors, conditions believed to be causal risk factor that are capable of change or modification. If, in fact, some, many, or most causal risk factors are not capable of being modified or are limited in the degree to which they might be affected via psychological or social means, then psychotherapies as interventions will be largely ineffective if behavioral change is the criteria by which they are evaluated. Certainly, the literature reviewed regarding the limited change in persons with personality disorders as a result of psychotherapy and the various failed attempts to modify sexual orientation raise serious questions about the degree to which key aspects of persons are subject to. [By analogy, even surgical procedures or medications (e.g., castration, antiandrogens) do not consistently reduce sexual interest and/or preoccupation.] To date, there is minimal empirical evidence that intraindividual (as opposed to group) characteristics change as a result of change. As Hoberman (2015b) reviewed, with few exceptions (e.g., Beggs & Grace, 2010; Olver, Beggs Christofferson, Grace, & Wong, 2013), most studies have found that pretreatment scores and ratings—and not posttreatment or change scores—are most strongly associated with sexual offender recidivism. Such general findings raise significant questions as to whether offenders do change as a result of sexual offender treatment or simply report or appear as if they have changed to therapists and observers.

Summary and Conclusion

In almost all respects, it is not particularly surprising that no scientific evidence yet exists that moderate- to high-risk sexual offenders may benefit from psychotherapeutic interventions. Generally, psychotherapies as a group appear most efficacious for presenting problems involving personal distress, and there is minimal evidence that specific types, models, or "strategies" of psychotherapy affect the likelihood of general outcome for such problems. While most types of psychosocial interventions are beneficial for some conditions such as general anxiety or depression, their improvements are relative (e.g., varying reductions in experienced distress, quality of life, and "life problems"). In contrast, empirical studies of psychotherapies to date show that they are much less efficacious for a variety of more severe conditions, including "behavioral" problems, maladaptive personality traits/personality disorders, and persons with comorbid psychopathology. To be sure, for many persons, their involvement in psychotherapy may be perceived as a useful and even valued experience, but actual behavior changes typically appear slow, incomplete, and not necessarily persistent over time. As noted earlier, Lambert (2013) summarized the extant research and concluded that improvement from psychotherapy is a function of the following four factors to the indicated degree: client/life situation (40 %), common factors (30 %), client expectancy (15 %), and (specific) techniques (15 %). From that perspective, it seems evident that psychosocial sexual offender treatments might not be particularly effective in affecting either personal change or sexual offender recidivism rates for the majority of the very heterogeneous set of persons who are identified as sexual offenders.

Given the identified importance of client variables relative to outcome from psychotherapy in general, based on the knowledge of empirically identified risk factors, there are many aspects of sexual offenders that would also likely impact on their potential response to psychotherapy, certainly relative to "typical" psychotherapy clients or even nonsexual offending clients with personality disorders, substance abuse, or general criminality. Further, sexual offenders are clearly a very heterogeneous group, with a number characterized by multiple and cumulative well-entrenched and persisting predisposing conditions including paraphilias and personality disorders as well as varied and multiple motivational issues and deficits in disinhibition. Little evidence of any sort indicates that fundamental sexual interests (perhaps largely akin to sexual orientations) and robust biologically influenced personality dimensions (that are effectively self-perpetuating) can be modified via psychosocial experiences, even targeted ones via such treatments. As a group, sexual offenders are characterized by a large, varied set of potentially cumulative, interacting, and persisting

criminogenic needs or psychologically meaningful risk factors. A subset of sexual offenders clearly appear to be "high risk," in that they are characterized by a much higher density and degree of criminogenic needs or risk factors. Several different pathways to sexual offending may also characterize sexual offending. Some limited evidence that psychosocial interventions (particularly forms of CBT) appear to "work" with general criminal offenders relative to reducing general criminal recidivism at least a small degree over brief follow-up periods and this does not appear to be the case for sexual offenders (as a somewhat "more specialized" group of criminal offenders) over longer follow-up periods, it seems quite reasonable to consider that the group of persons who engage in repeated sexual offending are significantly different from general criminals and likely in multiple ways that have yet to be identified, let alone understood.

In addition, prior to even entering sex offender treatment, the available evidence indicates that sexual offenders are largely characterized by a striking lack of motivation to seek or pursue psychotherapy, either before or after they have enacted sexual offenses. Various aspects of their overall psychological status and their predisposing conditions may well be ego-syntonic, and the same or other factors may limit and interfere with their ability or capacity to recognize that they have engaged in behavior that was harmful to others. Thus, significant dispositional reasons exist as to why they may not seek psychotherapy, such as lack of psychological mindedness, empathic deficits, and/or a resistance to authority or "assistance." Nonetheless, despite an apparent lack of identifiable or apparently genuine motivation for psychosocial treatment, a significant number of sexual offenders are mandated or effectively coerced by the criminal justice system to enter sex offender treatment programs (e.g., the best predictor of why a sexual offender is recommended for or placed in sex offender treatment). Such mandates are thus being imposed on a significant portion of sexual offenders who are unmotivated for treatment generally and/or are somewhat or extremely antisocial; not uncommonly, some of these offenders have pronounced or long-standing issues with authority, which might likely include such mandated psychotherapy. Thus, various client characteristics are likely to be ones that have a significant potential to limit or eliminate the potential effectiveness of sex offender treatment.

Relative to the issue of motivation and desire for personal change, recently there has been an increased emphasis on treatment preparation and motivational interview interventions for sexual offenders in various settings as a means to address potential resistance of sexual offenders to self-change (e.g., Marshall & Marshall, 2007; Prescott, 2009, 2011). Intuitively, such therapeutic activities make sense, particularly given the client characteristics of this population, and they appear to have great appeal to forensic clinicians working with such offenders. Motivational interviewing (MI) has been described as blending relationship building and a client's stage of change. Per Burke, Arkowitz, and Menchola (2003), therapists are careful not to explicitly advocate for change, resistance is viewed as an interpersonal phenomenon, and therapists are advised not to challenge the client's resistance directly. A client's readiness to change is viewed as related to the importance of change for the client and the confidence of the client about successfully making personal changes. In a MA, Burke et al. (2003) showed that MI was quite effective in general, when the prototypical MI component consisted of approximately 100 minutes of that intervention technique over two sessions. As with other therapeutic strategies, significant allegiance effects were found, with effects 2–3 times larger produced in the developer of MI's own clinical studies. In addition, MI was more effective in diet and exercise studies (e.g., self-desired or health-promoting domains) than in the treatment of clients with alcohol and drug problems (e.g., more behavioral and personally hedonic domains). However, the MA indicated that the studies were of weak methodological quality, with few attempts to identify alternative explanations for differential results. Per Burke et al., "…there is little evidence to suggest that AMIs actually work by enhancing motivation or readiness for change…[and] did not appear to differentially increase readiness for change in comparison to alternative interventions or controls" (p. 859). More recently, Lundahl, Kunz, Brownell, Tollefson, and Burke (2010) conducted another MA of MI; they found that judged against weak comparison groups, MI produced statistically significant durable results in the small-effect range but judged against specific treatments produced nonsignificant results. These results were found for alcohol and drug abuse. Despite these findings, Lundahl et al. concluded that MI is able to promote healthy behavioral change across various problem areas but is more potent in some situations compared to others and does not work in all cases. They also opined that MI did increase client's engagement in treatment and their intention to change although the basis for that conclusion was unclear. Thus, there is mixed evidence regarding the scientific evidence of MI, but results suggest positive effects for some individuals with some types of presenting problems. To date, there are no RCTs involving either weak or strong comparison groups so the empirical evidence for MI (or other treatment readiness interventions) remains unknown. Consequently, while such interventions offer hope or the possibility of enhanced sex offender treatment results, one cannot conclude that they do.

Therapist or common factors' characteristics are the second most significant category relative to outcome for general psychosocial interventions. It appears that the same types of so-called common factors associated with positive therapist behavior matter in the treatment of sexual offenders in some similar ways as they do to general psychotherapy

clients. As Marshall et al. (2011) reported on their own earlier research: "The four most important therapist features to emerge were warmth, empathy, rewardingness and directiveness" (p. 74). Marshall and colleagues also noted that other studies for that for sexual offender "Effective therapists were those who were seen to be honest and respectful, caring, noncritical and nonjudgmental" (p. 74). More broadly, Skeem et al. (2009) reviewed literature on both general and "high-risk" criminal offenders and suggested that therapist behaviors predictive of positive outcome included enthusiasm, warmth, respectfulness, defining clear rules, exerting authority without being authoritarian, fairness, and structuring learning into concrete, guided steps. Certainly, some, perhaps many, therapists who provide psychotherapy for sexual offenders treatment are characterized by such positive clinical styles. However, given the general literature on therapist characteristics and the more specific state of sexual offender treatment, it may also be that a number of clinicians who provide psychotherapy for sexual offenders may be characterized by inflated beliefs about their own competence, relatively untrained in the scientific evidence regarding sexual offenders (or misguided by the lack of detailed, comprehensive models of sexual offending), significantly uninformed about the absence of scientific information about the efficacy of sex offender treatment, relatively inexperienced as clinicians, and inadequately supervised. Conversely, one wonders as to the degree to which sex offender treatment psychotherapists believe or expect that their efforts are likely to impact their offender clients; as forensic clinicians, they are placed in an awkward position relative to "helping" their clients relative to socially and legally defined goals such as reduced sexual offense recidivism. However, it seems particularly notable that a number of studies have found that therapist's judgment of their sexual offenders' treatment progress is unrelated to sexual reoffending or, in fact, their judgment of positive progress is actually predictive of higher rates of sexual offense recidivism (e.g., Quinsey, Khanna, & Malcolm, 1998; Seto & Barbaree, 1999). This may be simply a de facto practitioners' "allegiance" effect, but it may also suggest that many sex offender treatment providers misperceive their clients' status while in treatment and consequently do not intervene adequately relative to the information provided by an offender, their stated insight or "knowledge" of treatment issues, and/or their enactment of therapeutic skills. As a result, perhaps some sexual offenders leave sexual offender treatment with a false confidence that they have internalized new beliefs and have actually acquired the capacity for behavioral change in the community. As Marshall et al. (2011) point out, therapists' perceptions of themselves do not always match the way that they are viewed by their clients; it seems likely that therapists' perceptions of themselves do not always match the way that they are viewed by others (e.g., supervisors or external evaluators) as well. In any case, as with other presenting problems and/or treatment modalities, a necessary step at this point is to study the various preliminary findings (e.g., both favorable and unfavorable) in a controlled manner (e.g., via RCT) and by various investigators to control for potential allegiance effects.

Further, relative to the current failure to demonstrate effectiveness of sexual offender treatment, there may be significant issues in the common delivery of sexual offender treatment. Aspects of clinical services such as the duration, intensity, treatment integrity, feedback to clinicians, and other qualitative aspects of therapy may also impact the lack of apparent outcome in psychosocial interventions for sexual offenders. As Skeem et al. (2009) noted, the quality of psychosocial treatment (indexed by features such as provider training, implementation of more careful monitoring and supervision of clinicians, and provision of treatment in research context) was strongly associated with lower recidivism rates. They concluded that program quality and integrity related substantially to program effectiveness and that the vast majority of correctional programs lack such qualities and procedures. Thus, once models or theories of sex offender treatment are empirically demonstrated, particular therapists with a commitment to evidence-based procedures, well-trained, carefully supervised, and provided ongoing feedback, appear most likely to be effective at delivering such programs. It should be remembered that there are ongoing issues and no empirical evidence about the specific manner in which sex offender treatment is provided to offenders: in groups as opposed to individual therapy, via psychoeducational methods or other manualized programs, without regular checks and feedback about treatment integrity or fidelity, and/or the appropriate dose of psychotherapy necessary for moderate- to high-risk sexual offenders.

Perhaps most importantly, there is little evidence that the particular intervention components or elements common to sex offender treatment programs at the present time have been demonstrated to be effective in either personal change (generally or with sexual offenders) or decreasing sex offender recidivism. This is a striking finding. While specificity of treatment methods has been demonstrated to carry a smaller load of the variance than expected in general psychotherapy for various presenting problems, nonetheless it contributes something, and as an "implementation" of psychotherapy, all methods seem to have demonstrated effectiveness for a great variety of emotional and even some behavioral disorders. However, the various elements of sex offender treatment have failed to demonstrate effectiveness for sexual offenders at all, either separately or as part of comprehensive packages of interventions. It is quite likely that this failure of efficacy of specific intervention strategies interacts with more delivery issues and/or with therapist effects, but it also may have even more to do with the 40 % of treatment variance that is associated with client variables, in this case the particular nature of many or most sexual offenders.

Finally, from both a theoretical and empirical perspective, it remains unclear as to what risk factors and what interactions among risk factors are related to the onset and maintenance of sexual offending. The field of sexual offending continues to lack a well-developed understanding of how sexual offenses come to occur and why particular individuals commit such offenses at particular times. Further, given what is currently understood, significant uncertainty exists as to if and how putative risk factors and processes can be changed.

It is striking that so many practitioners in the sexual offense treatment field zealously persist in continuing to provide psychosocial interventions that lack empirical demonstration of effectiveness for either meaningful personal change or sexual offense recidivism. Clearly, for many clinicians in the sexual offender treatment field, there appears to be a strong commitment to the hope or wish that their offender clients will be changed by their practices. Since there is no or little existing empirical evidence that this is true, it appears to be a form of cognitive dissonance and confirmation bias; to feel efficacious and meaningful in their work, clinicians ignore data (or the lack of data) that otherwise would threaten their sense of purpose and seek out. Moreover, rather than confront the apparent ineffectiveness of current treatment programs, many sexual offender treatment clinicians attend to the writings, mostly theoretical, that propose novel, albeit still untested approaches to treatment. As Rice and Harris (2012) stated:

> Over the past sixty years, the field of sexual offender intervention exhibits change where there should be stability—instead of a well-established foundation of effective therapeutic techniques, particular treatments go in and out of fashion in the absence of acceptable evidence as to efficacy. And the field exhibits stasis where progress should have occurred… Hypotheses, suggestions, and advice aside, essentially nothing is known (in the sense of empirically verified) about which therapeutic or supervisory techniques are effective for which targets in which types of sexual offenders. (p. 23)

However, sex offender treatment clinicians, as other psychotherapists working with particular types of presenting problems, must soon, even rapidly, come to terms with the implications of the lack of scientific evidence for current psychosocial interventions for their clients. Within the mental health field generally, sex offender treatment is typically left out of handbooks on psychological treatments for specific disorders and does not appear on any list of evidence-practice guidelines. While it is encouraging that new models of treatment and potentially useful clinical strategies continue to be developed and enthusiastically embraced by practicing sexual offender treatment clinicians, these methods remain scientifically untested in terms of their efficacy and may achieve the same limited results of older treatment approaches. The persistence in empirically unfounded interventions stands in stark contrast to the area of risk assessment where most practitioners in the sex offender treatment field have readily adopted more empirically based actuarial approaches and rejected unstructured clinical judgment based on scientific evidence. In the sex offender treatment field, clinicians appear to continue to rely on elements of programming that individually and collectively have demonstrated little relationship to the goal of reducing sex offender recidivism or more general personal change. In fact as multiple authorities have pointed out, there is little evidence that most of what constitutes "the content" of sex offender treatment programming appears related to reducing risk for sexual reoffending: victim empathy, social skills training, emotional regulation, techniques to reduce deviant sexual arousal, modifying cognitive distortions, and/or relapse prevention have not been individually or collectively demonstrated to reduce sex offender recidivism, let alone produce persisting change in offenders. The relative value of approach goals versus avoidance goals or remediation of any skills deficits has not been shown to be effective components of sex offender treatment relative to substantive personal change or reduced sexual reoffending.

Given the apparent dark portrait of the lack of efficacy of sex offender treatment and the multiple factors which are likely active in that failure, the sex offender treatment field should be regarded as wide open to increased attempts to think critically and creatively about theories of sexual offending and what methods and elements of psychotherapies might meaningfully impact sexual offender's personal change and/or lead to reduced sex offender recidivism. Anecdotally, DBT has been incorporated in various ways into many sexual offender treatment programs, albeit typically not following the specific model proposed by Linehan, Armstrong, Suarez, Allmon, and Heard (1991); however, no RCTs (let alone uncontrolled studies) have been conducted of its potential value to outcomes such as reducing sexual offender recidivism. One can view the GLM, Marshall's strength-based approach, and 3RT (examples of more contemporary treatment models for sexual offenders) as potentially inspiring models or programs that their proponents have the opportunity to demonstrate that they can make a fundamental difference in the role that psychotherapy can play as part of a large program of sexual offender management. Similarly, motivational interviewing (Prescott, 2009, 2011) and/or other treatment preparatory programs (e.g., Marshall & Marshall, 2009) might well lead to sexual offenders more motivated to enter and engage in meaningful psychotherapy; before such innovations become standard practice, however, they must be demonstrated to have some significant relationship to desired outcomes with sexual offenders.

Further, it may be time to apply approaches that have demonstrated some efficacy with significant and severe

problems number of recent RCTs have demonstrated successful outcomes with clients with more severe presenting problems; for borderline personality disorder, schema-focused therapy has been shown to be effective over a 3-year period of (Bamelis, Evers, Spinhoven, & Arntz, 2014; Giesen-Bloo et al., 2006), while several meta-analyses of psychodynamic psychotherapy have shown short- and long-term effectiveness more generally in the treatment of personality disorders and other complex mental disorders (e.g., Leichsenring & Rabung, 2011; Shedler, 2010). Other interventions that might have applicability are ones such as modified dynamic group therapy (e.g., Khantzian et al., 1990, 1992) and schema therapy for aggressive offenders with personality disorders (Keulen-de Vos, Bernstein, & Arntz, 2014). In addition, as Hoberman (2015b) suggested, it makes sense to develop, incorporate, and assess interventions that target particular sexually criminogenic dimensions, mechanisms, or predisposing conditions than specific "mental disorders" or the problem of "sexual offending" and to provide more individualized, but comprehensive, treatment for sexual offenders with multiple predisposing conditions and comorbid issues and problems.

Given the relative social importance of containing identified sexual offenders from committing more offenses (and to a lesser degree providing some means for offenders to engage in substantive change from a particular criminal lifestyle), it will be essential for both the individual elements and the programs based on the identified treatment models as well as any yet identified models to be subjected to rigorous scientific evaluation through RCTs and other contemporary procedures to gauge effective treatment outcome. As Marshall et al. (2009) indicated, it is "inadvisable to introduce new procedures on the basis of untested theory…" (p. 342). Given the length of time already passed without strong evidence of successful psychotherapeutic treatment of sexual offenders and the degree of concern about the occurrence and consequences of sexual offending, the field of sexual offender treatment has little room to fail in persuading society that it has something of value to offer as part of sexual offender management policy. To the degree that little evidence exists that psychosocial treatments have yet been demonstrated to be effective interventions for personal change and reducing sexual offense recidivism for the typical sexual offender, some shift in public policy should occur. While psychosocial treatment efforts may affect change on particular individuals, until clear efficacy of such approaches is demonstrated for sexual offenders in general and high-risk/high-need sexual offenders, it may be appropriate to shift reliance on alternative aspects of containment. To this end, an increased emphasis on comprehensive risk assessment, intensive supervision, variations in detention dispositions, and primary prevention may be the necessary means to reduce sexual reoffending.

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The Containment Approach: A Strategy for the Community Management of Sex Offenders

Kim English, Peggy Heil, and Greig Veeder

Introduction

We begin this chapter with a reminder that all research related to sex offenders suffers from what criminologists point to as "the dark figure" of crime (Sellin & Wolfgang, 1964). The dark figure refers to crimes that are never discovered or reported. While this measurement problem affects research on all types of crime, it especially haunts research on sex offenders because these are the least likely crimes to be discovered or reported. For this reason, it complicates the management of sex offenders. Lack of information about past and current sexually abusive behavior can leave professionals at a considerable disadvantage, operating without the knowledge required to make the most effective case management decisions. The hidden nature of these crimes can mask the risk and treatment needs of individual offenders. Obtaining and sharing knowledge, including information about individual offenders, is among the fundamental reasons that the containment approach emerged in the 1980s, and it is why containment remains an important method for managing sex offenders and protecting victims and potential victims.

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Background

The findings from a federally funded, nationally focused research study identified and documented the five-part containment approach for managing adult sex offenders (English, Pullen, & Jones, 1996; English, Pullen, & Jones, 1997; English, 1998, 2004). Small groups of professionals in jurisdictions in Oregon, Washington, Arizona, Minnesota, Wisconsin, Texas, and Colorado were implementing variations of the containment approach described here. The efforts involved therapists, probation and parole officers, judges, victims' advocates and therapists, child services workers, defense and prosecuting attorneys, and law enforcement. These collaborations created a multidisciplinary, cross-agency perspective that focused on the protection of victims and the humane treatment of offenders. Motivated by the secret nature of the offense and the considerable harm done by the crime, professionals were working together to identify and reform official agency practices and policies that created barriers to the safe management of known sex offenders.

It seems difficult to imagine today, but in the 1980s and early 1990s the most consistent problem voiced by professionals was that the criminal justice system managed sex offenders as if they were the same as other offenders (English et al., 1996). Many professionals who were working directly with convicted sex offenders reported that they struggled to convince their fellow professionals—their supervisors, their agency administrators, their colleagues in other agencies, and sometimes their colleagues across the cubical divide—that this population did significant damage to victims even when overt violence was not involved in the crime (see Johnson (2011) for an important discussion of psychological force). These offenders—both violent and nonviolent—operated in secret, were usually manipulative, blamed others, and groomed victims deliberately and skillfully. Safely managing these offenders in the community required special conditions of supervision and surveillance methods.

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It was common in the 1980s and even in the early 1990s for therapists to provide conventional psychotherapy to sex offenders in treatment, reflecting a considerable lack of knowledge of the literature on sex offender treatment. In fact, it was not uncommon for sex offenders in the 1980s to be court-ordered to participate in therapy at the local mental health center where they received counseling on stress management. Often both the offender and the victim were considered to share culpability, even when victims were quite young. Usually convicted offenders were either allowed to continue living with their victims or the victim was placed in foster care while the offender's life was undisrupted.

But many professionals suspected that these crimes were not one-time events. When perpetrators had access to family members, they often abused them for years before getting arrested. Those who continued to have access to their victims frequently abused them again while they were under correctional supervision. Those who were arrested for new sex crimes while under correctional supervision were often sent to prison on technical violations without incurring a new sex crime conviction, thus distorting recidivism statistics.

The containment approach grew out of the frustration of probation and parole officers who were constrained by ineffective policies and procedures resulting from social attitudes that minimized the crime. In the same way that intoxication was once viewed by the court as a mitigating rather than aggravating circumstance, sexual abuse was seen as a family problem or a simple misstep by the perpetrator. Even Prentky and Quinsey's (1988) statement about adult sex offenders was thought to apply only to the few offenders who used overt violence: "This is a distinct correctional population, a group whose crimes involve a dangerous interaction of sex and power" (page).

It was within a social and judicial context of remarkable apathy that the containment approach developed. Professionals from multiple agencies gather ED together in grassroots efforts, educating each other, raising awareness, and seeking to reform existing sex offender supervision and treatment strategies. They needed to change policies, practices, and common attitudes that minimized all but the most violent sex crimes. These early innovators were clear that their common interest was to prevent known sex offenders from harming again. They wanted those who perpetrated sex crimes to be held accountable by the criminal justice system, and to prevent further offenses while being offered every opportunity to change the behaviors that victimized others.

This chapter details the five-part strategy for managing adult sex offenders in the criminal justice system and reviews research that may provide a fresh understanding of containment. The focus of this chapter is #3 below, the use of a variety of containment strategies, particularly the polygraph examination, since it is the most likely aspect of containment to be misunderstood. Despite that focus here, each of the five parts represents a fundamental element of an effective sex offender containment approach. All five must be present and integrated to maximize the effects of risk management efforts by criminal justice professionals and treatment providers. These are the five components of the containment approach first described in English et al. (1996) which are discussed in detail in this chapter:

1. A clearly articulated community safety/victim-oriented mission;
2. The coordinated activity of many well-informed, multidisciplinary, intra- and interagency collaborative teams;
3. The use of a variety of containment strategies;
4. Consistent, informed public policies; and
5. Resources dedicated to state and local quality control efforts.

Component 1: Victim and Public Safety-Centered Philosophy

The Jackson County, Oregon, sex offender management process incorporated the phrase "making the victim whole" (English et al., 1996, pp. 2–7). The sex offender treatment program at the Colorado Department of Corrections has a mission statement that reads "No More Victims." The Colorado Sex Offender Management Board has among its guiding principles these statements: "Community safety is paramount" and "Victims have a right to safety and self-determination." This focus on victim and community safety is intended to confront the apathy, cultural denial, and lack of knowledge of the trauma associated with sexual victimization. It is critical to remain vigilant about this aspect of the containment approach because the purpose of managing sex offenders differently from other offenders is rooted in understanding the prevalence rates and impact of sexual abuse victimization.

Millions of individuals are victims of sexual abuse because many sex offenders commit an untold number of sex crimes: 1 of 6 U.S. women and 1 of 33 U.S. men have been victims of a completed or attempted rape in their lifetime, and many are raped more than once (Tjaden & Thonnes, 2000, using a definition of forced oral, anal, or vaginal penetration). This prevalence rate reflects a high frequency of sexually abusive behavior, much greater than official arrest records would suggest. In fact, Ahlmeyer, Heil, McKee, and English (2000) found a ratio of 100 self-reported contact and noncontact sex crimes for every crime recorded in official records (page). This pattern has held constant since researchers began to actively study prevalence rates. In 1988, Abel, Becker, Cunningham-Rathner, Mittelman, and Rouleau interviewed paraphiliacs under conditions of guaranteed confidentiality and found that only 3.3 % of the paraphiliacs'

self-admitted hands-on sex offenses, such as rape and child molestation, resulted in an arrest. The numbers of victims along with the numbers of offenses are difficult to conceptualize. Even harder is quantifying the effect that this level of abuse has on a society and culture that values personal safety.

Studies have found that the consequences of these crimes can be brutal and long-lasting (see Wyatt & Powell, 1988). Sexual assault victims compared to non-rape victims are at significantly higher risk to abuse alcohol and drugs, to suffer from depression, anxiety, nightmares and social isolation, and to attempt suicide (Kilpatrick, Edmunds, & Seymour, 1992; Peters, 1988; Briere & Runtz, 1988). Because most sexual assaults occur in the context of an established relationship, experts explain that this trust violation causes great confusion and nearly unbearable trauma to the victim (Herman, 1992). Summit (1988) is one of the few to discuss the psychological damage inherent not only in rape but in touching: "Sexual touching, so often trivialized by words such as fondling or molestation (annoyance), is only the physical expression of a climate of invasion, isolation and abandonment" (page). The victim-centered philosophy of the containment approach assumes that every sexual assault, from a violent stranger-rape to voyeurism by a family member, represents a significant act resulting in fear and a sense of betrayal. The victim's need for safety and empowerment thus becomes a priority in the management of the offender's case.

If the societal or criminal justice system response to an attack is to place the victim at fault, the trauma is magnified and recovery may be delayed (Hindman, 1989). Finkelhor (1988) describes how important it is for agency officials to respond appropriately: "Clinicians have often observed that the harm of some sexual abuse experiences lies less in the actual sexual contact than in the process of disclosure or even in the process of intervention" (pages 77–78). This point is fundamental to the containment approach. The power and authority of police officers, lawyers, judges, and social workers can weigh as heavily on the victim as on the perpetrator. Laws seeking to hold offenders accountable, but that are not mindful of the complex nature of victimization, particularly when the victim is a child and the perpetrator is a family member, can profoundly affect the victim. For example, community notification laws and Internet postings of offenders' addresses or pictures may have a devastating effect on the victim if the perpetrator is a family member. In an effective containment approach, the healthy recovery of the victim and the well-being of the community guide policy development, program implementation, and the actions of law makers and professionals working with both sexual assault victims and perpetrators.

Adopting a victim-centered philosophy sometimes requires a significant shift in agency values, as every case management decision will require considering the risk the offender presents to past and potential victims. Probation and parole agencies may be challenged to dissolve usual job and agency boundaries so that risk management decisions can be made quickly and in an ongoing fashion.

Reporting Rates

The victim-centered focus of the containment approach becomes especially important when those in the justice system have few opportunities to protect and empower victims of sexual assault. Most victims never report the crime to authorities and so cannot participate in a criminal case. Of course, many crimes go unreported. In fact, the 2011 National Crime Victimization Survey found that only 39 % of property crimes and 49 % of violent crimes were reported to law enforcement; 27 % of sexual assaults were reported (Truman & Planty, 2012, page). Importantly, this survey omits crime victims under the age of 12. Tjaden and Thoennes (2006) surveyed 16,000 adults and found that 22 % of women and 48 % of men who experienced a completed or attempted rape were under age 12 at the time of the assault (page).

Young victims are least likely to report assault. Diane Russell (1983) conducted face-to-face interviews with 930 randomly selected adult females in San Francisco and found that 5 % of extrafamilial sexual abuse and 2 % of incestual abuse were reported to law enforcement. Smith et al. (2000) found that reporting was delayed when the victim was young or knew the perpetrator, which was most of the time: only 11 % were raped by strangers. Smith et al.'s study of over 3,200 women reported that 28 % of the respondents had never told anyone about the rape until the researcher asked. Of those who told, 47 % did not do so for 5 or more years after the assault, making prosecution unlikely. A particularly discouraging finding in a study by Roesler and Wind (1994) found that one-third of incest victims disclosed the abuse prior to age 18, most commonly to a parent, but in 52 % of disclosures the abuse continued for at least another year. The women in this sample who disclosed as children said they were likely to be met with disbelief or blame rather than with support, validation, and protection. See Pipe, Lamb, Orbach, and Cederborg (2007) for more information about childhood disclosure of sexual abuse.

Older victims report at slightly higher rates. Kilpatrick, Saunders, and Smith (2003) found that 14 % of adolescents who were sexually assaulted reported the crime to law enforcement; 74 % knew their perpetrators. Tjaden and Thoennes (2006) found 19 % of women and 13 % of men who were raped since their 18th birthday said their rape was reported to the police. Only 17 % of marital/intimate rape was reported to law enforcement.

Arrest, Prosecution, and Conviction Rates

While the literature is replete with data substantiating the lack of reporting by victims of sexual abuse, less is known about what happens next. Tjaden and Thoennes (2006) surveyed 8,000 women and 8,000 men and found that 18% of *adult* rape victims reported the crime to police. Of these, 43 % resulted in an arrest. This figure drops precipitously when the victim is a child. Howard (2000) found that 27 % of reported sex crimes against children resulted in arrest.

Tjaden and Thoennes (2006) found that 18 % of the adult rapes that were reported to law enforcement resulted in prosecution, and one-third of those were convicted. Overall, Tjaden and Thoennes (2006) found that, of adult female rapes, 19 % were reported to law enforcement, 7.8 % were prosecuted, 3.3 % resulted in convictions, and 2.2 % resulted in incarceration (p.34).

Why are these rates important? First, every effort should be made to develop policies and practices that protect children and empower adults whose victimizations come to the attention of authorities. How victims are treated can affect reporting rates. Many victims want their privacy protected and fear being blamed for the offense (Kilpatrick et al., 1992, page). In fact, 99 % of those in Kilpatrick et al. (1992) said that public education about acquaintance rape would increase reporting rates, suggesting that holding sex offenders accountable regardless of their relationship to the victim would empower some to report the crime, along with efforts to move the blame away from the victim and on to the perpetrator. Still, many victims are reluctant to report abuse by a trusted person upon whom the victim may be emotionally or financially dependent. These low reporting rates reflect the complicated nature of this crime, since in most cases the victim knows the perpetrator.

Second, these figures should serve as a sober reminder that we know very little about this crime; it occurs in secret and remains almost entirely hidden from researchers and others trying to develop and implement prevention and containment methods. It affects our ability to assess immediate and long-term risk for offenders. The assessment of long-term risk is especially plagued by underreporting, since actuarial scales that rely on official record data will underestimate risk of actual (as opposed to recorded) reoffense. Underreporting will be discussed later in the chapter.

Finally, even those offenders who come to the attention of the criminal justice system due to a sexual assault may have incomplete information in their official records. Frequently, these crimes are plea bargained to another classification and so may not result in a sex crime conviction. Of felony sexual assault cases filed in Colorado in 2008, 76 % were convicted of sexual assault, 20 % were convicted of a nonsexual, nonviolent crime, and 4 % were convicted of a nonsexual violent crime (Colorado Division of Criminal Justice, 2011). For those individuals who actually committed a sexual offense, the factual basis of the crime is usually lost in this bargaining process. This masks the true offending history as recorded by official records and can distort our understanding of risk for individual offenders.

Component 2: The Coordinated Activity of Many Well-Informed, Multidisciplinary, Intra- and Interagency Collaborative Teams

Various teams form and work together as cases proceed through the criminal justice system and the child protection system. These teams contribute to the development of consistent policies focusing on victim protection and offender accountability. Representatives from these organizations also train staff in other organizations to ensure an integrated approach. These teams can overcome the fragmentation that naturally arises from the multilayered nature of the criminal justice system, and the communication barriers that often exist across agencies. The team approach minimizes duplication of effort and maximizes resources. It also strengthens both the motivation and the effectiveness of individual workers. These teams frequently provide an important support network for coping with frustration, stress, and the burnout often experienced by those who work with sex offenders (English et al., 1997; Edmunds, 1997; Kadambi & Truscott, 2003; Thorpe, Righthand, & Kubik, 2001; English and Heil, 2006).

Members of intra-agency, multiagency, and multidisciplinary teams typically include representatives from law enforcement, child protection, rape crisis centers, prosecutor's offices, defense attorneys, probation and parole, hospital emergency room staff, treatment providers, polygraph services, school counselors, crime victim advocates, and child victim advocates. The teams develop policies, procedures, and protocols for managing sex offenders and monitor their own implementation of these practices. Assembling professionals with different areas of expertise creates a rich pool of information and perspectives to improve the management of sex offenders. State and local sexual assault organizations representing victim concerns are an important resource to those involved in defining and implementing a containment approach. In fact, a major litmus test of any specific containment practice, as well as the overall management approach, should be support from victim service organizations.

A strategy that commonly emerges within this context is job specialization. Specialization is the assignment of one or more workers to specifically handle sex offense cases. It

may take the form of a unit, as is typical in law enforcement, or a single professional designated to manage all sex assault cases. The effect of specialization is to greatly increase the expertise of professionals, in turn enhancing the ability of team members to educate each other. With specialization, case experience is multiplied and agencies can target training resources. These teams and job specialists, then, are responsible for understanding and incorporating into their work very specific issues associated with sex offender case management such as victim trauma, investigation methods, interview techniques for victims and perpetrators, medical assessments, dynamics of offending, offender denial, local policies and procedures related to sex offender management, and professional burnout. These teams can play an important role by improving each others' understanding; cross-training allows physicians to learn the evidentiary issues prosecutors face, law enforcement officers and prosecutors learn about common reactions to trauma from rape crisis counselors, and victim advocates learn more about the criminal justice system so they can better help victims prepare for court (Epstein and Langenbahn, 1994, p.85).

Interagency and multidisciplinary collaboration can occur in many ways. In Colorado, for example, a state-level Sex Offender Management Board with multidisciplinary membership is defined in legislation and meets monthly. The Board developed guidelines for the evaluation, treatment, and behavioral monitoring of adult sex offenders, including sex offenders with developmental disabilities. It also developed release criteria for sex offenders serving lifetime probation or parole sentences, a sentencing strategy undertaken in lieu of civil commitment. Smaller multidisciplinary groups meet regularly within judicial districts. The State Division of Probation Services regularly convenes two groups, the officers who specialize in juvenile sex crime cases and those who manage adult caseloads. In Oregon, quarterly meetings were held for all the probation and parole officers from across the state that specialized in the supervision of adult sex offenders, and law enforcement and treatment providers also attended these meetings. In Alaska, the Department of Corrections regularly gathered stakeholders within the agency to develop policies related to sex offender management. In Ohio, a parole officer initiated a meeting with colleagues working in the local police department's sex crime unit, and they subsequently worked together to solve cases. Frequently, line staff forges these types of relationships, with one committed professional seeking out the expertise of another. Regular meetings and communication ensue. These small acts of collaboration continue to change the way this work gets done in many jurisdictions across the country (English, 2004, page).

Component 3: The Use of a Variety of Containment Strategies

Case processing and case management in a containment approach must be tailored to the *individual sex offender* and his or her patterns of sexual offending. This focus on the individual is a fundamental aspect of containment. In fact, we return to this point many times in this chapter. Not only is this individual focus central to the containment approach, but individualized assessment and treatment is a basic tenet of evidence-based correctional practices, specifically the Risk-Needs-Responsivity Model (Andrews & Bonta, 2010; Wolff, 2008; Andrews, Bonta and Wormith, 2011) that promotes the development and use of a very specific treatment plan based on a thorough assessment of specific treatment needs. Sex offender treatment experts also promote this approach (for example, Heil & Simons, 2008; Ward & Stewart, 2003a), which should also include an assessment of cognitive deficits that require special programming (Haaven & Coleman, 2000, page). Ward and Brown (2003) emphasize that individuals who are assessed as low risk may display high needs requiring intervention, so needs and not risk should drive treatment in this event. This is especially true for offenders convicted of sex crimes who score low risk on actuarial scales. Typically, actuarial scales are heavily weighted by incomplete official record data. Additional offense history is frequently disclosed when offenders proceed in treatment with polygraph testing, further illuminating the seriousness, frequency, and range of deviant behaviors, reflecting new levels of needs and risk and an associated need for more intensive, long-term treatment.

Containment Strategies

Individualized case management incorporates multiple tools that become part of containment. These include confidentiality waivers, collateral contacts, home visits, employment restrictions, Internet restrictions, family reunification policies, positive informed support, urinalysis testing, law enforcement registration, conditions of supervision, and leisure time monitoring for the offender. Additional strategies include professional cross-training, surveillance officers, victim services, and multidisciplinary teams. The core strategy, which is a focus of this chapter, is the formation of a containment team consisting of a specially trained treatment provider, a supervising officer (including the probation or parole officer in the community and the correctional staff prison), and a polygraph examiner. Some jurisdictions include a victim advocate as part of the team, operationalizing the victim

orientation described in Component 1 above. Including a victim representative on the team ensures that the victim's perspective is routinely incorporated into case management decisions.

In fact, to be most effective in these collaborations, victim organizations must provide support and sometimes training to staff to ensure that they have sufficient confidence to keep treatment providers, supervising officers, and other practitioners and policymakers focused on public safety. For example, when offenders reach the end of time-limited probation or parole terms, often professionals develop family reunification plans even for offenders who have not made meaningful life changes because the offender is "going home anyway." The individual may still present a significant risk to the community and potentially specific family members, despite the presence of a reunification plan. Scott (2011) notes that in a 3-year period in Maricopa County (Phoenix), half the reoffenses for sex crimes occurred because family members allowed their children to be in contact with offenders, even though they had been appropriately informed.

The containment approach depends on obtaining and sharing key pieces of information about the abuser with the containment team: "The criminal justice supervision activity is informed and improved by the information obtained in sex-offender-specific therapy, and therapy is informed and improved by the information obtained during well-conducted post-conviction polygraph examinations" (English, 1998, p.225). Each anchor must be perceived by the offender as separate-yet-aligned with the other.

The containment team must be prepared to consistently respond to shared information in order to minimize the offender's access to victims and high-risk situations. This additional information allows professionals to develop meaningful treatment and supervision plans. It also means that professionals obtain much more information about offenders' violations of these plans. It is this aspect of containment that is one of the most difficult to implement: increasing the information on each case requires significantly more time on the part of both the treatment provider and the supervising officer. This additional information can multiply the amount of case time required.

Sharing information requires that the supervising officer, treatment provider, and polygraph examiner establish common and clear public safety goals and consistent responses to new information disclosed by the offender during the course of treatment and supervision. In poorly functioning containment teams, members sometimes withhold information disclosed by offenders that may result in greater containment (such as curfews or GPS monitoring) or criminal justice sanctions, usually for the purpose of protecting the offender. Team members who withhold information about the offender are either feeling conflicted in their role or are being successfully groomed by the offender, or both. The value of working together as a team is to obtain feedback from fellow professionals. Sharing information and respectfully giving and receiving feedback are necessary to create the transparency required to safely manage this population of offenders. Working well as a team is reflected by this information sharing, and it models the honest and open lifestyle that is the goal for the offender.

The core containment strategy—polygraph, treatment, and correctional supervision—is discussed in detail below, beginning with the polygraph examination since its use informs and frames treatment and supervision.

Post-conviction Polygraphs

The post-conviction polygraph is the only type of polygraph exam used in containment, and its regular use is fully integrated into treatment and supervision. Understanding how the information disclosed during the polygraph exam is integrated into case management is essential to successful implementation of the containment approach.

The greatest value of the polygraph examination is that its use facilitates the offender's progress in treatment (Knapp, 1996; Grubin, Madsen, Parsons, Sosnowski, & Warberg, 2004). Clients know that they will be regularly polygraphed as part of the treatment process and are encouraged from the onset to fully disclose those aspects of their lives that they have traditionally kept secret. Preparation for the polygraph examination includes clarifying behaviors that are abusive. This is often educational for clients who are expected to disclose their history of offending so that an appropriate treatment and supervision plan can be developed and implemented. We discuss the accuracy of the polygraph later in the chapter, but it is this important process of disclosing harmful behaviors that helps move the offender through denial and early resistance to treatment where the polygraph proves it mettle.

In addition to verifying the accuracy and completeness of self-reported sexual history information gained in treatment, the polygraph exam is also used periodically (preferably at least every 6 months) to corroborate the offender's compliance with criminal justice and treatment conditions. This information about compliance is a critical component of public safety because it taps the offender's actual life behaviors, going beyond how one behaves during therapy. It is a relatively simple task for offenders to learn the language of treatment and to assess and respond to the expectations of the containment team. In fact, many sex offenders can easily employ elsewhere the skills developed in the service of manipulating victims. Grooming therapists and supervising officers should be expected; feigning engagement in treatment should also be expected. Assessing behavior change *outside* of treatment using the polygraph exam and other

monitoring methods, then, is a critical barometer for managing this population of offenders safely.

Safe management means every effort is under way to prevent a new sex crime by a known sex offender. The polygraph examination is an essential component of the containment approach because its use reveals much necessary information about the offender. Its use is also critically valuable in determining those for whom this is their only sex crime and who, therefore, may be at low risk of offending again.

One objective of containment is to improve public safety by obtaining information that will prevent known offenders from harming again. The polygraph targets behaviors actually engaged in, not sexual interest or sexual arousal. This occurs primarily through the synergistic effect of combining sex-offense-specific treatment, criminal justice supervision, and post-conviction testing. Working together, these strategies can facilitate the offender's compliance and increase the information he or she discloses, thereby increasing the effectiveness of treatment and supervision. The effective use of the polygraph depends in large part on how a treatment provider reacts to newly disclosed information. We return to this issue later in the chapter.

Types of Polygraph Exams

The post-conviction polygraph examination gathers information after the individual has been convicted of a sex crime. In containment, sex offenders are tested for three time periods: sex crimes that occurred prior to the current criminal event, the time between arrest and treatment onset, and abusive and other noncompliant behavior during treatment. Each of these time periods provides different sets of information for different purposes. Questions covering the time period prior to arrest or conviction for the current crime uncover age of onset, duration, frequency, and variation (types of victims and assaultive behaviors) which are critical elements of therapeutic and risk assessment (Heil & Simons, 2008, page). The time between arrest or conviction and sentencing or the onset of treatment can be a very active period for some offenders and indicates how they might behave under stress, while polygraph testing while the offender is under supervision and in treatment provides information about the extent to which the offender is responding to external controls and applying the tools learned in treatment.

The Colorado *Standards and Guidelines* (2011) specify five types of polygraph examinations. Four of these are discussed here (the fifth type, the child contact assessment polygraph, is used specifically to assess the individual's risk to their own children, and will not be discussed here). Although the polygraph procedure itself remains the same, the questions and consequences for deception vary depending on the time period involved and the seriousness of the information withheld or disclosed.

The *sexual history examination* is used to thoroughly investigate the person's lifetime history, including the identification of victim age/gender/relationship and victim selection behaviors. The sexual history addresses age of onset, frequency, seriousness, and variety of past sexually abusive behavior. Revealing this information allows the offender the opportunity to be accepted by the therapist despite the level of harm he or she has caused others. It reveals to the therapist how entrenched the deviant behavior may be and begins to clarify the true risk the offender presents to the community. This information should inform the therapist on the intensity and duration of treatment needed to effectively address the offender's issues, and the number and type of containment strategies that might be necessary to safely manage the person in the community, such as GPS tracking, curfews, daily phone calls, and using a "buddy system" with other members of treatment programs. Therapists and supervising officers must also determine who, if anyone, needs to be warned given the information learned during the course of treatment and polygraph examinations.

The sexual history polygraph examination requires that the offender has completed in treatment a written sexual history disclosure journal prior to the examination. The Colorado *Standards* require that the therapist provide the sex history material to the examiner in advance of the exam, and the examiner is required to read the information in the packet before preparing for the examination. Both the supervising officer and the treatment provider must work together to prepare the offender to take the sexual history examination. Effective preparation, according to polygraph examiners, improves an offender's ability to resolve questions and issues of concern. Preparation for the examination in therapy should *not* include a review of possible test questions, but rather should involve discussing the examination process, expectations regarding honesty, and the need to disclose—in treatment rather than the polygraph office—noncompliant behaviors and risk concerns. The focus should remain on treatment and supervision compliance, risk and need factors, cognitive distortions, and the "stuff" of therapy.

The maintenance/monitoring polygraph examination is first used within 90 days of treatment onset and then at least semiannually. It should be used more frequently for those who present high-risk behaviors, who recently experienced a life change (such as changing their residence or starting to date), or who have previously unresolved examination results, and it can be used as frequently as weekly. This examination investigates the offender's compliance with supervision and treatment, and many offenders anecdotally report to polygraph examiners that it has a deterrent effect on their behavior. In a small study of only 28 offenders who were guaranteed confidentiality, Harrison and Kirkpatrick

(2000) found that over half reported that they altered their behavior in anticipation of the polygraph examination. Specifically, more than half reported a decrease in grooming behavior, 43 % reported a decrease in probation violations, 36 % reported reduced substance use, and 27 % reported decreased sexual touching of children. Grubin et al. (2004) also found polygraph testing to have a deterrent effect on high-risk behaviors in a small sample of sex offenders voluntarily participating in polygraph exams: 20 out of 21 offenders reported that they thought the polygraph examination helped them avoid reoffending. The average number of high-risk behaviors reported by sex offenders significantly decreased between the first polygraph test and the second, suggesting that polygraphy was effective in decreasing these behaviors. At the same time, disclosures of high-risk behaviors to treatment providers and supervising officers increased. Grubin et al. (2004) concluded that the polygraph might be better considered a truth facilitator rather than a lie detector (page). Abrams and Ogard (1986) also studied the deterrent effect of polygraph testing on probationers and determined that 69 % of offenders who received polygraph testing with supervision successfully completed probation as opposed to only 26 % of offenders who received supervision alone.

The *event-specific* polygraph examination is used to investigate the details of a person's specific involvement in a known or alleged incident, or to resolve discrepancies or inconsistencies in the offender's account of a specific event. Polygraphs should not be conducted on active criminal investigations unless law enforcement officials agree to the procedure. The *child contact assessment*, mentioned above, is used in Colorado to assist the containment team in making a recommendation about the offender's contact with his or her own children who are not already known to be victims as well as siblings of victims. The event-specific polygraph examination is used in situations of unknown risk to identify possible risk based on past behaviors and inform decision makers regarding the offender's potential risk to the children.

The event-specific examination may be used when offenders deny the instant offense or aspects of it. Nannetti and Greer (1996) noted that common defenses for child sex offenders include (1) the touching was not sexually motivated or was accidental or innocent, (2) the victim's graphic description is based on prior knowledge, (3) the alleged abuse is a fantasy; the child wants attention, and (4) the identification of the perpetrator is inaccurate (page). Offenders of adult victims may maintain that the sexual contact occurred with the victim's consent. These issues can be addressed with a careful interview that includes the definition of terms to be used during the examination, and targeting questions specific to the behaviors of concern. Strate, Jones, Pullen, and English (1996) describe the value of these examinations to help the offender take responsibility for his or her damaging behavior, moving them forward in the treatment process. Additionally, details of the instant offense are often incomplete. Polygraph examiners report that, upon questioning, clients will often disclose the use of force or violence that was not recorded in the police report or other descriptions of the offense. Victims of sex crimes are often reluctant to disclose the use of aggression, especially if they are acquainted with the offender.

The Polygraph Test

The polygraph exam is a verification of the offender's self-reported information about his past and current behaviors. Its focus is actual behavior undertaken by the client, not feelings, thoughts, motivations, interest, or attraction. The polygraph examination lasts approximately 90 min; most of this time is spent discussing the exam process and the potential questions, calibrating the equipment, and interviewing the client. Each examination can test on only three or 4 questions. These few questions reflect the need to identify the offender's patterns of behavior and immediate risk concerns. This question limit reveals that the polygraph can never substitute for the combination of therapy and supervision. In fact, it is possible that the questions asked could completely miss a part of the offender's life that is teetering out of control. This is a sober reminder that the use of the polygraph cannot replace the vigilance required of a supervising officer and a treatment provider to continually look for cues that the offender may be slipping into dangerous patterns of behavior.

Question construction is a critical dimension of the polygraph examination. There can be no surprise or trick questions, and they must elicit only a yes or no response. Questions must be concise, well-defined, and easy to understand. Broad and vague questions such as "does your written sex history journal include every victim?" are likely to generate an anxious response whether or not someone is intentionally withholding information. Instead, questions should be discussed and completely defined in advance of the test procedure, during the pretest interview between the examiner and the client. The American Polygraph Association's *Model Policy for Post-Conviction Sex Offender Testing* (2009) reads: "Before proceeding to the test phase of an examination, the examiner should review and explain all test questions to the examinee. The examiner should not proceed until satisfied with the examinee's understanding of and response to each issue of concern" (181).

The polygraph examiner focuses on the technical and physiological requirements of the exam itself, the threats to validity, careful construction of questions, a methodical execution of the pretest (where every question is reviewed with the offender), the test itself (measuring heart rate, blood pressure, respiration, and perspiration), and the posttest

Table 1 The polygraph, supervision, and treatment work together to identify behavior problems

How violation was discovered	Total
Self-disclosure during polygraph examination	15.6 % (77)
Probation officer found out (including self-report)	14.0 % (69)
Treatment provider found out (including self-report)	12.1 % (60)
Lab result (UA)	11.3 % (56)
Fail to appear for treatment	9.7 % (48)
Probation officer (PO) did home visit	8.1 % (40)
Fail to appear for probation appt.	7.3 % (36)
Law enforcement	5.5 % (27)
Roommate called PO or treatment provider	4.3 % (21)
Group member called PO or treatment provider	2.8 % (14)
Both PO and treatment provider found out (including self-report)	2.0 % (10)
GPS/EHM	1.4 % (7)
PO called or visited employer	1.2 % (6)
Sex offender's friend called PO	1.2 % (6)
Victim advocate called PO	1.0 % (5)
PO called residence	0.8 % (4)
Computer surveillance	0.8 % (4)
Employer called PO	0.4 % (2)
PO called nonresident family member	0.4 % (2)
TOTAL	100 % (494)

Source Colorado Division of Criminal Justice (2004). *Report on safety issues raised by living arrangements for location of sex offenders in the community*. Denver, CO: Sex Offender Management Board. Special analysis conducted by Amy Dethlefson

interview (review of test results with the offender). Well-trained examiners who actively participate in workshops and educational experiences and are open to quality control reviews by their colleagues are important members of the containment team.

The synergy of containment—polygraph exams, treatment, and supervision—can be seen in the data presented below. In a study of 130 mostly high-risk sex offenders during the first 15 months of community supervision in Colorado, 443 violations of probation were recorded in the probation files of 103 offenders. Most of these violations did not result in revocations; they do, however, reflect the large amount of information that became available to the containment team in the course of their work with individuals in the sample.

Table 1 displays how the violations were discovered. Note that the violation could be discovered by multiple sources. The polygraph examination identified 77 (15.6 %) of the violations, the probation officer discovered 69 (14.0 %), and the treatment provider reported 60 (12.1 %). These violations were revealed primarily by the sex offenders in the study who self-reported the information. Of course, it is possible and even likely that many of these violations would have been discovered without the polygraph; however, the important point is that the three leading sources of detected violations were from the three components of the containment approach.

In this study, 15 new sex crimes were committed by 13 offenders in a 15-month period. All of these were noncontact crimes, and 11 were disclosed during polygraph examinations. In two cases, a treatment group member phoned a probation officer, 1 offender self-reported to the treatment provider, and law enforcement detected one crime (Colorado Sex Offender Management Board, 2004).

Violations and Stages of Change

The number of violations detected in the study referenced above underscores the difficulty of working with this population. Sex offenders are almost always an involuntary treatment client. In a meta-analysis of 125 studies of therapy retention, Wierzbicki and Pekarik (1993) found 50 % of clients dropped out of treatment—and the study did not differentiate between voluntary and involuntary clients. In a study of proactive recruitment, Lichtenstein and Hollis (1992) investigated a program where physicians spent time with every smoker to persuade them to sign up for a state-of-the-art, action-oriented clinic. If that failed, nurses spent up to 10 min more, followed by 12 min with a health educator and, finally, a counselor's call to the home. The result was a base-rate participation of 1 %. Note that, with smoking, there is no social stigma associated with getting help.

Most therapists are aware of Prochaska and DiClemente's (1982) groundbreaking work which identified the processes involved in producing individual change. It is a process that unfolds over time and involves a progression through six stages: precontemplation, contemplation, preparation, action, maintenance, and termination. Termination occurs when individuals experience zero temptation and complete self-efficacy: they are confident that they will not return to their old unhealthy pattern of behavior. In fact, it is as if they never experienced the problem or acquired the pattern in the first place. Snow, Prochaska, and Rossi (1992) found that this stage was reached by less than 20 % of smokers and alcoholics. Prochaska (2001) reported on a study of the stages of change by Rossi (1992) of 15 unhealthy behaviors in 20,000 HMO members. Rossy reported that 40 % were in precontemplation (people are not intending to change or may take action "in the next 6 months"), 40 % were in contemplation (people intend to change in the next 6 months), and 20 % were in the state of preparation, meaning they have a plan for action such as consulting a counselor. Again, involuntary treatment was not studied, so these figures are likely less optimistic with court-ordered clients.

Prochaska (2001) discusses how individuals who begin to contemplate acting seriously vacillate between the costs and

benefits of change: "There is no 'free change." The balance between the costs and benefits of changing can provoke profound ambivalence. This ambivalence can keep people immobilized in this stage for long periods. We often characterize this phenomenon as chronic contemplation or behavioral procrastination" (231). And it might be expressed by sex offenders as behaviors that violate the conditions of supervision and treatment.

Sex offender ambivalence regarding personal change contributes to significant treatment attrition and community supervision revocation rates. Treatment providers and supervisory agents must attempt to motivate offenders' investment in the change process through the use of Motivational Interviewing (Miller & Rollnick, 2002, page), appropriate therapeutic relationships such as promoting offenders' hope for change, supporting offenders' change efforts, and respectfully holding offenders accountable to change. Motivating change also occurs through the use of behavioral monitoring, incentives, and sanctions. While therapists cannot instill hope or will in the offender, they can provide logic and delineate the benefits of behavioral change. It is understandable that court-ordered clients may find it difficult to become self-motivated or remain self-motivated about the difficult work that change requires. Yet, allowing unmotivated offenders to remain in group treatment without being held accountable for completing homework and applying what they are learning rewards negative behavior and undermines those who *are* engaged in the change process. Change is not absorbed by passive participation in treatment. Rather, it requires active and sometimes painful work. In Colorado, termination from community treatment can result in a prison sentence if the individual does not reconsider and recommit to the process of change. The decision to terminate treatment should be made by the containment team or, in the case of prison treatment, the treatment team. This ensures multiple perspectives consider the offender's stage of change, ambivalence, and level of motivation.

Therapist Response to the Polygraph Information

Often, therapists find the information disclosed by the offender during the polygraph examination difficult to absorb. Some therapists experience a dissonance between the reality described in the polygraph report and their hopes for the client. Therapists enter the profession to positively influence the lives of their clients, and the information generated via the polygraph examination is often disappointing, especially when it indicates that the offender is continuing to engage in risky or abusive behavior. Frequently, the first reaction of the therapist is to doubt the polygraph results rather than doubt the progress the offender has made (or not) in treatment. If the therapist does not move past these impulses and recognize them as rooted in personal disappointment, the successful containment of the offender is seriously jeopardized. In this situation, the therapist values his or her image of the offender over the potential harm the offender may present to the community. It is this reason that the containment approach requires a victim orientation and a public safety mission. Learning that the revelation of secrets and risk behaviors is a goal of treatment and supervision, and that public safety is the ultimate outcome, is how professionals guide and support behavioral change that is helpful to the client.

Containment is rooted in the humane management of sex offenders (English et al., 1996, page). Containment professionals who cannot hold offenders accountable for the risks they pose as revealed by self-reported information may allow the offender to be in high-risk situations, such as living with family members or children. New victimizations may result in very long prison sentences for the client. Those who consistently struggle with recognizing and managing their disappointment with court-ordered clients may be more suited to working with a noncriminal population.

It's About Honesty

The treatment provider and the supervising officer need to set the expectation that the offender will be found nondeceptive on the examination. That is, honesty is expected and with appropriate preparation in therapy, the client will "pass" the examination because they are willing to be honest. Some treatment programs work with the correctional agency to specify, in advance, written consequences for deceptive results and incentives for nondeceptive results that indicate the offender is engaged in the change process. This clarity provides support for changes the offender may find difficult to undertake, and it promotes understanding and a common goal: for the offender to succeed in therapy.

In fact, research conducted at the sex offender treatment program at the Colorado Department of Corrections found that the proportion of successful (nondeceptive) polygraph examinations varied considerably over time based on variables such as the reluctance of the treatment staff to support the use of the polygraph combined with consistent application of sanctions related to polygraph test findings. When sanctions were poorly implemented for nondeceptive exams, 37 % of the tests were nondeceptive (over a 1-year period); when staff were reluctant to use the information from the polygraph examination, 51 % of exams were found nondeceptive. However, when staff attitudes changed and sanctions were consistently implemented, 63 % were found nondeceptive, a statistically significant difference (Simons, Heil, & English, 2004).

For those who have not worked with the polygraph examination, it may be helpful to know that the polygraph examination itself is relatively proscriptive and predictable. The American Polygraph Association has detailed standards of practice (APA, 2009). It is not a mysterious instrument or process so it should not distract from the work of treatment. Nevertheless, all members of the containment team, including the examiner, require special training to be effective with this population. The skill of the examiner should build confidence in the offender: honest clients worry that the examiner is unskilled, and dishonest clients worry that the examiner is very skilled.

Polygraph Controversies

Donald Krapohl (2007), former president of the American Polygraph Association and member of the Defense Academy for Credibility Assessment Department (formerly the Department of Defense Polygraph Institute), has comprehensively summarized the controversies concerning the use of the post-conviction sex offender test (PSCOT). Polygraph critics cite concerns about accuracy, the lack of research, the possibility of false accusations, and the possibility of mistreatment of offenders as an outgrowth of the examination process. Proponents point out that traditional methods of detecting or deterring sex crimes by known offenders are inadequate, and identifying precursor behaviors is critical to protection of vulnerable victims. Both camps agree that more research is needed.

The value of the polygraph in the containment approach is its ability to facilitate self-reporting of the frequency and variety of sexually abusive behaviors. The information obtained using the combination of treatment and polygraph testing seems to be reluctantly disclosed, rendering it all the more important because of the value it holds to the offender. The self-reported information should be used to improve treatment, supervision, and public safety, and new crimes admitted during supervision should be subject to further investigation and, if verified, prosecuted. It should be viewed as one tool in the toolbox of sex offender management and should not be overly relied upon. A nondeceptive examination may be the result of targeting the wrong behaviors, so clearly its use should never displace active supervision by the criminal justice agency. Polygraph screening combined with skilled interviewing techniques produces high value information that would be nearly impossible to uncover by other methods, according to Krapohl (2007) who discusses PSCOT along with the use of the polygraph in U.S. counterintelligence agencies.

Amid the controversies outlined by Krapohl (2007), two valuable outcomes result from the consistent use of the polygraph in the containment approach. First, it takes the onus of responsibility for disclosing sex crimes off the victim and places it on the offender (English, 1998). Even after reporting a crime, and even after that crime has resulted in a conviction, victims may withhold important but embarrassing or humiliating aspects of the crime. Victims who know the offender are often uncomfortable reporting acts of violence or threats, or prior assaults, yet this information is vital for the assessment of risk and treatment needs. The offender is in the best position to report on his or her behavior, and disclosing details of the current crime places responsibility for our knowledge on the offender and not on the victim.

Second, the polygraph has significant value for identifying the one-time, low-risk sex offender. Individuals with one or few offenses will be easily identified. This narrows the field of questioning and increases the rate of accuracy. Most examiners report that they do, indeed, identify first-time offenders while conducting sexual history examinations. Low-risk offenders should be separated from medium- and high-risk offenders in treatment and supervision planning. Given the incomplete nature of official record data, this is a significant and often-overlooked benefit provided by the polygraph examination.

Polygraph Accuracy

Critics of the use of the polygraph in sex offender management often question the accuracy of the instrument. It is important to remember that the reliability and validity of the polygraph exam is not in question when the offender self-reports additional or new victims prior to or after the examination. These self-reports are similar to self-reports during other circumstances. The National Academy of Sciences (2003) explored the use of the polygraph in the detection of espionage and, despite criticizing the paucity of well-controlled research on the instrument, concluded "specific incident polygraph tests can discriminate lying from truth telling at rates well above chance, though well below perfection. Because the studies of acceptable quality all focus on specific incidents, generalization from them to uses for screening is not justified" (4). The NAS concluded its accuracy investigation with the determination that specific incident polygraph testing had a median accuracy rate of 86 %. Indeed, accuracy declines as the test moves toward multiple issue testing, and this speaks to the need to focus on each offender's specific vulnerabilities: drinking, driving "aimlessly," masturbating to inappropriate sexual fantasies, and other types of specific precursor behaviors such as stalking (English & Heil, 2006).

Krapohl and Stern (2003) compared counterintelligence testing with post-conviction sex offender testing. In espionage testing, the assumption is that there may be one out of

1,000 or 10,000 tested subjects who engaged in espionage. However, in sex offender testing, the situation is reversed: it is likely that 500 or 800 or 950 offenders out of 1,000 are hiding important information (the base rate depends on many factors [Simons, Heil & English, 2004]). Krapohl and Stern (2003) estimated a conservative accuracy rate of 80 % (page). This rate can increase or decrease with the skill of the examiner, but on average 760 of the 1,000 sex offenders will be correctly identified as deceptive on the exam. Many of these offenders will disclose important risk-related information to the polygraph examiner during the course of the examination. The disclosures may not be complete, but significantly more information now exists for treatment and supervision purposes. However, the overall error rate along with the fact that the test questions are limited in number (and so may miss areas of concern) underscores the need for ongoing intensive supervision and vigilance on the part of the treatment provider and supervising officer.

Krapohl (2007) makes an important recommendation about the problem of false positives—calling a person deceptive who is telling the truth. Since polygraph decisions are based on scores that the examiner assigns to the polygraph data, he suggests altering the polygraph decision rules such that false-positive errors are less likely to occur. This, of course, increases the incidence of false negatives, classifying deceptive individuals as nondeceptive. In addition, recognizing that multiple-issue screening tests have lower accuracy than do single-issue criminal tests, Krapohl (2007) recommends a successive hurdles approach (Meehl & Rosen, 1955). Applicable to most medical and psychological diagnostic tools, this principle refers those who produce a "positive" finding on a screening to a subsequent, more focused test. The examiner explores the issues with the examinee, seeking resolution of the positive result. This is followed by another test with more focused questions. This is an iterative process, and successive tests can involve resetting the scoring cutoffs to correct for the reduction in false positives, discussed above.

This approach requires research to better understand its affect on decision accuracy. Nevertheless, the successive hurdles strategy is recommended in the *Model Policy for Post-Conviction Sex Offender Testing* (American Polygraph Association, 2009). Containment teams should ensure that examiners are following the APA's model policy, are members of their local polygraph association, and receive frequent training to improve their testing and interviewing skills.

Self-incrimination is discussed in greater detail in English and Heil (2006), but it is somewhat less of a concern today than in the early days of post-conviction testing. In January 2005, in *U.S. v. Antelope,* 05 CDOS 745, the 9th U.S. Circuit Court of Appeals ruled that Antelope had been unjustly denied his Constitutional right against self-incrimination when a Montana district court judge required that he undergo treatment and disclose past crimes as a condition of probation supervision. The court found that Antelope could not be forced to participate in treatment unless he was promised that he would not be prosecuted for past crimes. This ruling, while applicable only to the jurisdiction covered by the 9th Circuit Court, marks the critical need to clarify with offenders and the containment team exactly how the information obtained during therapy and polygraph examinations will be used. This case codified the need to develop a specific strategy that precludes professionals from obtaining crime details necessary for prosecution: the name of victim, the geographic location, and date and time of offense. Should victims come forward independently and report the sex crime to law enforcement, prosecutors may choose to pursue criminal charges.

Despite the *Antelope* decision, some programs continue to obtain full details, including the name of the victim and their current location if this is known by the offender. These programs operate on the assumption that this information is critically necessary to provide the potential for counseling to child victims or to be included in the client's exclusionary zones on GPS. Newly revealed victims are reported to the supervising agency; however, this information is rarely used for prosecution or a change in sentence.

The Polygraph and Therapeutic Alliance

A commonly expressed criticism about the use of the polygraph is that it may negatively affect the therapeutic alliance since it communicates distrust of the client (for example, McGrath, Cumming, Burchard, Zeoli, & Ellerby, 2010). However, its use is analogous to the urinalysis testing during substance abuse treatment, a strategy recommended by the National Institute on Drug Abuse (2006): "Monitoring drug use through urinalysis or other objective methods, as part of treatment or criminal justice supervision, provides a basis for assessing and providing feedback on the participant's treatment progress" (3). Substance abuse treatment providers routinely overcome the problem of monitoring behavior and therapeutic alignment.

Nevertheless, the therapeutic relationship is one of the foundations of psychotherapy outcome and individual change (Hubble, Duncan, & Miller, 1999). Lambert and Barley (2001) summarize the research on the therapeutic relationship, and they define the therapeutic alliance as a condition that includes both the therapist's skills and the client's contributions to the relationship (page). This means that the client is also responsible for building therapeutic alliance, and few would argue that the client's honesty is important in this regard.

Lambert and Barley (2001) caution therapists to "watch for a reduction in their ability to empathize and relate to clients that can indicate professional stress or burnout" (page). Certainly, all containment team members must strive to encourage and support offenders' change efforts while holding them accountable because of the challenges presented by this population. In fact, Lambert and Barley (2001) close their discussion of the therapeutic relationship with these words: "It is clear that some therapists are better than others, at least with some clients. This is probably related to the therapist's contribution to the therapeutic alliance, especially in working with severe cases" (359).

Ackerman and Hilsenroth (2003) reviewed therapist characteristics and the therapeutic alliance and suggested that clients who perceive the treatment relationship to be a collaborative effort are more likely to invest in the therapy process and, in turn, experience greater therapeutic gains (page). Lambert and Barley (2001) refer to Bordin's (1976) classic work and describe the therapeutic alliance as having three parts: tasks, goals, and bonds (359). *Tasks* are behaviors and processes within the therapy session that constitute the actual work of therapy. Both the therapist and the client need to view these tasks as important and appropriate for a strong therapeutic alliance to exist. The *goals* of therapy are the objectives that both the client and therapist endorse. *Bonds* are the positive interpersonal attachment between a therapist and client of "mutual trust, confidence, and acceptance." It is important to remember here that court-ordered, offense-specific treatment means that the client has been found responsible for a crime. Involuntary treatment requires a shift in the burden of producing the therapeutic alliance: the client must prove willing to engage in treatment because it is a condition of supervision and therapy. This inherently requires that the offender demonstrate behavioral changes, making them in large part responsible for the therapeutic alliance. Additionally, the use of the polygraph examination, collateral contacts with family members and roommates, urinalysis testing, driving logs, sex history journals, leisure time logs, and other therapeutic tools are not mutually exclusive from building a strong therapeutic alliance. In fact, offenders who have the experience of feeling understood, accepted, and valued when the truth about them is known (and continually verified) are in a strong position to make use of the new skills and attitudes that accompany successful cognitive-behavioral therapy.

Understanding the sex offender client means that therapists should expect most of these individuals to struggle with honesty. Therapists should look for signs of the offender's use of manipulation in the service of keeping secrets. Because the secrets can lead to significant harm, the therapist's continual and reality-based skepticism benefits the client. Experienced offense-specific therapists explain this dynamic as a critical safety-oriented perspective. Part of the therapeutic interaction that makes use of the alliance is *reframing*. Reframing involves reflecting back to the client what he has said and putting it in a new light; it is not simply to agree with the client but to offer new interpretations. Polygraphs and other tools can be part of this process. Developing a positive therapeutic alliance will be challenging regardless of the containment tools involved in treatment because the tasks, goals, and bonds—the essence of the alliance—may be faced with considerable ambivalence and even hostility by the involuntary client. The client can positively affect the alliance by learning to view the containment tools as beneficial to himself and the community.

The polygraph examination can be framed simply as a tool to verify the offender's self-reported information and to clarify the person's immediate level of risk and compliance, much like the use of urinanalysis testing for substance abusing clients. Skilled therapists present it to the client as a helpful tool, while acknowledging the offender's anxiety about its use. Therapists help the client understand that the use of the polygraph helps unveil many secrets that lead to hurting people, and it is the offender's responsibility to stop these behaviors, including the precursor behaviors that lead up to the assault. The polygraph is just one tool to assist in this aspect of the change process. Rather than focusing on the examination, therapists focus on the value of honesty and openness during the treatment process.

Sex Offense-Specific Treatment

Sex offender treatment uses cognitive-behavioral therapy to target the thoughts, feelings, attitudes, reasoning, and problem-solving that contribute to sex offending behavior along with denial, minimizations, motivations, and justifications (see for example, Marshall & Serran, 2000; Terry, 2000; Ward, Hudson, Johnston, & Marshall, 1997). Lipsey (1992) found that programs that were classified as being structured, cognitively and behaviorally oriented, multimodal, and which were directed at building concrete skills had significantly better outcomes than other programs (Cooke & Philip, 2001). Fernandez, Shingler, and Marshall (2006) discuss the need for treatment goals to be based on individual needs, deficits and strengths, and the use of "shaping" to reward and reinforce small steps toward prosocial behavior change (page).

Schwartz (2011) discusses reasons group therapy is preferred over individual therapy. The common characteristics of guilt, denial, and secrecy "make sex offenders especially difficult to treat in individual therapy. Because these offenders often lie, minimize and rationalize their behavior, it is quite a task for a lone therapist to muster the strength or the evidence to confront their defenses" (page). Moreover, Schwartz suggests that individual therapy can replicate the dynamics

of the sexual assault because the therapist and offender "are in a 'secret' (confidential) relationship" and offenders can more easily, in private, exercise power and control in the relationship (Schwartz, 2011, 24).

Sex-offense-specific treatment begins with assessments and planning that take into account the duration, frequency, variety, and intensity of the client's sexually abusive behavior. Many convicted sex offenders have extensive sexually abusive histories beginning when the person was young. Heil and Simons (2008, page table is located on) summarized the following information. Wilcox, Sosnowski, Warberg, and Beech (2005) found the mean age of onset was 13; Freeman-Longo and Blanchard (1998) reported ages 18 for rapists and 15 for child molesters; Simons, Heil and English (2004) reported age 12; and English, Jones, Patrick, Pasini-Hill, and Cooley-Towell (2000) reported age 11 for those convicted of incest and 13 for non-incest offenders. Wilcox et al. (2005) found the average age from onset to detection to be 14 years; Freeman-Longo and Blanchard (1998) found 6 years for rapists and 13 years for child molesters; Simons, Wurtele, and Durham (2004) reported 16 years; and English et al. (2000) estimated 10 years.

Lengthy and intense treatment may be required for many sex offenders, particularly since these behaviors are likely to result from the interaction of biology and social learning (Ward & Beech, 2008). Abel, Becker, Cunningham-Rathner, Mittelman, and Rouleau (1988) and others (Abel & Rouleau, 1992; Ahlmeyer et al., 2000; English, Jones, Patrick, & Pasini-Hill, 2003a, 2003b, English, Jones, & Patrick, 2003b; Heil, Ahlmeyer, & Simons, 2003; O'Connell, 1998, Simons et al., 2004; Wilcox et al., 2005) have documented the presence of multiple paraphilias. Abel et al. (1988) discussed a "wave effect" in some offenders with multiple paraphilias where preferences changed over time and the intensity of one behavior rose while others subsided but sometimes overlapped (page).

Additional treatment needs may become apparent after the full pattern of sex offending is identified. The offender generally discloses information incrementally over the course of treatment, with careful integration of the polygraph test and treatment; much of the offending pattern and history can be discerned within 12–15 months. During this period, issues such as compulsivity, impulsivity, and hypersexuality often become evident. The experience of childhood trauma may also be revealed: "For some offenders, their own childhood victimization has been so severe and traumatizing that several years of [therapy] work are needed before they can work through issues blocking their progress" (Scott, 2011, pp. 27–11). Therapists may consider psychiatric referrals for medication (e.g., SSRIs) as an adjunct to cognitive-behavioral treatment when necessary; monitoring medication use then becomes an important component of containment. To be relevant to the offender and to be effective in terms of public safety, comprehensive individualized treatment plans and relapse prevention/community safety plans should also be based on more complete information. These plans are thus revised and made more specific over time.

The offenders' officially recorded crimes may not reflect their most serious sex offending behaviors. There is little utility to a relapse prevention or risk management plan that is only designed to prevent sex offenses identified in the official record without addressing the actual range of sex offending behavior. For example, a relapse prevention plan for a rapist may permit him to reside with his children based on an assumption from the official record that he does not pose a risk to children. However, as revealed in studies with guaranteed confidentiality or treatment with polygraph, approximately 50 to 65 % of rapists have committed child sexual abuse (Abel et al., 1988; English et al., 2000; Heil, Ahlmeyer, & Simons, 2003; O'Connell, 1998; Wilcox et al., 2005). Therefore, determining whether the rapist has a history of child molestation becomes an important consideration in developing an effective relapse prevention or community safety plan. In addition, comprehensive sexual history information may help therapists assess sex offending motivations and risky lifestyle patterns. This will lead to the identification of alternative skills that the offender may need to develop in order to decrease opportunities to reoffend. Skill development consists of assistance in building a new lifestyle that includes productive leisure time, satisfying vocational skills, and authentic relationships.

Treatment and Disclosures

The victimization data discussed earlier suggests that the majority of sex crimes are never disclosed or recorded in official records. And for those that are in the criminal justice system, "Once an individual has been arrested…he stops talking about the kind of behavior he has been involved in" (Abel, 2012,D-4). The hidden nature of the behavior for which the offender seeks treatment means that the therapist can best care for the client by uncovering the extent of his or her deviant sexual history. Treatment providers help the offender to disclose the full extent of his or her deviant sexual history because this is necessary to develop an individualized treatment plan that addresses his or her full scope of issues and needs. As previously stated, age of onset, duration of offending, frequency of offending, and the variety of behaviors the offender engaged in must be understood in order to develop a meaningful treatment plan. In addition, allowing the offender to hold on to powerful secrets about their past abusive behavior is not therapeutic and if allowed by the therapist may perpetuate the secrecy at the core of the offender's lifestyle. Marshall (1994) describes procedures for overcoming denial and reducing minimization and

clarifies a critical part of the disclosure process: people are most likely to take the risk to admit to acts that they believe others view as repugnant if they know they are not going to be rejected and if they are assured that support and help will continue (page). This idea is a foundation of the containment approach.

In containment, the treatment provider and the supervising officer work closely together in a collaborative team. To participate in community treatment, the offender agrees and consents to a waiver of confidentiality to permit information sharing among containment team members, including the polygraph examiner and law enforcement. An essential role of treatment in the containment approach is to obtain details about each individual's offending history, patterns, and precursor behaviors necessary for criminal justice officials to develop risk management plans. The information is verified using a polygraph examination as discussed above.

Uncovering the Offender's M.O.

Specific information about a sex offender's *modus operandi* is obtained though sex offense-specific treatment and validated and expanded by post-conviction polygraph examinations performed by specially trained examiners. Pithers' (1990) description of the assault pattern is a reminder of the need to be alert to what may, at first, appear to be accidental or occasional victim access: "Many aggressors, seeking to minimize their responsibility for offenses, would also have us believe their behaviors are the product of irresistible impulses overwhelming their self-control....In reality, many offenders carefully plan offenses so that they appear to occur without forethought" (334). Amir (1971) found that 75 % of rapes involved some degree of planning, while Pithers et al. (1988) reported that 90 % of their sample of sex offenders reported experiencing specific, strong, emotional states before reoffending. Hudson, Ward, and McCormack (1999:179) stated that "much of the optimism that has pervaded the treatment of sexual offenders in the last 15 years has come from the notion that the processes that these men follow are comprehensible and, therefore, under ideal circumstances, at least controllable" (179).

This idea is central to the containment approach. This attention to planning increases the likelihood that each offender's MO can be identified, allowing the supervising officer and the treatment provider to apply appropriate restrictions to reduce the likelihood of reoffense. Some examples of pre-assaultive behavior include stalking a victim prior to an assault, standing beneath a stairway to view underwear, going to children's movies or toy stores, purchasing toys and child-friendly videos, secretly watching family members, engaging in substance abuse, and jogging through neighborhoods at night. Having knowledge of these pre-assaultive behaviors can allow supervising officers to intervene before a sexual assault occurs. For example, one offender, who described in his sex history journal his use of shelter dogs to get the attention of child victims, was prohibited from owning a dog when released on parole. During his first home visit, his parole officer found a newly purchased dog collar, and the offender was revoked to prison. In another example, an offender with a pattern of stalking victims can be asked on a polygraph examination questions specific to stalking. The very specific nature of the question increases accuracy, and failing on a very specific question related to the offending pattern should result in an immediate response by the criminal justice system. This can include law enforcement surveillance, but it can also include changing the individual's living situation, requiring the individual to team up in a buddy system with other members of the (milieu-oriented) treatment program, using GPS monitoring, and alerting at-risk individuals in the offender's life.

As previously described (see also English, 1998, 2004; English et al. 2000; English et al. 2003b), early in the treatment process, the offender will be assigned the job of writing a sex history journal detailing past sexual activity, consenting and nonconsenting (since sometimes what appears to be consenting to the client is actually coercive), a description of the victim (age, gender, general relationship to offender), and the circumstances surrounding the assault. In this extensive exercise, the offender reveals the range and frequency of sexually abusive behavior. This information, typically not otherwise disclosed by the client, will be used to manage current and future risk, and to ensure that the offender's treatment plan is appropriately directed at real patterns of behavior. Because many individuals have early onset of sexually abusive behaviors, information about the duration of the offending history can inform the treatment plan. Abel and Rouleau (1990) found that over 50 % of his sample of more than 500 noncriminal justice-involved men reported they were below the age of 18 when they began sexually abusive behaviors (page); English et al. (2000) found an average age of onset of 12 (11 for those convicted of incest) for contact and noncontact behaviors in their study of offenders on probation and parole in three states (page). This early onset, particularly when combined with frequent offending, suggests a need for intensive, long-term treatment, supervision, and positive support to change what is apt to be a deeply entrenched lifestyle.

Once the client's sex history information is provided to the polygraph examiner, the therapist and the supervising officer work with the examiner to construct monitoring questions specific to that offender's MO, such as "Since you were released from prison on January 15, have you stalked anyone?" (The word *stalk* will have been carefully defined by both the examiner and the offender before the polygraph examination began). Deceptive findings on the exam should be followed by a subsequent and more narrowly focused exam at a later date.

Challenges for Therapists

Many of those providing treatment services to sex offenders believe their skills can overcome the client's patterns of secrecy and denial and are surprised to learn that many offenders still withhold information that is only revealed during the polygraph testing process. Moreover, many professionals can be deeply affected by the full scope of harm the offender has inflicted on victims. These issues present significant challenges to treatment providers who require specialized training and support from their colleagues to learn how to integrate polygraph assessments as a therapeutic tool.

It becomes easier to incorporate polygraph-related information into the treatment and supervision process when the containment team members prioritize public safety. The full details about the offender's past behaviors and dynamic risk factors that are revealed through the sex history journal and ongoing polygraph examinations often leave therapists feeling negatively about their clients. Ward and Fisher (2006) discuss the need for clinicians to have a "mixed view of human nature," meaning that those who work with sex offenders should believe that "individuals have innate tendencies to behave both altruistically and aggressively or selfishly toward their fellow human beings" (155). The therapist must use the information gathered through the polygraph testing process to manage risk and also engage the offender in the process of change. Managing the information obtained by using the containment approach, especially the polygraph, is part of the necessary challenge for professionals.

Avoiding information can lead to serious gaps in containment and real gaps in public safety. English et al. (2000) collected detailed data by hand from the treatment and polygraph files of 180 convicted sex offenders on probation or parole in jurisdictions in three states. The information provided below shows what information was available in the official records prior to the onset of treatment/polygraph and afterward. Nearly all the individuals were convicted of crimes against children, and 80 were convicted of sex crimes against their own children; 31 were preparing for the polygraph examination; self-report data were collected just prior to their first exam.

Table 2 shows the proportion of the sample admitting to sex offenses committed as an adult against victims in specific age/gender categories. Before treatment and polygraph, 4.4 % reported sexually assaulting a boy younger than 6 years old, and afterward, 10.3 % of the sample admitted assaults against this age and gender group. This information tells both treatment providers and supervising officers what specific groups of potential victims offenders must avoid and suggests that multiple MOs may be involved when a wide range of age groups is targeted. When multiple MOs are involved, this must be carefully addressed in the relapse prevention/community safety plan. Also, 95 % of the sample was convicted of a crime against a child or adolescent, but 36.7 % reported a history of sexually assaulting adult women and 7.2 % reported assaulting adult men. Abuse of multiple age groups may reflect the need to assess compulsivity or hypersexuality. Also, an expanded evaluation targeting a wide range of thinking distortions, beliefs about consent, hostility, and entitlement may be necessary to ensure that the treatment approach is comprehensive enough. According to Heil and Simons (2008) "multiple paraphilias are difficult to detect, monitor and treat" (542). The greater the range of problems, and the more engrained the belief system, the more likely the need for intense treatment and monitoring of sufficient duration to allow the offender to make sustainable changes and begin to experience the benefit of a prosocial lifestyle.

Table 3 shows a larger proportion of the sample disclosing the listed assaultive behaviors after treatment with polygraph examinations. The proportion of the group reporting

Table 2 Percent offenders admitting to victims in each age and gender category before and after the polygraph

Age and gender categories of victims	Total ($n=180$) Represents sexual offenses committed as an adult	
	% before	% after
Males 0–5	4.4	10.3
Females 0–5	11.1	23.9
Males 6–9	7.2	10.6
Females 6–9	22.8	30.6
Males 10–13	5.6	11.1
Females 10–13	38.9	44.4
Males 14–17	5.0	11.1
Females 14–17	39.4	57.2
Males 18+	.6	7.2
Females 18+	15.0	36.7
Elderly/at risk	1.7	2.8

Table 3 Percent of offenders with admitted behavior before and after participation in treatment/polygraph ($n=180$)

History of sexually assaultive behaviors	Before treatment/polygraph (Information from court file) (%)	After treatment/polygraph (Information from treatment and polygraph records) (%)
Vaginal penetration	56.7	72.8
Oral sex	36.7	56.1
Anal penetration	9.4	18.3
Urination with sex act	1.7	8.3
Excessive aggression	3.9	9.4
Fondling/frottage	66.7	85.6
Exhibitionism	13.9	46.7
Voyeurism	8.9	53.9
Bestiality	4.4	36.1

Table 4 Disclosure differences across containment sites

History of sexually assaultive behaviors	Site A ($n=57$) Most offenders had multiple polygraphs; containment team very tight; 66 % of exams found "truthful"		Site B ($n=62$) Most offenders had multiple polygraphs; containment team rarely communicated; 49 % of exams found "truthful"		Site C ($n=31$) For all offenders, first polygraph; containment team newly established; 30 % of exams found "truthful	
	Before treatment/ polygraph (%)	After treatment/ polygraph (%)	Before treatment/ polygraph (%)	After treatment/ polygraph (%)	Before treatment/ polygraph (%)	After treatment/ polygraph (%)
Vaginal penetration	57.9	71.9	51.6	75.8	60.0	66.7
Oral sex	52.6	75.4	35.5	59.7	22.6	32.3
Anal penetration	7.0	22.8	12.9	22.6	6.5	9.7
Urination with sex act	3.5	17.5	0	4.8	3.2	6.5
Excessive aggression	1.8	10.5	6.5	12.9	9.7	9.7
Fondling/frottage	71.9	87.7	64.5	91.9	61.3	67.7
Exhibitionism	12.3	49.1	17.7	54.8	12.9	35.5
Voyeurism	7.0	54.4	9.7	62.9	6.5	41.9
Bestiality	5.3	47.4	3.2	45.2	9.7	19.4

these behaviors increased substantially "after" treatment/ polygraph. For example, excessive aggression nearly tripled. Over one-third of the group reported engaging in bestiality as an adult, suggesting that the supervision plan should disallow access to animals. Learning that an offender has engaged in bestiality presents a significant opportunity to learn more about the secrecy and likely shame associated with this behavior. The treatment provider may want to address this behavior in individual sessions when the therapist can ask very specific questions about intimacy and violence with the animal. Gene Abel, M.D. (2007) describes bestiality as "very relevant: these individuals are adept at ignoring many things, including fur, feces, and the animal trying to get away from you" (page). Abel believes this behavior signifies "deep denial that leads to the idea that having sex with a child is no big deal" (page). In addition, it is noteworthy that nearly half of those in Sites A and B reported engaging in bestiality. Others have studied the prevalence of bestiality among convicted sex offenders. Heil and Simons (2008) found 59 % of child sexual abusers engaged in bestiality compared to 30 % of rapists (page). In the same study, 81 % of those who assaulted both children and adults reported bestiality. Simons, Wurtele, and Durham (2004) found that those who had abused animals were at significant risk to children (page). Without the combination treatment/polygraph, this important marker for dangerousness—assaulting another species—may remain unknown and therefore not a focus of treatment or supervision.

Of particular interest are the noncontact sex crimes of exhibitionism and voyeurism, which seem to be especially underreported initially. These behaviors may occur early in the offending cycle or fuel compulsive behavior. Both are therefore important in terms of risk assessment; understanding the role of hands-off crimes in the assault cycle can alert both the offender and the containment team to the need for an immediate increase in external structure (which may include house arrest), supervision, and support to provide the containment necessary to avert the progression to a hands-on sex crime.

While the information in Tables 2 and 3 may seem alarming, it is consistent with the groundbreaking work of Abel et al. (1988) and Abel et al. (1987) using federal certificates of confidentiality and other polygraph studies (see Heil & Simons 2008 for a review). Further, the findings presented here are likely to be underestimates because many of the examination results were deceptive. Additional polygraph examinations result in a greater proportion of nondeceptive examinations and, correspondingly, additional disclosures as reported by Heil et al. (2003). Note that the consistent application of sanctions and incentives increases disclosures and nondeceptive findings on the polygraph examination (Ahlmeyer, Heil, McKee, & English, 2000).

To underscore the need for the polygraph to be well integrated with treatment and supervision, Table 4 shows differences across the sites where data were collected. Site A had containment teams that were well established and closely coordinated. Site B was composed of experienced professionals who considered themselves to be working in containment teams but in fact communicated infrequently. Consequently, treatment services and supervision strategies were not well integrated and in practice did not consistently incorporate the additional information obtained during polygraph exams. Site C had just implemented the polygraph into treatment and supervision only months prior to the study, and offenders had not yet received pressure from the containment team to fully disclose. Harrison and Kirkpatrick (2000) found that offenders tend to think they can "beat the

polygraph" prior to their first examination, suggesting they might not be forthcoming with complete information early in the treatment/polygraph process. Finally, in none of the sites were there consistent consequences for lack of disclosure.

Longer implementation and greater containment team cohesion were generally correlated with higher rates of nondeceptive responses: 66 %, 49 %, and 30 %, as shown in Table 3. Greater rates of disclosure were found generally in the first two sites compared to Site C. This supports the assumption that the information in Tables 1 and 2 underreports the actual frequency of engaging in these specific sexually abuse behaviors, and it underscores the need for those implementing the containment approach to work together closely. Of course, some unknown portion of the variation across sites may also reflect actual differences in behavior.

Over half (57.8 %) of the study cases disclosed sexually assaulting family victims in addition to the current victim (data not displayed). Of these, 34.8 % self-reported assaulting strangers and 56.7 % said they also had victimized another from "a position of trust." This "relationship crossover" is important for both treatment providers and supervising officers because it reveals the range of the preferred and expanded victim pool. Twenty-nine percent reported assaulting both males and females (data not presented). Abel et al. (1988) found that 23 % of his sample offended against both family and nonfamily victims and, of those who raped adult women, 50.6 % admitted to also molesting children (page). Twenty-percent reported assaults against both males and females. Ahlmeyer et al. (2000) found 50 % of the adult rapists also admitted sexually abusing children, and 82 % of the child molesters reported sexually assaulting adults (page). Even those convicted of "hands-off" crimes require careful assessment: Abel et al. (1988) found that exhibitionists were highly likely to engage in additional sexually assaultive behaviors: 46 % had assaulted young girls, 22 % had assaulted young boys, and 25 % admitted raping an adult (page). Based on this information, Abel and Rouleau (1990:10) said: "Therapists need valid, reliable information from the sex offender. Without this, the treatment is less likely to identify the precise treatment needs and to quantify treatment's long term effects" (page).

This analysis of multiple targets begins to reveal information about offending frequency. Among those who started offending before the age of 18, Abel and Rouleau (1990) reported an average of 380 contact and noncontact sex crimes by the time the men reached adulthood (page). In a small sample of inmates, Ahlmeyer et al. (2000) found that inmates reported an average of more than 500 contact and noncontact sex offenses and an average of 184 victims. Freeman-Longo and Blanchard (1998) studied 23 rapists and found that this small group reported 319 incidents of child sexual abuse. Heil et al. (2003) studied 233 inmates who reported an average of 137 sex offenses committed against an average of 18 victims. Emerick & Dutton (1993), Simons et al. (2004), Weinrott & Saylor (1991), and Wilcox et al. (2005) report similar findings.

Containment in Prison

Although there are more external controls and supports in prison, there are many opportunities for inmates to sexually act out (Heil et al. 2009, page). This is important risk and treatment information, so there is value in using the containment approach, including the polygraph examination, in prison. Since containment is about using multiple strategies to obtain information from the offender that can be shared for the sake of enhancing public safety, prison is an excellent environment to implement containment strategies. Prison treatment staff can establish relationships with law enforcement, engage in collateral contacts including working with families, provide intense treatment, and prepare offenders to release into containment when they are placed on parole supervision. Preparing offenders for community-based containment can greatly enhance their likelihood of success, as shown in Table 5, along with their longer term outcomes, as shown in Table 6.

Table 6 Any rearrest 3 years: Colorado prison treatment program

		No arrest	New arrest	Total
No treatment	*n*	491	607	
	%	44.7 %	55.3 %	100.0 %
Phase 1	*n*	170	127	297
	%	57.2 %	42.8 %	100.0 %
Phase 2	*n*	78	41	119 %
	%	65.5 %	34.5 %	100.0 %
Total	*n*	739	775	1,514
	%	48.8 %	51.2 %	100 %

Source Lowden et al. (2003)
Note Sex offenders discharged from parole between April 1, 1993, and July 30, 2002. Difference is significant at $p < 0.001$

Table 5 Parole outcomes: Colorado prison treatment program

		Completed	Revoked	Total
No treatment	n	685	625	1,310
	%	52.3 %	47 %	100.0 %
Phase 1	*n*	112	48	160
	%	70.0 %	30.0 %	100.0 %
Phase 2	*n*	97	18	115
	%	84.3 %	15.7 %	100.0 %
Total	*n*	894	691	1,585
	%	56.4 %	43.6 %	100.0 %

Source Lowden et al. (2003)
Note Sex offenders placed on parole between April 1, 1993, and July 30, 2002. Difference is significant at $p < 0.001$

The Sex Offender Treatment and Management Program at Arrowhead Correctional Center in Colorado has been using the polygraph exam in treatment for over 15 years. It is well integrated into the program (for a full description of the program and recidivism outcomes, see Lowden et al. 2003). Because the program is unusually comprehensive compared to what is available to offenders serving community sentences in Colorado (where 90 min group therapy once or twice per week is typical), and because program evaluation outcomes were positive (See Tables 5 and 6), a brief description of the program is included here.

Phase I is a time-limited therapy group that includes an initial curriculum on criminal thinking errors, anger management, and stress management. Some of the sex-offense-specific issues and areas that are addressed include characteristics of sex offenders, development of victim impact, cognitive restructuring, sex offense cycles, relapse prevention, healthy sexuality, social skills, and relationship skills. The program lasts 6 months and offenders participate in group treatment for 2 h/day, 4 days/week. Phase 1 does not include the use of the polygraph examination. Lowden et al. (2003) found that the average length of time in Phase 1 approached 9 months because some offenders were terminated for nonparticipation and were required to start at the beginning when they reentered the program (page if available). Phase 1 operates in five facilities, including the women's prison; two facilities accommodate low functioning inmates, one accommodates the hearing impaired and one accommodates Spanish-speaking inmates. All those who complete Phase 1 are eligible to participate in Phase 2. Phase 2 is a modified therapeutic community where offenders live and work together. Polygraph testing is part of the Phase 2 program. Lowden et al.'s (2003:31) description of Phase 2 remains consistent with current operations:

> To participate in the TC, inmates must be motivated to work toward eliminating sexual assault behavior and they must accept responsibility for changing their destructive actions. The TC program addresses offenders' life skills and their understanding of the world, others, and themselves. It also seeks to teach offenders to develop socially appropriate and non-sexually aggressive responses to their problems. Treatment topics include relapse cycle and prevention, cognitive restructuring, sexuality, social skills, and levels of denial (page).

Phase 2 offers 15 different types of therapy groups, including a probation group for those who have been placed on treatment probation for lack of progress. The average time in treatment for Phase 2 participants is more than 12 months. To be recommended for parole by the treatment program, inmates must meet the following criteria:

- Actively participating in treatment and is applying what he or she is learning
- Completed a nondeceptive polygraph assessment of his/her deviant sexual history; any recent monitoring polygraph exams must also be nondeceptive
- Practicing relapse prevention with no incidents of institutional acting out within the past year
- Defined and documented his or her sexual offense cycle
- Reviewed and received a therapist-approved copy of the sexual offense cycle
- Identified at least one approved support person who has attended support education
- Compliant with any psychiatric recommendations for medication that may enhance his or her ability to benefit from treatment and/or reduce his/her risk of reoffense
- Benefited from treatment and/or reduced his/her risk of reoffense
- Able to be supervised in the community without presenting an undue threat

Resources limit the number of inmates served. In 2009, there were approximately 2,500 sex offenders serving time in the Colorado Department of Corrections; 172 offenders participated in Phase 1 and 100 participated in Phase 2.

The use of the containment approach in prison can improve success rates in the community, enhancing public safety. Parole officers reported that parolees who had participated in the prison treatment program understood what was expected of them in community containment (Lowden et al., 2003, page) and more easily transitioned into community residences. The structure offered by containment on parole seemed valuable to offenders: 70 % of the Phase 1 participants successfully completed parole, and 84 % of the Phase 2 participants successfully completed parole, compared to 52 % of sex offenders (in an unmatched comparison group) who did not participate in treatment.

Apart from providing treatment and containment services to inmates, a program mission is to enhance knowledge and understanding of this offender population. Table 7 shows the results of a study of offenders in Phase 2 sex offender treatment at the Colorado Department of Corrections who were found nondeceptive on their sexual history polygraph examination. The table shows self-reported "hands-on" sex abuse histories of 408 individuals who participated in Phase Two. It excludes noncontact behaviors such as exhibitionism, voyeurism, and Internet sex crimes. The findings show that 2 %, or 9 people, reported only one offense and were found to be nondeceptive on the polygraph examination. For these individuals, this single victim and crime represented the crime

Table 7 Frequency of contact sex crimes: nondeceptive polygraph findings ($n=408$)

One victim	5 % (19)
One sex offense	2 % (9, 8 were violent with force/weapon)
Number of victims (median/mean)	14/23
Number of offenses (median/mean)	42/263

Source Colorado Department of Corrections, Sex Offender Treatment and Management Program

for which the inmate was imprisoned. Eight of those with a single offense were convicted of violent sex crimes. The remainder of the inmates, 98 %, reported more than one offense. The nondeceptive program participants reported a median of 14 victims (mean of 23) and a median of 42 (mean of 263) contact offenses.

Assessment is Ongoing

The information obtained using the combination of treatment and polygraph shows that offenders with multiple paraphilias, multiple victims and offenses, and early age of onset are not unusual. Rather, many of the offenders who come to the attention of the criminal justice system seem to have these complicated patterns of behavior. Yet, there are important differences among offenders that must be identified to individualize the treatment intervention. Simons, Wurtele, and Durham (2004) found that offenders who were primarily child sexual abusers (i.e., those who reported that at least 80 % of their victims were children) had child sexual abuse histories, earlier onset of masturbation, early exposure to pornography, and sexual activities with animals (page). Heil and Simons (2008) discuss these findings in terms of social learning theory and the need for treatment to help the offender resolve childhood trauma as it relates to sexual abuse. Simons et al. (2004) found that sex offenders who were primarily adult rapists had childhood experiences involving physical abuse, parental violence, emotional abuse, and cruelty to animals. These individuals tended to respond to emotionally charged situations with aggression and violence. Finally, those offenders who Simons et al. (2004) labeled "indiscriminant" because they did not meet the 80 % threshold for rape or child molestation had childhood experiences with both heightened sexuality and violence. Discussing the issue of multiple paraphilias, Heil and Simons (2008:542) state that these individuals "have structured their lives to gain access to sexual outlets, and consequently they may have developed few other interests and social contacts" (page). They recommend that treatment providers use information gained from polygraph examinations to evaluate for multiple paraphilias and evaluate for trauma and attachment issues, attention-deficit/hyperactivity disorder (ADHD), depression, and social phobia. Comprehensive treatment for multiple paraphilias includes cognitive-behavioral treatment, pharmacology, trauma therapy, attachment interventions, and containment.

In sum, information about patterns of sex crime behavior—age of onset, duration of offending, frequency, seriousness, and variety—routinely provided by offenders in the written sexual history journal described above and verified polygraph examinations can provide relevant information about the risk offenders present to individual victim groups, and illuminate treatment needs and patterns of dangerous behavior. The containment approach involves using knowledge of these behaviors to develop relapse prevention/community safety plans that account for preferred targets while helping the offender learn to replace destructive patterns with prosocial behaviors. Offenders have a range of criminogenic needs that must be targeted in offense-specific treatment. Offenders can learn to avoid new criminal behavior while learning to build a "good life" (Ward & Stewart, 2003b; Ward & Marshall, 2004; Yates, 2004; Ward and Fisher, 2006). However, the polygraph data used in the containment approach suggest that many sex offenders in the criminal justice system have multiple paraphilias. This information may not be available early in the assessment and treatment process, suggesting that assessment should be an ongoing part of treatment. The prevalence of multiple paraphilias in the sex offender population suggests that treatment, to be effective, must be intense, frequent, and long term.

The Impact of the Polygraph on Therapists

As addressed above and referred to elsewhere (English & Heil, 2006), the information disclosed during the polygraph examination can be alarming. Reflective of the disquieting effect of information disclosed during the polygraph examination, examiners and supervising officers frequently reported to us during dozens of interviews that some therapists were resistant to the examination findings (English et al., 2000, page). In these cases, therapists often did not return phone calls from the examiner and, when they did speak on the phone, the therapist was skeptical rather than feeling relief at getting information previously withheld by the offender. Clearly, some therapists struggle with reconciling their perceptions of the offender's treatment progress with the new information obtained from the polygraph process (Grubin et al., 2004, page). Once the information is revealed, the therapists and team members must reevaluate their treatment and supervision plans to develop appropriate responses to the information. The polygraph testing procedure becomes less useful without this response. Research at the prison sex offender treatment program in Colorado found that participants were significantly more likely to fail polygraphs when the therapist was rated as ambivalent about the use of the polygraph (Simon, Heil, and English, 2004, page). The therapist's commitment to the use of the polygraph is a critical aspect of its successful implementation.

Nevertheless, its use is challenging. The polygraph examination results can be especially concerning when certain clients, thought to be progressing well in treatment, are found deceptive on the polygraph test. Sometimes these exams involve disclosures by the offender of high-risk or

actual offending behaviors. When the offender fails to disclose new information—and sometimes when he does—the situation can give rise to professionals' concerns that the polygraph is not accurate or the examiner is not competent. Sometimes this leads to significant conflict between the therapist and the supervising officer, who may act on the information by increasing surveillance and restricting the offender's lifestyle. If the offender discloses new criminal behavior, the officer may pursue an arrest.

This series of events can create considerable tension among the examiner, officer, therapist, and offender. All containment team members need to remain mindful that they can be groomed by the offender to disregard concerns. Since addressing manipulation is an inevitable aspect of treatment and containment, the polygraph is a helpful tool. The development of policies, protocols, and agreements regarding the use of the information learned from the polygraph exam will be especially helpful at this time. Additionally, there is no substitute for enthusiasm and purposefulness about this work. Understanding the value of working with sex offenders may be the most important antidote for the difficulty of the work itself.

As we have discussed before (English and Heil, 2006), it may be helpful to those who find themselves uncomfortable with the polygraph process to consider that the examination is intended to help prevent the offender from harming again. This is a humane undertaking. Offenders reluctantly report that the use of the polygraph is valuable, even though they dislike taking the exam. Therapists who dislike the use of the polygraph may benefit from visiting the examiner at his office, observing an exam via short circuit television or videotape, talking with other therapists who use the polygraph, and obtaining training that specifically focuses on how best to use post-conviction polygraph results.

The polygraph examination should only be used in conjunction with sex offense-specific treatment. These two components, acting together and consistently, provide a powerful incentive for an offender to be truthful and to refrain from behavior that puts the community at risk while helping the offender adopt prosocial thinking and behavior. Without the use of the polygraph examination process, the information necessary to manage the risk of offenders is significantly incomplete, and the offender's risk to the community remains uncertain.

Risk and treatment plans may need to be adjusted when more complete information is obtained. Thus, low risk on sex offender actuarial scales should be questioned later when the offender discloses a more serious offending history. In fact, comprehensive treatment with a consistent focus toward new, potentially risk-related information necessarily moves the management team to focus on a case-by-case basis. To maintain a public and victim-safety perspective, it is necessary to move away from cookie-cutter interventions and toward individualized treatment based on learning information that an offender may be trying to hide. This specific focus on each offender means that a centerpiece of community-based containment is the use of technical violations as one option to preventing new sex crimes.

Criminal Justice Supervision

It is imperative that community supervision within the containment approach be well implemented, since most sex offenders serve all or part of their sentences in the community. In Colorado, in fiscal year 2012, one out of three adults (37 %) convicted of a sex offense received a direct sentence to prison. The remainder were sentenced to probation or a combination of probation and jail.

The supervising officer is empowered primarily by the authority of the criminal justice system, which can exercise its containment powers a number of ways. These include specialized conditions of supervision, longer probation and parole sentences, restrictions on high-risk behaviors, restrictions on contact with children, random home visits, urinalysis testing, and verified law enforcement registration. Computer and Internet monitoring of sex offenders (Bullens, 2004) and GPS and electronic monitoring (Padgett, Bales, and Blomberg, 2006) are also important containment tools.

Supervising officers should be familiar with the stages of change (Prochaska et al. 1992, page) and understand that personal change is hard. A supervising officer in Colorado works with offenders to develop a life plan, which starts with him/her asking new clients to make a list of (prosocial) activities they would like to accomplish. Developing this list is usually an exercise that takes several visits with the officer. One offender expressed a wish to attend college, and the officer helped the offender access financial aid to accomplish this. Involvement in college courses also had the advantage of removing the offender from his negative peer group and involving him with prosocial others. This is an excellent example of a supervising officer proactively assisting the offender with the change process. In the containment approach, supervising officers are obligated to help the offender succeed while recognizing the difficulties involved in the change process. Indeed, officers should be aware of each offender's preferences, strengths, competencies, and resources: "This crucially involves identifying the internal and external conditions necessary to implement the [treatment] plan and designing a rehabilitation strategy to equip the individual with these required skills, resources and opportunities" (Ward & Fisher, 2006, 154). The supervising officer should work closely with the treatment provider to support and reinforce the work of therapy (see Scott, 2011).

Among the most important of containment tools is the relationship between the supervision officer and the client.

Recent research has underscored this often-overlooked aspect of supervision: Skeem et al. (2003) state that the relationship between the officer and the offender can be "a pivotal source of influence on the implementation of treatment mandates" (see Alexander et al. 2008). Skeem et al. (2007) found that relationship quality involves caring, fairness, trust, and an authoritative not authoritarian style (page). The content of the conversation between the supervising officer and the offender also matters. Emerging research in Canada suggests that focusing on the offender's criminogenic needs during the supervision meeting rather than the conditions of supervision reduces recidivism (Bonta et al. 2010, page).

The supervising officer represents the criminal justice agency responsible for the offender, and so he or she generally convenes the containment team. In prison treatment, the therapist often plays both roles, although correctional officers, especially work supervisors, can be trained to assist in the containment process. Supervising officers depend on a variety of information tools including collateral contacts with an offender's family members, roommates, employer, and the victim's therapist, for example.

Officials can define the behavioral changes required of sex offenders as they move through stages of treatment and show themselves to be managing their own risk. The Colorado Sex Offender Management Board (*Standards and Guidelines,* 2011), at the request of the state's General Assembly, documented the behaviors necessary to show successful progress through offense-specific treatment and completion of treatment. The behaviors can be monitored by the supervising officer and used to set clear expectations for supervision and treatment compliance. The following is a list of some common behavioral compliance expectations.

The offender:

- is, and consistently has been, in compliance with all recommended prescribed psychiatric medications used to reduce arousal or manage behaviors related to risk
- can identify objectification and inappropriate sexual gratification in relationships and is developing skills to address them
- is addressing any domestic violence history with appropriate domestic violence treatment and has not engaged in domestic violence
- is addressing drug and alcohol programs in treatment and is maintaining abstinence if recommended
- the offender demonstrates control over arousal and interest through plethysmograph or Abel Screen "improvement"
- the offender consistently completes nondeceptive polygraph examinations regarding high-risk and precursor behaviors and masturbation to deviant arousal fantasies
- the offender consistently demonstrates self-motivated use of a relapse prevention and safety plan and has distributed written copies of the plan to any cohabiters and significant others
- the offender consistently demonstrates self-motivated use of treatment techniques for identifying and correcting cognitive distortions

These are just a few examples of the specific behavioral requirements of sex offenders under supervision and in treatment in Colorado. For more information, refer to the Colorado Sex Offender Management Board's *Standards and Guidelines* (2011).

Leverage and Sanctions

Criminal justice systems can encourage, even leverage, the offender to engage in treatment. This is a long-valued role in the substance abuse treatment community. The National Institute on Drug Abuse (2012) lists the following as "Principle 8" in its description of substance abuse treatment with criminal justice populations: "The coordination of drug abuse treatment with correctional planning can encourage participation in drug abuse treatment and can help treatment providers incorporate correctional requirements as treatment goals" (3).

Consequences for failure to follow the directives of treatment and supervision can take a variety of forms. At a minimum, surveillance can be increased (house arrest, electronic monitoring, additional home visits by the supervising officer, requirements to phone the officer or others with location information) and orders for additional treatment sessions or homework can be imposed. Intermediate sanctions include community service activities, short-term jail sentences, or placement in a halfway house for sex offenders. At the extreme end of the sanction continuum is revocation of the community sentence and placement in prison. But prison sentences are not the end of risk management concerns, since most prisoners eventually are released into the community whereupon the containment approach should be reinstated.

Consequences can be clearly spelled out because this clarity promotes consistency and communicates what is expected of an offender. Sometimes this takes the form of a lengthy and explicit treatment contract. Members of the Colorado Department of Corrections sex offender treatment team and parole officers joined with local treatment providers to develop a "decisions grid" specific to polygraph testing (see Fig. 1) although other types of grids can be valuable. Low-level sanctions included starting regular urinalysis testing, restricting community activities, requiring additional treatment homework, and imposing a curfew or geographic restrictions. Medium-level sanctions included withdrawing driving privileges and travel permits for vacation, more visits

	Admissions Prior to Polygraph Examinations	Admissions During Polygraph Pretest	Admission to Non-deception findings at Posttest	Admissions to Deception Posttest	No Admissions to Deception
Past offenses & High Risk Behaviors					
Behavioral Lapses & Basic Rule Violations					
Serious Treatment Rule Violations					
Offenses & High Risk Behaviors					

Fig. 1 Decisions grid provides clarity

with supervising officers, frequent searching of the residence, and prohibiting community activities. High-level sanctions included moving the offender to intensive supervision status, contacting law enforcement for surveillance, requiring community service, and imposing a curfew with daily scheduled call-ins to the officer. All sanctions included increased supervision. Incentives for treatment progress and nondeceptive results were also included. The decisions grid is discussed with every offender and is attached to a form that requires the signatures of the therapist, supervising officer, and offender. The grid is an excellent example of coordination and collaboration among stakeholders who wanted to be clear and consistent regarding the use of sanctions.

The use of sanctions in the containment approach is consistent with substance abuse treatment as recommended by the National Institute on Drug Abuse (2012), "Rewards and sanctions are most likely to change behavior when they are certain to follow the targeted behavior, when they follow swiftly, and when they are perceived as fair" (21). Many treatment providers have reported that without the leverage of the criminal justice system's consequences for noncompliance, they could not engage sex offenders in the treatment process (English et al., 1996, page). When the offender engages in a long-term process to change what is often a deeply entrenched pattern of behaviors, motivation to change can be expected to ebb at times. Sanctions, including treatment termination and revocation, provide important public safety leverage because ambivalence is part of the nonlinear change process (Prochaska, DiClemente, & Norcross, 1992, page). Personal change is difficult, and many sex offenders enter treatment without a complete understanding of the full extent of their abusive behavior and the psychological difficulty associated with acknowledging the extent of the harm they have done. Treatment must address these issues early on, while providing the offender the tools to learn to rebuild their lives in a healthy way.

Nevertheless, it is important to recognize the dangerousness presented by an offender's inconsistent effort to change. Without external pressure on the offender to adhere to the behavioral expectations detailed in the conditions of supervision and treatment contract, community safety depends on the offender's good will alone. In this way, community supervision and sex-offense-specific treatment are continuously linked, providing the greatest opportunity for the offender to experience the leverage that is often necessary to engage in the difficult change process. Even so, revocation rates are high for failure to comply with treatment requirements, often above 50 %. This should not come as a surprise, however. As mentioned above, Wierzbicki & Pekarik (1993) conducted a meta-analysis of 125 treatment studies and found nearly 50 % of clients dropped out of psychotherapy (page). Prochaska (2001:235) calls this fact a "skeleton in the

therapy closet" (page). In containment, individuals are expected to participate in the therapeutic process because without going through the change process, the risk looms that the client will victimize others with continued sexual offending. Failure to participate in treatment after multiple efforts are made to engage the client will likely eventually result in revocation to prison. Prochaska (2001) reviews studies he conducted with colleagues that focused on clients involved in therapy for substance abuse, smoking, obesity, and a broad spectrum of psychiatric disorders and found that those who quickly and prematurely dropped out of treatment were in the precontemplation stage of change. Precontemplation is defined as the stage in which people are not intending to change or take action in the near future (usually measured as "the next 6 months") (Prochaska, 2001, page). It is not uncommon for treatment programs to offer "deniers' groups" that last up to 6 months; some jurisdictions offer psychoeducational classes in place of deniers' groups (English et al., 1996, page). Marshall and Moulden (2006) report encouraging results from "preparatory programs" that are designed to enhance the effects of subsequent treatment (page).

Case-specific supervision requires planning, documentation, and visits to the offender's home and work. Often, safety considerations require that fieldwork be conducted in teams of two officers. Ongoing training is also necessary to keep professionals at the top of their game. Probation and parole officers should have caseloads limited to 20 or 25 sex offenders, and they should have flexibility in work hours to monitor the offender's activities at night and on weekends (English, 2004, page). Burrell (2006) recommends a caseload of 20 for high-risk offenders (page).

Component 4: Informed and Consistent Public Policies

Clear policies facilitate containment. As described most recently in English (2004), the fourth component of a sex offender containment approach requires local criminal justice practitioners to develop public policies at all levels of government that institutionalize and codify the containment approach (page). Harris and Lurigio (2010:478) reflect on the need to move toward evidence-based public policy and note that "a significant and widening gap exists between the effective practices that are employed by criminal justice and clinical practitioners and the policies that have been created by state and federal legislators" (page). Indeed, local agency policies can be most responsive to the needs of their workers, and the expertise of these workers along with research should be the driving factor behind policy development.

Sex offender policies should hold offenders accountable and, to be effectively implemented in the field, must empower those who work closely with these cases. Policies must define and structure the discretion authorities need to manage each offender individually. Criminal justice practitioners must organize and document local and agreed-upon practices that support a victim-oriented approach to sex offender risk management. English et al. (1996) provide examples of areas that require written guidelines for uniformly managing sexual assault including the following: The weight given in sentencing to an offender's denial of the crime, the use of polygraph information, family reunification assessment protocols, presentence investigation report information, failure to progress in treatment, revocation procedures, third-party liability/duty to warn potential victims, and employment and leisure time restrictions for sex offenders under criminal justice supervision; and the use and limitations of actuarial risk assessment instruments.

Ideally in the containment approach, policies are based on research and best practices. Policies should focus on addressing gaps in risk management activities and empowering the ability of the supervising officer to quickly respond to offender behaviors that are out of compliance with treatment requirements and supervision conditions.

Written policies and procedures are an essential part of the justice process. An offender deserves to know what is expected of him or her and what to expect from the criminal justice and mental health systems. Often, behavioral expectations are spelled out in lengthy treatment contracts. Clear expectations will help keep the focus on the offender "working the program" rather than complaining about the system. Additionally, some policies undermine sex offender containment and minimize the seriousness of the crime. Policies that undermine sex offender containment include allowing plea bargains to lesser charges, to non-sex crimes, or to misdemeanor sex crimes when the evidence exists to fully prosecute the case. Lowering the charge, granting diversion, or issuing a deferred judgment minimizes the case to the offender ("it wasn't that bad, I won't do it again") and the victim ("I'm not important to the court"). When sex crimes are disposed as assaults or trespassing—outside the family of sex crimes—the sexual assault is eliminated in the official record. Aiding in the minimization process will ultimately make it harder for the offender to begin and sustain the lifelong changes required to ensure public safety.

Prosecutors and judges who specialize in sex crimes and receive regular training from national entities understand the power of the court to set in motion the healing process, referred to as therapeutic jurisprudence (see LaFond and Winick, 2004). Evidence-based sentencing practices to reduce recidivism suggest increasing the discretion of the judge so he or she can make decisions based on the risks and needs of each individual and the treatment necessary to reduce the likelihood of reoffending (Wolff, 2008, page).

Clear, consistent, and documented agreements on sex offender polices, developed in a spirit of cooperation among agencies responsible for managing sex offenders, enable the successful implementation of the containment process outlined here. The range of activities that require such documentation is quite large, but primary among them is the need for open communication and information sharing at all stages of the process of managing sex offenders in the community.

Risk Assessment and the Limits of Actuarial Scales

New information about the offender's risk to reoffend is frequently revealed in the first months and years of supervision and treatment. In fact, risk is essentially unknown in the early stages of treatment. It is imperative, then, that intervention strategies and policies encourage an elastic response to risk. Although most sex offenders do not have an extensive arrest or conviction record, much of the research reviewed in this chapter indicates that many have a long history of hurting different types of victims.

Having a sex crime conviction is the most powerful predictor of risk of future sex crime. An often overlooked fact in the Bureau of Justice Statistics study is that a 5.3 % sex crime rearrest rate over 3 years among over 9,600 offenders released from prison means that the convicted sex offenders were four times more likely to be rearrested for another sex crime compared to other offenders (Langan, Schmitt, & Durose, 2003, page). Many reoffended quickly, too: 40 % were rearrested within a year of release from prison. Harris and Hanson (2004) reviewed 10 recidivism studies and found 37 % of sex offenders with a prior sex crime were rearrested within 5–6 years (page). After reviewing the literature on sex offender risk scales and recidivism rates, Doren (2002:150) reported "lifetime sexual recidivism by previously convicted sex offenders is not a statistically 'rare event.' ….[L]ong-term recidivism statistics approach 50 %." (page).

The lack of officially recorded crimes can cloud risk assessments conducted with actuarial scales since these usually depend on past arrests or convictions for sex offenses. Additionally, actuarial scales place individuals into groups with certain statistical probabilities to reoffend and thus do not measure individual-level specific and immediate risk. Policies should reflect the limitations of actuarial instruments to predict short-term risk and to predict unreported sex crime events. Treatment providers, evaluators, judges, and supervising officers need to consider additional information along with actuarial scores when considering risk to the public.

Component 5: Quality Control

Quality control is a fundamental tenet of evidence-based correctional practice (Cohen 2002; Latessa et al. 2002). Program monitoring and evaluation activities combined with professional standards of practice ensure that victim safety and the humane treatment of offenders are not compromised (Przybylski and English, 1996, page).

As addressed in English et al. (1996) and English (2004), the containment approach requires broad discretion on the part of the criminal justice system professionals, treatment providers, polygraph examiners, and others collaborating to protect public safety. This discretion allows for individualized treatment and supervision plans, and quick responses to the ongoing assessment of risk and progress. It also recognizes that these cases often involve complicated relationships between the perpetrator and the victim. Such discretion must be systematically monitored to ensure fairness, justice, and the humane treatment of offenders. For this reason, quality control is fundamental to the administration of any sex offender management program, project, or system-wide process. Quality control activities should include, at a minimum:

- Monthly, multi-agency case review meetings to ensure that prescribed policies and practices are implemented as planned
- The requirement of annual training on the topics of sexual assault, conflict resolution, teaming, victimization, trauma, family reunification, treatment efficacy, and research related to each of these
- Developing and tracking performance measures associated with the policies and procedures specified in the jurisdiction
- Videotaping of all polygraph examinations to avoid recanted statements and to facilitate periodic review of examinations (including chart reviews) by a quality control team
- The collection of case data describing the characteristics of offenders who fail in treatment or commit new sex crimes so gaps in containment can be identified and closed

Sexual abuse cases are difficult to manage, and offenders frequently attempt to manipulate the management system just as they did their victim(s). Containment professionals can burn out, get soft, miss "red flags," become cynical, and otherwise become ineffective. Empathy toward victims and repeated exposure to traumatic material can also result in *compassion fatigue* (Figely, 1995; Stamm, 1995). Police, firefighters, and other emergency workers report that they are most vulnerable to compassion fatigue when dealing

with the pain of children (Beaton and Murphy 1993, page). In addition, "trauma is contagious" (Herman, 1992,180). Compassion fatigue, a near certainty in this work, presents a significant threat to the quality of the program and the well-being of the dedicated professionals who are working to make our communities safer. Ongoing training, flexible hours, a supportive environment, and safe working conditions are important ways that administrators can help fight compassion fatigue.

A final aspect of quality control consists of clearly defined and agreed-upon measures of success. It is challenging to identify measures of detection, detention, and revocation that target offenders *before* the commission of a new assault. Addressing these issues requires the allocation of resources for monitoring and evaluation. Indeed, resource allocation is a key component of quality control.

Effectiveness of the Containment Approach

Lowden, et al. (2003) conducted a comprehensive process and outcome evaluation of the sex offender treatment program at the Colorado Department of Corrections. This program, described earlier in this chapter, employed the containment approach in the institution, including intense treatment with polygraph testing. When paroled, the offenders participated in treatment, supervision, and polygraph testing in the community.

Researchers found that 84 % of the offenders who participated in the therapeutic community component of sex offender treatment in the institution successfully completed parole, versus 52 % of the sex offenders who had not participated in institutional treatment. By the third year following parole discharge, 21 % of the offenders who had participated in institutional treatment had been arrested for any type of crime versus 42 % of the offenders who had not participated in treatment. Treatment and supervision effects lasted for the duration of the outcome period, nearly 8 years. However, over time, individuals in both the treatment and comparison groups continued to fail. After nearly 8 years, 40 % of those who had participated in the therapeutic community were rearrested for any type of crime; 50 % of those who participated in Phase 1 were rearrested, and 62 % of sex offenders who had not participated in treatment were rearrested. These findings may provide the most compelling argument for the value of containment—treatment combined with polygraph examinations and specialized supervision—but the fact that the effect of treatment eroded over time is an equally important finding. Few offenders in Colorado receive the intensity of treatment available to them in prison, yet only half in the prison study remained arrest free after nearly 8 years. Given the lack of reporting by sexual assault victims, actual reoffending rates are likely higher. This suggests the need for ongoing containment for many convicted sex offenders. In a discussion of child pornography offenders, Abel testified to the U.S. Sentencing Commission in 2012 that treatment and follow-up "maintenance" should range from 5 to 10 years and, for some offenders, lifetime maintenance is required (U.S.S.C. 2012)

Other studies also reveal the value of the containment approach. A preliminary study of the containment approach in the Framingham, Massachusetts, parole agency also produced promising results (Walsh, 2005, page). Of the 152 sex offenders managed under containment between 1996 and 2005, 15 were still actively under parole supervision, 81 had successfully completed supervision, and 58 had returned to custody. Eight offenders had been arrested for new crimes, none of which were sex offenses.

A study of the Jackson County (OR) probation and parole program also found support for the containment approach. Comparing outcome data on offenders in the Jackson County program with a comparison group from a nearby county, researchers found that offenders who stayed in treatment/containment for at least 1 year were 40 % less likely than those in the comparison group to be convicted of a new felony (England-Aytes et al. 2001, page). The Jackson County program dates back to 1980 and was featured in English et al. (1996).

The Maricopa County (AZ) Adult Probation Department has been using the containment approach since 1986. An evaluation by Hepburn and Griffin (2002) of the program involving 419 probationers with an average 36-month follow-up period found 2.2% of the offenders were arrested for a new sexual offense and 13.1 % were arrested for a new criminal offense. This appears to compare favorably to Losel and Schmucker's (2005) meta-analysis which found average sexual recidivism rates of 11.1 % and criminal recidivism rates of 22.4 % for treated offenders over an average 5-year follow-up, but the differences in time-at-risk are important.

Stalans (2004) conducted a comprehensive study of probation sex offender programs in three counties in Illinois that were implementing the containment approach. Stalans (2004) concluded that "…all specialized probation programs should be based on the containment approach and should include (a) at least three unannounced random field visits per offender every month, (b) a full-disclosure polygraph and a maintenance polygraph exams every 6 months, and (c) a tight partnership between probation officers and treatment providers that includes probation officers appearing at random times at the treatment site to check on offenders' attendance" (599).

The Virginia Department of Corrections conducted a study of 1,753 sex offenders in three probation and parole regions; 583 were assigned to one of nine containment programs and the remainder were assigned to non-containment units (Boone et al. 2006, page). The new crime rates after an

average of 4.5 years were comparable at 4.5 % (non-containment) and 4.6 % (containment). More than half of those who returned to prison did so due to technical violations, and those who were in containment programs had a 30 % higher technical violation rate than the non-containment group. The researchers stated the following about the higher rate of technical violations: "Higher technical violations are to be expected in containment units as the purpose of the increased supervision is to deter new crime and detect patterns of relapse before the offender engages in a new crime" (Boone et al., 2006, 40). The authors concluded:

> Sex offender containment models modify recidivism rates in different and opposite directions. The first impact is that offenders who violate conditions of their probation will be detected with greater frequency, thus inflating the recidivism rate. The second impact is that sex offender containment models reduce the likelihood that individuals will engage in new crimes by a combination of deterrence (increased supervision) and treatment (sex offender therapy). Non-containment units with similar rates of recidivism cannot be classified as doing just as well as a containment unit based solely on similar recidivism rates. Non-containment units may in fact be missing, due to reduced supervision and the absence of polygraphs, offenders who are committing new crimes, while less intensive treatment may be increasing their likelihood of re-offense (Boone et al., 2006, p. 40)

Finally, published results of a longitudinal, randomized control group study of the treatment program operating at the Atascadero (CA) State Hospital that compared outcomes of treated sex offenders with those of two untreated control groups: treatment volunteers and treatment refusers. Although the authors point out that the random assignment did not produce equivalent groups—the treated group had higher risk scores, a higher number of offenders previously committed for treatment as mentally disordered sex offenders, and a higher number of unmarried offenders—the program was considered state of the art. The Atascadero program used cognitive-behavioral treatment, relapse prevention, and 1 year of aftercare in the community. The evaluation found that the program was ineffective in reducing recidivism. It is important that the authors note that the treatment program differed in some respects from most current treatment programs. To reduce treatment attrition, offenders were not required to fully participate or progress in treatment to remain in the program. Consequently, the offender's sentence determined program discharge and was unrelated to treatment progress or assessed risk. In addition, these offenders did not participate in polygraph testing. After summarizing these issues, the authors conclude:

> Although it has not been rigorously tested, this "containment approach" (English, 1998) represents the current thinking in the field (Association for the Treatment of Sexual Abusers (ATSA), 2004; California Coalition on Sexual Offending, 2001; Center for Sex Offender Management, 2000; Colorado Sex Offender Management Board, 1999). As we learned in interviews with our treatment failures, a number of RP participants were facing high-risk situations soon after entering the community (Marques et al., 2000). It is possible that added surveillance and teamwork could have prevented some of these early failures (Marques et al., 2005, pp. 101–102)

Indeed, the Atascadero program lacked important aspects of the containment approach, including the use of the polygraph, the consistent application of sanctions—including termination from treatment for nonparticipation—and containment upon release from the institution. Requiring that individuals disclose their assault patterns, develop and implement plans to avoid high-risk environments, develop a positive support system, fully engage in treatment upon release, and acknowledge and manage their ongoing risk—that is, take full responsibility for the risk he or she presents to the community—are key components of the containment approach and were not part of the Atascadero program.

Conclusion

In sum, the containment approach is victim-safety focused, multi-agency, and collaborative. This chapter has focused closely on the containment strategy that involves the treatment provider, the supervising officer, and the polygraph examiner. Since the officer represents the criminal justice agency responsible for the offender, he or she generally convenes the case management team, and our research found that the officer and the treatment provider often go beyond the traditional boundaries of their job descriptions to implement containment (English et al., 1996, page). In other words, they show a particular kind of dedication to public safety, making time for the necessary collaborations, teaming, information sharing, training, and surveillance required to manage this population in the community. Supervising officers and treatment providers depend on a variety of information tools including "collateral contacts" with an offender's family members, employer and victim representatives, home visits, electronic monitoring, and urinalysis testing for drug use. While polygraph testing is one technology in a varied set of tools that are used to improve the management of sex offenders, the integration of polygraph testing with treatment and supervision remains at the core of the case management component of the containment approach.

This description, and certainly the practice of actual containment, is consistent with what Lisbeth B. Schorr called "critical attributes of effective intervention" (year, page). In this important paper, Schorr (1999) states that interventions that are most likely to change the lives of children and families in high-risk circumstances share certain attributes. They are (1) are comprehensive, flexible, and responsive, (2) see children [or victims and offenders] in the context of families, and families in the context of communities, (2) have a long-term orien-

tation with an understanding that deep-rooted problems are unlikely to respond to quick-fixes, (3) are managed and staffed by people who believe in what they are doing, (4) operate with intensity and perseverance to achieve a clear, coherent mission, (5) recognize the limits of a single strategy, and (6) encourage staff to build strong relationships based on mutual trust and respect, often going well beyond the boundaries of their job descriptions. Communities where the containment approach is implemented benefit from its focus on public safety.

Finally, the containment approach should be implemented in the context of emerging research in the field. This includes incorporating the risk-need-responsivity model (Andrews, Bonta & Wormith, 2011, p. 738) which includes respecting the client and providing services "in an ethical, legal, just, moral, humane, and decent manner" (page). Equally important is the research that underscores the importance of the relationship between the supervising officer and the offender in the change process (Skeem, Encandela, and Eno Louden, 2003; Skeem, Eno Louden, Polaschek, & Camp, 2007). Likewise, therapists must have a positive attitude toward the offender (Ward and Fisher, 2006, page) and seek to build a strong therapeutic alliance built on honesty, respectfulness, warmth, interest, and openness (Ackerman and Hilsenroth, 2003, page). Fundamentally, this approach seeks to manage risk and hold offenders accountable; this must occur in ways that are compatible with the humane application of containment.

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Circles of Support & Accountability: The Role of the Community in Effective Sexual Offender Risk Management

Robin J. Wilson and Andrew J. McWhinnie

Ask yourself: How many people are there in your daily life who are not paid to be there? Now ask yourself, "How successful am I as a person, lover, spouse (maybe), a parent, a friend, or a member of an extended family?" These two questions are almost inextricably related, right? The first you may recognize as a question similar to one found in many assessment tools measuring stable dynamic predictors of risk for sexual reoffending (see Hanson, Harris, Scott, and Helmus, 2007) exploring significant social relationships. Indeed, such instruments consider quite a number of areas that, translated into common parlance, explore a person's connection to and ability to function in a community setting of noncriminal associates (e.g., relationship stability, general social rejection, lack of concern for others, impulsivity, poor problem-solving skills). The need for "community" in anyone's life is extensive, and no less so for the person struggling to cope with issues related to criminal sexual behavior. In fact, poor social functioning and social isolation are well known and commonly observed factors among those who engage in deviant sexual behavior (Finkelhor, 1984; Finkelhor & Araji, 1986; Hanson et al., 2007; Hudson & Ward, 1997; Malloy & Marshall, 1999; Marshall, 1989; Marshall, Barbaree, & Fernandez, 1995; Miner et al., 2010; Pacht & Cowen, 1974; Segal & Marshall, 1986; Ward, Laws, & Hudson, 2003).

As a family physician and clinician working in one of Canada's most impoverished communities—the Downtown Eastside of Vancouver, British Columbia—Dr. Gabor Maté reflects on his experience: "We shouldn't underestimate how desperate a chronically lonely person is to escape the prison of solitude. It's not a matter of common shyness but of a deep psychological sense of isolation experienced from early childhood by people who felt rejected by everyone, beginning with their caregivers" (Maté, 2008).

So, are people who have committed sexual offenses simply social isolates, lonely, and in need of a friend? Yes, in some ways, though it is not quite that simple. Treatment models for various types of sexual offending patterns have been, and continue to be, developed that address some of the more pernicious issues a clinician will ever confront (e.g., fantasies of sexually abusing children, acts of sexual violence, general social deviance). But, if treatment is to be successful and if change in treatment is to be maintained, then having a few good friends really helps, especially friends who understand and can help a person stay safe, live safe, and develop the human bonds that failed to develop in the first place when they were growing up. These friends are needed to continually talk about and model appropriate adult relationships. The obvious human need for appropriate intimacy suggests that these sorts of friends are worth their weight in any currency, and, as radical as it may seem, this is a role in managing risk that can *only* be fulfilled by members of a willing and knowledgeable community.

Canada has over 20 years of experience of doing just that—pairing ordinary citizens with high-risk sexual offenders. Citizens have been visiting offenders in jail forever. But, being alongside as a person leaves prison and enters the mean streets of a hostile community rife with both temptation and scorn—this is an unusual experience. This is where the proverbial rubber meets the road for offenders returning from "paying the price." This is where the "price" is actually "paid." We are talking about engaging nonprofessionals—ordinary citizens who are not paid to be with the returning offender, who are aware of the dynamics of sexual offending behavior and the offense histories of the persons involved, and who are still willing to try being a friend to a high-risk sexual offender in his bid to live safely in the community with no more victims.

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Put into clinical terminology, the research literature on effective interventions tells us that we should provide offenders with human service opportunities that match intensity to risk, specifically target assessed areas of criminogenic need, and which promote motivation to change and consider the idiosyncratic nature of the clientele (Andrews & Bonta, 2010). This is the essence of the risk-need-responsivity (RNR) model that underpins many of the correctional rehabilitation programs across North America and some international jurisdictions. A related literature thread tells us that programs should not just focus on risk, need, and responsivity, but that they should also promote the development of lifestyle balance and self-determinism (Curtiss & Warren, 1973)—all in the quest for a "good life" (Wilson & Yates, 2009; Yates, Prescott, & Ward, 2010). But what do most "good lives" have? A solid social network—even if it is just a small one—of reliable and concerned friends.

The majority of persons who sexually offend (and get caught) receive determinate sentences, meaning that they will 1 day return to society. In the best case scenario, all sexual offenders will have had an opportunity, while incarcerated or under supervision, to complete some degree of evidence-based treatment or counseling, hopefully adhering to the RNR principles noted above. However, there are still many instances in which this does not occur. For instance, what happens when the person in need of an effective intervention does not have access to one? What happens when the offender fails to appreciate that he/she needed one and, as such, did not take advantage of the opportunity when it was presented? Scenarios like these lead to some being released to the community as "untreated sexual offenders." Whether deservedly or not, these are the sorts of folks who cause real concern for law enforcement personnel and members of the community.

Let us also, for a moment, consider those offenders who do have access to good treatment while institutionalized and who undertake that treatment, but their risk is still not sufficiently ameliorated prior to release. Truth be told, this happens frequently. Part of the reason for this is that, as noted above, most sexual offenders receive determinate sentences—that is, the Department of Corrections must let them go at the end of their time. In some US states (less than half), there are civil commitment programs that will indefinitely hold certain sexual offenders while they receive additional treatment and risk management instruction. However, even this is not fail-safe. There are many occasions when the judicial system will "release" someone from civil commitment for reasons unrelated to clinically assisted reductions in risk to reoffend. Simply put, sometimes offenders at risk make it back to the community before we have a chance to fully address that risk.

So, where does that leave the community? It would be unreasonable to expect that the criminal justice system will be able to ensure that the totality of risk to the community can be managed. As a field, we are simply not able to predict—with full accuracy—who will and who will not reoffend sexually upon release to the community. With the advent of actuarial risk assessment tools (e.g., Static-99R; Helmus, 2009) and measures of community reintegration (i.e., dynamic risk potential—see Hanson et al., 2007), we are a lot better at distinguishing these two groups, but there is more to be accomplished.

Perhaps one of the areas with greatest potential for growth is in regard to community engagement of the collaborative risk management endeavor. Many jurisdictions now favor "containment" approaches to managing risk in the community (see English, Pullen, and Jones, 1998). In such models, treatment, supervision, and monitoring occur in concert; however, all of these services/measures are offered by the "official control" sector—probation/parole, law enforcement, paid professionals, etc. Silverman and Wilson (2002) suggested that a viable solution to community violence is found in community engagement with the criminal justice system. Research in support of this assertion includes findings that social support led to reductions in violent recidivism among mentally ill patients as well as violent sexual offenders (Estroff, Zimmer, Lachicotte, & Benoit, 1994; Gutiérrez-Lobos et al., 2001). Further, stable housing, as well as social support, has shown a relationship to reduced sexual recidivism and general criminality among both child molesters and rapists (Grubin, 1997; Lane Council of Governments, 2003; Willis & Grace, 2008, 2009). It would be our submission that while containment models provide a clear "law and order" accountability framework for statutory agencies and released offenders alike, the sort of caring and warm human regard available from endeavors like Circles of Support and Accountability (CoSA; Wilson & McWhinnie, 2013) is critical to ensuring long-term social and community integration.

Community Risk Management: The Birth of Circles of Support and Accountability

In the summer of 1994, congregants of a small Mennonite community church had no idea that they were about to change the way people considered "high risk" were received in Canadian communities and internationally. A man named Charlie—a repeat offender who had spent the majority of his life incarcerated for molesting more than 20 children—was about to be released from an Ontario prison.[1] Convicted of

[1]While in the institution, an assessment report composed using an early version of the Sex Offender Risk Appraisal Guide (SORAG—see Quinsey, Harris, Rice, and Cormier, 2006) had put Charlie's risk potential at 100 % chance of sexual or violent reoffending in 7 years.

multiple sexual offenses involving young boys, this was not good news for the residents of Hamilton, Ontario, where Charlie was planning to reside.

Bill Palmer, a psychologist with the Correctional Service of Canada (CSC) was Charlie's therapist in prison. No one knew the risks Charlie posed better than he. Palmer also knew that once Charlie was released, both he and CSC would be powerless to do anything about the risks Charlie posed. Palmer contacted community-based corrections personnel working in Toronto, Ontario, including the primary author (Wilson) and the District Chaplain, Rev. Hugh Kirkegaard. Palmer wanted to know, was there anything that could be done? Without appropriate supports and supervision, the probability that Charlie would harm another child was high. Wilson's response was less than heartening. In essence, the criminal justice system had more or less run out of options in Charlie's case. His release was imminent, there were no services for him, and, apart from police surveillance, there was little the community could offer Charlie. To Palmer, something—anything—that would help Charlie stay safe in the community was needed. But what? To whom could he turn?

Rev. Kirkegaard hoped that the answer would ultimately come from volunteers who had assisted Charlie during the last time he had been out, specifically, from the Reverend Harry Nigh and his congregants at the Welcome Inn, a Mennonite church. Harry Nigh knew Charlie from his experience with a person-to-person outreach to prisoners, called "M2W2" (Man to Man, Woman to Woman—see Yantzi, 1998). Further, people, who had known Charlie the last time he had been released and who were still visiting him in prison, had been exploring ways of supporting Charlie this time around. Restorative justice adherent Ed Vandenberg, for instance, was intrigued by a "circling" process used successfully in the past with mental health patients. Bill Palmer contacted Reverend Nigh and facilitated a meeting at the penitentiary to plan for Charlie's release. It was there that the idea of a "circle of ongoing support" was brought up—"a Charlie's Angels group" as Harry referred to it in his minutes. This concept has deep roots in Canadian Aboriginal traditions. However, the idea in this case was also influenced by other work with which this Charlie's Angels group had been experimenting in supporting other ex-prisoners. The goal was to assist ex-prisoners in living offense-free. As part of the basis for their optimism, these folks knew that an even earlier, similar initiative had proven successful in supporting people with disabilities to live independently in the community.

In hindsight, Reverend Nigh recalls a sense of foreboding. He knew he could also have simply said there was nothing he or his church community could do, and that Charlie, in fact, posed too great a risk for their small community to take on. Instead, Harry gathered several members of his Hamilton congregation and, together, they fashioned a response of "circling" people like Charlie to provide support for them as they worked at establishing themselves in the community. Members of this faith community responded by welcoming Charlie in their midst, but Charlie presented many challenges to this first circle, including poor problem-solving skills, institutionalization, and a sort of entrenched social orneriness. They soon realized that the circle needed to have an accountability component to go along with its supportive work. With that realization, the first of what has now become "Circles of Support and Accountability" (CoSA) was established.

With the assistance of his "circle" (Reverend Nigh and his associates), Charlie began to settle into a life in the community. Days turned to months, months turned to years, and Charlie did not reoffend. Indeed, on the strength of Charlie's apparent success, other faith groups began engaging in similar processes, assisting additional high-risk sexual offenders who were being released to the community with little or nothing in the way of a formal risk management framework. This was the birth of a Circles of Support and Accountability movement that now stretches across Canada, into the United States, and across both the Atlantic and Pacific Oceans.

From that first experience in Ontario until the present time nearly 20 years later and west to British Columbia (one of now 16 CoSA projects in Canada), Linda Rathjen—a BC CoSA volunteer—talks about working with "Arthur," a man in many ways similar to Charlie:

> When asked what his highlight was after his first month out of prison, [Arthur] emphatically stated that it was having found his CoSA group, his six friends. His greatest fear was losing them. So the signing of the covenant, where we committed to being his Circle for at least a year, meant the world to Arthur. It guaranteed the safety of our relationship with him, and helped reduce his fear of abandonment. It symbolized community to him in a tangible and real way, and he was more than eager to abide by the terms of the covenant. I believe my community is safer because of CoSA. When Arthur was asked on his anniversary as to why he has been successful in the community this time as opposed to other times, he replied, "I've never had good friends before. How could I ever do anything that would hurt these people?" So, when the phone rings, and I see that it's Arthur, and I don't feel like talking with him AGAIN, I am reminded that this could be the phone call that he needs to prevent him from slipping back into his crime cycle, and how could I do less than give him those few minutes of my time in exchange for the safety of my community?

Circle Mechanics

In the generally accepted model, each Circle is comprised of a Core Member (the ex-offender) and four to six community volunteers—citizens who have pledged personal time to assist the Core Member in the community. Community members who volunteer their time to CoSA are trained to ensure that they understand the roles and responsibilities

associated with assisting and holding accountable high-risk sexual offenders in the community (Correctional Service of Canada, 2002a; Wilson, Cortoni, & McWhinnie, 2009; Wilson, McWhinnie, Picheca, Prinzo, & Cortoni, 2007). In addition, community volunteers in almost all Canadian CoSA projects have access to an advisory committee comprised of professionals from law enforcement, corrections, clinical services, and business who also volunteer their services. Most, if not all, CoSA projects also have a paid "staff" person who serves as the local coordinator and provides operational support to the Circles running in their project.

In the initial phase of the Circle (typically 60–90 days following release), at least one volunteer is designated as the primary contact and meets with the Core Member on a more or less daily basis. Other Circle volunteers are also in contact with the Core Member, at a minimum, on a weekly basis during this initial phase. In addition to these individual meetings, the full Circle meets on a weekly basis. A CoSA is a relationship scheme based on friendship and accountability for behavior. As is expected in any friendly relationship, openness among all members is key and is seen as the method by which accountability is most likely to be maintained.

Offenders targeted for CoSA are usually those who have long histories of offending, have typically failed in treatment, have displayed intractable antisocial values and attitudes, and are likely to be held until sentence completion due to high levels of risk and criminogenic need. Upon release, these offenders face significant reintegration challenges, and involvement in CoSA assists greatly in helping them make good choices regarding the acquisition of valued goals consistent with the tenets of the currently popular good lives model (GLM—see Wilson and Yates, 2009; Yates et al., 2010). Briefly, the GLM posits that all people seek to attain human goods that include, among others, relatedness/intimacy, agency/autonomy, and emotional equilibrium. In short, human goods are associated with general well-being, and the sort of balanced, self-determinism also argued in the life skills model (Curtiss & Warren, 1973). Through involvement in CoSA, released offenders have access to "prosocial guides" who will assist them in meeting their needs in ways that promote personal efficacy and well-being and decrease propensity to reoffend. Those released without benefit of participation in CoSA are presumably less able to meet their needs in prosocial ways and are, therefore, less likely to reintegrate successfully in the community.

With its focus on support, CoSA provides positive social influences, concrete help with cognitive and other problem-solving, and helps counteract the social isolation and feelings of loneliness and rejection associated with sexual reoffending. Further, with its concurrent focus on accountability on the part of the offender, it targets issues related to distorted cognitions that support offending and minimize risk, including cooperation with supervision and the need to maintain a balanced, self-determined lifestyle. The CoSA approach is therefore fully in line with the risk and need elements of the principles of effective interventions (Andrews & Bonta, 2010; Wilson & Yates, 2009).

A Two-Ring Circle

A CoSA is actually two circles—an inner circle consisting of community volunteers and the Core Member and an outer circle consisting of professionals who have volunteered their expertise to support the inner circle (see Fig. 1). The inner circle manages the day-to-day aspects of the Core Member's community reentry, while more difficult or complicated issues (e.g., breach of conditions, treatment concerns, and

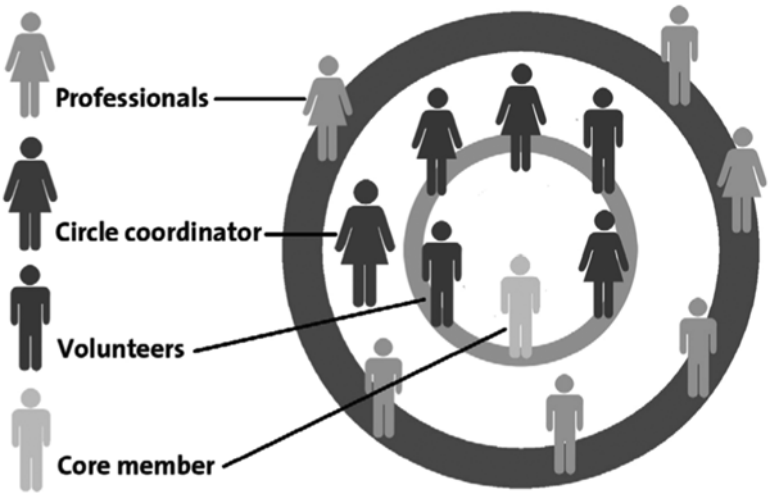


Fig. 1 Graphic representation of CoSA model (adapted from Wilson and Picheca (2005), Wilson et al. 2007b, c)

reports to law enforcement or child protection) are addressed with the assistance of the outer circle, comprised of professionals and other representatives of official stakeholder groups (e.g., probation, law enforcement, treatment professionals). In our experience, a realistic circle size is now five volunteers for each Core Member.

Training and Support of Volunteers

It is essential that volunteers are supported, monitored, and held accountable for the work they are undertaking. This supervision needs to be undertaken by a coordinator (i.e., the paid staff member noted above) who not only understands the issues related to risk management but who also understands the needs of the volunteers. The challenge is to find a balance wherein the volunteers feel supported but are not wholly dependent on that support to work effectively. It is important to understand that when undertaking something new, this something new is approached from a point of naïveté. Both advice and guidance are needed until experience consolidates sound judgment. The Circles coordinator provides this guidance and advice both formally and informally. The personal well-being of volunteers is paramount and, as such, they are invited to attend quarterly reviews in which they can explore their experience of Circles work. The coordinator will also ensure that each Circle as a whole is regularly reviewed.

Evidence-Based Practice

There are many different practices currently employed, each of which claims to help ameliorate the risk that sexual offenders pose to the community. On the surface, many of these practices appear to make sense. However, in today's world, it is not enough to have what psychologists call face validity ("makes sense"), you have to underscore your claims of efficacy with program evaluation research. And, even when you do this, there still may be criticism from other professionals or the community that your evaluation has flaws or other elements that might serve to lessen the strength of your claims.

From the very beginning, we realized that if we were ever going to be able to claim that CoSA had a measurable effect on the risk to the community posed by Core Members, we were going to have to build in a research component. Having been involved from the beginning, the first author was careful to start building a database of variables and factors that would, at some point in the future, require revisiting to be sure that CoSA was having its intended effect on safety. We also realized that it would be important to conduct this research in keeping with other developments in the field, so we were careful to use tools and methods that other programs and projects were using. In short, it was important that we not allow any potential benefits of CoSA involvement to be dismissed simply because we had not conducted scientifically rigorous investigation of those potential benefits.

As the numbers of persons coming into the project as Core Members grew, we approached a point where it was possible to start speaking with others about what we were doing and to start evaluating outcomes. The very first presentation on the mechanics of the CoSA model was made at the annual conference of the Association for the Treatment of Sexual Abusers (ATSA) in Arlington, Virginia, in the fall of 1997 (Heise, Kirkegaard, & Wilson, 1997). However, discussion of actual data did not come until 3 years later (Wilson & Prinzo, 2000), when a preliminary comparison of 30 Core Members and 30 matched comparison subjects was presented. A few years later, we were able to double these samples, and the first peer-reviewed evaluation of CoSA was published (see Wilson, McWhinnie et al., 2007; Wilson, Picheca, & Prinzo, 2007a, 2007b). A national replication study followed soon after (Wilson et al., 2009), demonstrating very similar results.

As soon as we started conducting comparisons of men who had been in a Circle with similar men who had not, we were surprised by the outcomes. Contemporaneously, other studies were then starting to emerge regarding the relative rates of reoffending observed after offenders had completed one or another treatment intervention compared to those who had not completed treatment. Most studies were reporting modest (but significant) reductions in reoffending, purportedly as a consequence of being involved in "sexual offender-specific" treatment. However, CoSA was never intended to be a treatment program; these were nonprofessional, community volunteers assisting high-risk offenders, post-release, in the process of community integration. Yet, the differences in reoffending between men in Circles and matched comparison subjects not in Circles were striking.

In a meta-analytic review, Hanson and colleagues (Hanson, Bourgon, Helmus, & Hodgson, 2009) presented data from 23 sexual offender treatment efficacy studies meeting certain basic criteria for study quality (including our first CoSA evaluation—Wilson, Picheca, et al., 2007b). Average sexual reoffense rates for those offenders completing treatment was 10.9 %, while those offenders who did not complete treatment reoffended at a rate of 19.2 %, for an odds ratio of .568. In the first evaluation of CoSA (see Wilson, Picheca, et al., 2007b), the rates of sexual reoffending over an average of approximately 4½ years were 5 % for 60 CoSA participants and 16.67 % for 60 matched comparison subjects who were not involved in a Circle, for an odds ratio of .299. In a recently published replication study (see Wilson et al., 2009), the respective differences in sexual reoffending were 2.3 % and 13.7 %, for an odds ratio of .168 (mean follow-up time was approximately 3 years).

In many respects, it would appear that the value added for offenders involved in CoSA surpasses that available through involvement in treatment. However, this may not be an entirely fair comparison. In the aforementioned meta-analysis of treatment outcome studies, Hanson et al. (2009) assigned a rating to included studies based on how well they adhered to the elements of the Andrews and Bonta (2010) RNR model. Hanson et al. assigned a rating of "2" to the first CoSA evaluation (Wilson, Picheca, et al., 2007b), stating that the model met the "risk" and "responsivity" tenets, but not "need." In this chapter, we would like to correct Dr. Hanson and his colleagues, in suggesting that the acute attention paid by Circle volunteers to elements of criminogenic need may be precisely what has given CoSA an edge over other attempts at community-based risk management. Indeed, one of the unique benefits of CoSA is found in the nature of the relationships formed between volunteers and Core Members. In this model, attention to criminogenic need is accomplished through methods that are responsive to offender needs in ways that professionals generally cannot offer.

As an outcome of their ambitious Dynamic Supervision Project research, Hanson and associates (Hanson et al., 2007) updated their scales for assessing stable and acute dynamic risk factors. The resultant scale for stable dynamic factors (Stable-2007) essentially outlines 13 variables in 5 categories that are important to consider in community risk management and the development of ongoing treatment. Most sexual offender aftercare (i.e., post-release) programs are informed by the Stable-2007 or other similar schemes (e.g., Thornton's Structured Risk Assessment [SRA] protocol—Thornton, 2002). The five domains in the Stable-2007 are:

1. Significant social influences
2. Intimacy deficits
3. General self-regulation
4. Sexual self-regulation
5. Cooperation with supervision

However, most programs have only the ability to teach skills theoretically linked to the reduction of difficulties in these target areas. Probation and parole staff must then send offenders back out into the community to put those new skills into practice, while staff essentially "wait and see." CoSA takes a somewhat different approach to this. Unlike correctional and other similar personnel, CoSA volunteers are able to engage with offenders in ways that might otherwise be characterized as a breach of professional boundaries (e.g., buying the Core Member lunch, inviting him to your home, giving him your personal phone number—of course, all with safety considered in advance). Volunteers can provide intensive mentoring and virtual hand-holding as the Core Member attempts to address issues related to his criminogenic needs. The issues of high caseloads and limited services are nonexistent in the CoSA approach. This is the "support" element at work. But let us not forget about "accountability." This latter aspect requires that Core Members make genuine attempts to address lifestyle management deficits, to debrief their experiences during the process of community integration, and to engage in a dialogue about how to do things better. We submit that this is the essence of what Andrews and Bonta meant when they decreed that effective interventions must attend to criminogenic needs.

Proliferation of the Model

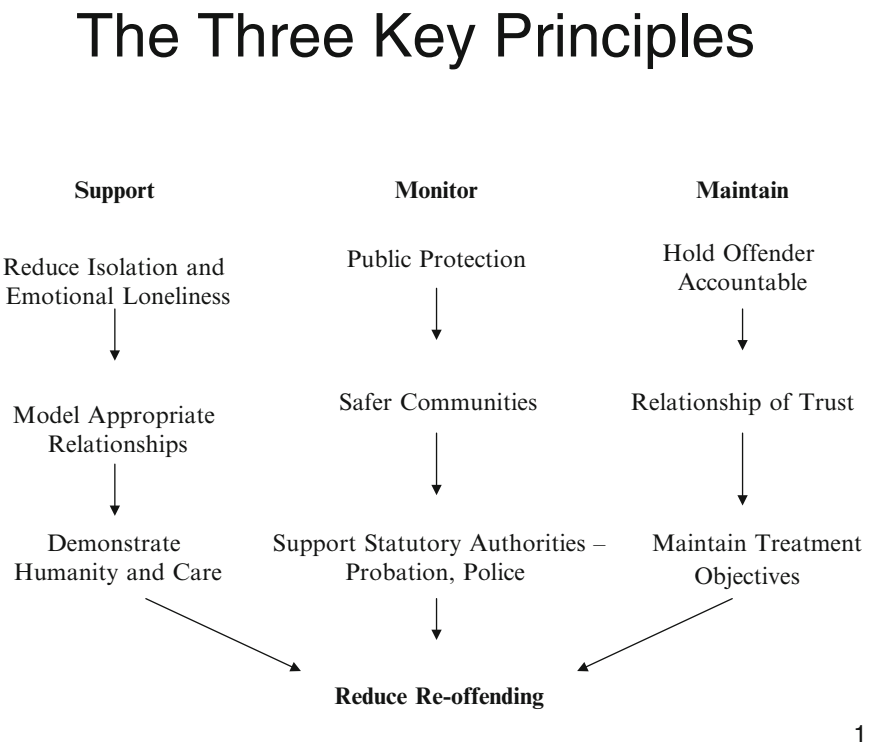
Circles of Support and Accountability started as a grassroots attempt to address a specific problem for a specific individual—Charlie was being released at sentence completion to a hostile community environment in which he would have little or no assistance in avoiding high-risk situations, developing new skills to compete with old ways of doing things, or finding a place for himself in the community. This at first seemingly simple gesture of kindness by Reverend Nigh and his congregation has subsequently grown into something of a movement in the restorative justice-friendly faith community. Unbeknownst to us, two probation officers from Minnesota took our handouts away from that first presentation in Arlington and just started doing it in their county. Many other CoSA projects have gotten their start in similar ways—by word of mouth or by acquiring literature describing the model, either at conferences, on the internet, or through informal sharing with like-minded organizations. Both authors receive email inquiries weekly from parties in international jurisdictions who are keen to explore CoSA project development.

CoSA has grown to become a viable community partner in assisting high-risk sexual offenders in their efforts at integrating with society. The CoSA model has now proliferated across Canada (from which the current sample was drawn) and into the international arena, with many countries investigating the model. Outside of Canada, the most ambitious application of the model is found in the Hampshire and Thames Valley (HTV) region of the United Kingdom. In 2000, five Canadian CoSA delegates were asked to travel to London to meet with restorative justice adherents from the Religious Society of Friends (Quakers), officials from the Home Office and Her Majesty's Prison Service, and related statutory agencies (see Peace and Witness, 2005). These discussions resulted in the formation of a demonstration project in the HTV region and another

endeavor sponsored by the Lucy Faithfull Foundation, a religious charity and social service provider. In June 2008, the British government established a national charity under the title "Circles UK."

The variant of CoSA available in the United Kingdom differs somewhat from its Canadian counterpart in that participating offenders remain under supervision while those in Canada are mostly in the community post-sentence and post-supervision. The systemic approach taken in Britain recognized the importance of two important key factors in offender management: firstly, the impact of sexual offender treatment programs and, secondly, the role of the Multi-Agency Public Protection Panel (MAPPA)—a process that mirrors, in many respects, the containment model used in the United States (English et al., 1998). The design of the MAPPA model is founded on three key principles (see below—Bates, Saunders, & Wilson, 2007; Saunders & Wilson, 2003; Wilson, McWhinnie, & Wilson, 2008), which are based on those significant issues relating to the recidivism of sexually aggressive behavior. The reduction of isolation and emotional loneliness is an imperative, while perceptions of intimacy and the significance of attachment deficits demonstrate the need for appropriate modeling—a central feature of a CoSA volunteer's role. Circles are only effective if a relationship of honesty and trust is developed within all the constituent parts. As with treatment, therapeutic alliances are important. By definition, the Circle has a therapeutic dynamic, and humanity and care become the context in which the Core Member is held accountable for his past abusive behavior.

A preliminary study published by British CoSA researchers (Bates et al., 2007) provided qualitative information regarding the development of Circles in their jurisdiction; however, numbers of participants were still too low to facilitate quantitative evaluation of recidivism outcomes. Nonetheless, Bates et al. reported that, over the first 4 years of the HTV project's existence, no Core Members had sexually reoffended. An updated, more comprehensive review of CoSA in the UK experience was recently published (Bates, Williams, Wilson, & Wilson, 2013), the results of which show low rates of sexual reoffending and other related misconduct roughly equivalent to the Canadian experience (i.e., a 75 % reduction in sexual or violent reoffending).



In addition to the development of CoSA projects in the United Kingdom, many jurisdictions in the United States are also looking at CoSA as a means to manage the risk posed by released offenders. As in Canada and the United Kingdom, the primary driving forces behind these projects has been the faith community, but, as statutory agencies find it increasingly difficult to shoulder the entire burden of community safety, these agencies are warming up to the idea of community-based partnerships that include members of the community. In Minnesota, where a CoSA project now flourishes with assistance from the Department of Corrections (MN-DOC), researcher Grant Duwe (2013) has shown that MN-CoSA recipients were 62 % less likely to be rearrested, 72 % less likely to be revoked for a technical violation, and 84 % less likely to be reincarcerated for any reason. Additionally, Duwe demonstrated a cost-benefit ratio of 1.82, meaning that for every dollar the MN-DOC spends on CoSA, they receive back $1.82 in community safety.

Community Development

The Circles of Support and Accountability model is an innovative community response to a problem with which statutory agencies and clinical personnel have continued to struggle—often at the expense of community safety. From our perspective, legislators have moved quickly to establish law and policy regarding risk management of released sexual offenders. However, sometimes bills have moved too quickly through their respective houses—seemingly without consideration of what might actually result (see Levenson and D'Amora, 2007). The community is understandably alarmed about the risk potentially posed to children and other vulnerable persons, but simply enacting legislation as a means to "get tough on crime," without knowing whether the law will actually decrease crime or increase safety is not the way to go. Research has shown that members of the community at large are able to comment intelligently on a given social issue when given enough information, particularly regarding sexual offenders (see Wilson, Picheca, et al., 2007a). One way to ensure greater information transfer to citizens is through the sort of town hall meetings promoted by Bob Shilling, an innovative detective with the Seattle Police Department.

Earlier in this chapter, we referred to the observation by Silverman and Wilson (2002) that solutions to risk in the community need to include participation by members of the community. Our experiences in CoSA over the past 16 years have done much to solidify that perspective. We are richer for those experiences, as are the Core Members, Circle Volunteers, affiliated professionals, and community activists who have also ridden the crest of this wave in sensible approaches to *community* risk management. Staunch CoSA advocate and participant Detective Wendy Leaver of the Special Victims Unit of the Toronto Police Service once said: "I put these guys in jail…I don't support them when they get out" (Correctional Service of Canada, 2002b). Thankfully, she did not leave it there. Over her 20 years of experience as a volunteer, advisory group member, and dedicated police officer, Det. Leaver has demonstrated the strength of the model. Slowly but surely, Circles projects have won over their critics.

Whenever a high-risk sexual offender is released from prison, the media publish negative stories about the foolhardiness of correctional policy and practice, laced liberally with such provocative questions as, "How could they release a monster like this?" Interestingly, this approach lasts about 3 or so days before the news gets old. Often, this results from the media's frustration with a reportedly bad person not engaging in the predicted bad behavior. This is frequently the time that CoSA gets its best press. Eager to keep the issue alive and to fuel the public's seemingly insatiable fascination with the lurid world of sexual deviance, the media starts looking for "good news stories," and they find us. We are happy for the attention, as it helps spread the news, inspires citizens to volunteer, and emboldens those who would attempt similar approaches in their own jurisdictions.

Maintaining a Nonproprietary Focus

Over the 20 years since Reverend Nigh and his congregation agreed to help Charlie, a loose-knit network of CoSA adherents has grown around the world. Websites abound, and sharing of information is an integral part of maintaining, pruning, and encouraging the growth of the model. Training manuals have been written, research studies have been published, training videos have been produced, and conferences have been held. Interestingly, virtually never is a cost associated with any of these. Being involved in CoSA has always been about being involved in your community—local, national, or international—and protecting the vulnerable. All anyone ever asks is that credit be given where credit is due.

Being involved in Circles of Support and Accountability is an irreversible, life-altering experience. All who have been drawn in have been changed by this innovative means of building community for those who have, by their behavior, been cast out. Why do "we" do this? In short, we do this because we care deeply about our community and about the risk for harm to its most vulnerable members. If that requires welcoming offenders back with open arms, so that we can be sure that they never harm another individual, then so be it. In closing, we leave you with another quote from Detective Leaver (Correctional Service of Canada, 2002b):

> These people [Circles participants] have no idea what [the core member] is going to do, what he's about, and I do…As months went into years, I saw the benefit of the Circle…I think what really caught my interest was, maybe this works [sigh], maybe it does.

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Pharmacotherapy for Sexual Offenders

Mohan Nair

Over the last decades, there has been increasing interest and concern about individuals who sexually offend and what to do about them. Sex offenders are a heterogeneous group. As with the management of drug abuse and addiction in our society, the management of sex offenders has become a major function of the criminal justice system. Criminal justice system responses are focused on retribution, incapacitation, and deterrence. For reasons that are too complex to be pursued in this chapter, penological philosophy in the United States moved away from the rehabilitation models of the 1970s. Lawmakers seem to promote the belief that criminals, especially sexual offenders, cannot be rehabilitated. Sociopolitical and legislative policy have criminalized more behaviors and pushed for harsher punishments, such as longer mandatory prison sentences. Perceived high rates of recidivism among rapists and child molesters are a particular public concern. Following the *Kansas v. Hendricks* decision of 1997, a growing number of states in the United States have made provisions for the indefinite civil commitment of sex offenders.

Society is increasingly confronted with the fact that a significant proportion of offenders who find their way into the criminal justice system have a mental illness (Fazel & Danesh, 2002; James & Glaze, 2006; Steadman, Osher, Robbins, Case, & Samuels, 2009). The Los Angeles County's Twin Tower Jail, housing 1,400 mentally ill inmates, makes it the nation's largest mental institution (Montagne, 2008). For many sex offenders, their mental illness may be a complicating, contributory, or even a causal factor to their offending behavior and recidivism (Booth & Gulati, 2014; Langstrom, Sjostedt, & Grann, 2004).

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Overview of Psychiatric Disorders in Sex Offenders

Sex offenders comprise a significant proportion of those who come into the criminal justice system. They constitute between 20 and 25 % of the approximately two million males incarcerated in the United States (Berlin, Saleh, & Malin, 2009). Mental illness may play a role in an individual's maladaptive sexual behavior that brings them in contact with the law just as it can with nonsexual offenses. A number of studies of sex offender populations have shown that in addition to having paraphilic disorders, some sex offenders have non-paraphilic (i.e., sexual disorder related) diagnoses including substance abuse, depression, anxiety, bipolar disorder, autistic spectrum disorders, attention deficit/hyperactivity disorder (Dunsieth et al., 2004; Fazel, Sjostedt, Langstrom, & Grann, 2007; Kafka & Hennen, 2002; McElroy et al., 1999; Silva, Leong, & Ferrari, 2004; Siponmaa, Kristiansson, Jonson, Nydén, & Gillberg, 2001), and personality vulnerabilities, such as antisocial, borderline, narcissistic, and schizoid avoidant spectrum disorder (Dunsieth et al., 2004).

Disorders that may make a person more likely to engage in sexual offending behavior include paraphilic disorders, non-paraphilic disorders, or both. A subgroup of sex offenders suffers from psychiatric disorders classified as paraphilias, a term somewhat synonymous with sexual deviance. Per the DSM-IV:

> The essential features of a paraphilia are recurrent, intense sexually arousing fantasies, sexual urges or behaviors generally involving: 1) nonhuman objects, 2) the suffering of oneself or one's partner, or 3) children or other non-consenting persons that occur over a period of at least 6 months. (APA, 2000, p. 566)

These fantasies, urges, and behaviors cause marked distress or interpersonal difficulty for the individual. Per the DSM-5 (APA, 2013), the term paraphilia "denotes any intense and persistent sexual interest other than sexual interest

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in genital stimulation or preparatory fondling with phenotypically normal, physically mature, consenting human partners" (p. 685). A paraphilic disorder is a paraphilia that is currently causing distress or impairment to the individual or a paraphilia whose satisfaction has entailed personal harm, or risk of harm, to others. As DSM-5 points out, it is not unusual for an individual to manifest two or more paraphilias; comorbid diagnoses of separate paraphilic disorders may be appropriate or warranted if more than one paraphilia is causing suffering to the individual or harm to others (e.g., p. 687).

In addition to identifying paraphilic disorders, other psychiatric disorders that are comorbid to paraphilic disorders in sex offenders need to be identified and treated to further decrease an offender's risk for sexual and nonsexual criminal behavior. For example, a pedophile previously able to control his deviant sexual impulses, may, in the context of a manic episode, engage in pedophilic acts. Acute psychiatric illness and active symptoms can be a significant dynamic risk factor that may increase the risk of sexual offending. Once diagnosed with an underlying psychiatric disorder, standard of care dictates that appropriate medications be given to control the mood dysregulation (i.e., manic or hypomanic symptoms). Therefore, there are clinical and risk management reasons why one needs to identify and treat both the sexual disorder and the comorbid psychiatric conditions in such offenders.

Sexual offending behavior is heterogeneous and multifactorial and, therefore, calls for a variety of approaches to treatment. Cognitive behavioral therapy, the mainstay of both institutional and outpatient treatment for sexual offenders, has shown modest reduction in recidivism rates, but significant and long-term benefits have been less robust (Losel & Schumcker, 2005; Seto et al., 2008). To date, with few exceptions, treatment, when provided at all, has predominantly consisted of individual and group therapy and behavior modification. Although the literature supports the use of pharmacotherapy in selected sexual offenders (Bradford, 2000; Saleh & Guidry, 2003), medications have not been used—as the next section of this chapter will explore—to the extent that they could.

Turf Issues and Lack of Familiarity with the Medical Model

Lack of familiarity with the medical model and pharmacology lessens the likelihood for the use of medications among those who treat psychiatrically ill sexual offenders. Sexual offenders are often seen within criminal justice settings that have an inherent bias against the mentally ill, frequently misinterpreting psychiatric symptoms as bad behavior or malingering (Felner, 2006). Most mental health professionals who deal with sexual offenders do not have medical backgrounds. Nonpsychiatric mental health professionals may have varying levels of exposure and experience to serious mental disorders and may not identify the complex interplay of Axis I and Axis II disorders in their clients. They may not be aware that medications can help manage paraphilic disorders or the comorbid psychiatric conditions that may trigger or worsen such behavior (Noroian, Myers, & Saleh, 2009).

Notwithstanding their notable contributions toward the understanding of sexual psychopathology, psychiatrists have, as a group, not been on the forefront of the evaluation and treatment of sexual offenders in recent times. Most residency training programs do not provide significant didactic and clinical time in the area of sexual psychopathology and its treatment. In many ways, the field of sexual offending research is reminiscent of drug and alcohol treatment 30 years ago. Dual diagnosis, the coexistence of psychiatric illness with substance abuse, and the need to address both simultaneously have only been recently accepted. Drug and alcohol counselors trained exclusively in nonmedical models of addiction actively opposed the use of medications. Physicians, including psychiatrists, had little interest in dealing with alcoholics and drug addicts, even though alcoholics and drug addicts formed a significant number of both medical and psychiatric patients. The American Board of Psychiatry and Neurology did not introduce the subspecialty certification in Addiction Medicine until 1995. Medications now play an important role in treating substance abuse disorders.

Interventions based on the medical model are notable by their absence in leading journals that address sexual offending. There are just seven articles on the use of medications in the treatment of sexual offenders in the *Sexual Abuse: A Journal of Research and Treatment* from 1988 to 2014. Few psychiatrists join organizations dealing with sexual offenders and are poorly represented on the editorial boards of journals that deal with sexual behavior.

Psychiatrists' Reluctance in Treating Sexual Offenders

In the last two decades, there has been an explosion of medication use in psychiatry with a parallel reduction in the use of psychotherapy in community settings. These are driven by complex factors including disillusionment with the psychoanalytic model that dominated academic psychiatry into the 1970s, managed care, a better understanding of brain-based behavior, and, most importantly, the availability of more effective medications with more tolerable side effect profiles. Medications are routinely used in controlling agitation and violence and are seen as an efficient way of dealing with the mental health problems of a large population that has

limited mental health care access. For example, annual expenditures for medications in the Iowa prison system increased 28-fold, from $291 per 100 inmates in 1990 to $8,138 in 2000 (Lund, Flaum, Adam, & Perry, 2002). However, such a trend is not seen in the area of treating paraphilic sexual offenders. Psychiatrists may be overly cautious of the side effects of antiandrogen medications and are unfamiliar with the literature. While the risk of antiandrogen use cannot be minimized, many other commonly prescribed psychiatric medications can have serious and potentially life-threatening complications as well. With proper patient selection, protocols, and monitoring, androgen deprivation treatment may not carry more risks than the use of other psychotropic medications (Berlin, 2009; Reilly, Delva, & Hudson, 2000; Saleh, Berlin, Malin, & Thomas, 2007). Practitioners who use a particular medication or group of medications become more observant in identifying adverse effects early on in treatment, thereby increasing safety of such treatment modality.

The pharmaceutical industry is not committed to invest in the lengthy and expensive process of getting FDA approval for drugs that may be beneficial for treating paraphilias. Research-based evidence from large or even moderate randomized controlled double-blind trials and prospective open-label studies are lacking. Guidance for using medications is based on case reports or series, marked by methodological biases (Bradford, Fedoroff, & Gulati, 2013; Thibaut, De La Barra, Gordon, Cosyns, & Bradford, 2010). Treatment based entirely on off-label use has limited appeal with physicians. Generally speaking, endocrinologists are unlikely to treat sex offenders, and psychiatrists are wary of drugs with endocrine/metabolic complications.

Resistance on the Part of Patients

Sexual offenders may be resistant to considering medications for a variety of reasons. They may be in denial of their problem (e.g., denying culpability, difficulty controlling their behavior, or having sexual deviance). They may fear stigmatization as a psychiatric patient. For example, only one-third of sexual offenders in prison who were eligible to participate in California's Sex Offender Treatment and Evaluation Project (SOTEP) at Atascadero State Hospital chose to do so (Marques, Wiederanders, Day, Nelson, & Van Ommeren, 2005). Patients with prior exposure to medications may be concerned about the adverse effects (e.g., lethargy, dystonia, tardive dyskinesia) of psychotropic medications and distrustful of mental health professionals. Historically, many psychiatrists have overplayed the benefits and failed to adequately disclose potential harmful effects of biological interventions (i.e., lobotomy, electroconvulsive therapy (ECT), antidepressants, and antipsychotic medications). Psychiatrists are suspect of coming up with simple solutions for complex conditions (i.e., violence, fear, unhappiness) for which no "magic bullet" exists (Valenstein, 1986). For the psychiatrist and other medical providers, developing the trust of the patient remains an important part of the treatment dynamic. Adequate informed consent, which includes providing material information on medication side effects and realistic information on the benefits of proposed treatments, is a key element in developing a therapeutic alliance between patient and physician. The treatment provider needs to be open regarding the limits of confidentiality and about issues of dual agency. No less than in other areas of medicine, the establishment of the doctor-patient relationship becomes critical in the safe and effective use of available treatments. Ethical considerations regarding the use of pharmacotherapy for sexual offenders and specifically issues regarding informed consent will be addressed in the Informed Consent and Legal sections to follow.

Rationale for Treatment

Sexual offending imposes a terrible burden on individuals and society (Hankivsky & Draker, 2003; Shanahan & Donato, 2001). Sexual crimes such as rape and child molestation come at great cost, both human and financial. Rape and child sexual abuse often involve violence and may require medical attention. Other costs include victims' lost wages, psychological treatment, legal system fees, and imprisonment of the offender. The total national cost of sexual violence in 1996 was estimated at $261.25 billion (Post, Mezey, Maxwell, & Wibert, 2002). Hanson et al. (2002) conducted a meta-analysis of 43 studies of groups of sexual offenders (combined $n = 9{,}454$) who received psychotherapy; they were followed for an average of 4–5 years. Hanson et al. reported a 7 % decrease in sexual offense recidivism as a treatment effect, although those positive results were derived largely from studies with significant methodological issues. Consequently, any viable intervention to decrease further sexual victimization is relevant.

The following list, though not exhaustive, is an outline of the goals of treatment:

- Assist the offender to prevent sexual offense and recidivism.
- Control deviant urges in paraphilic offenders.
- Control aggressive behaviors in paraphilic and non-paraphilic offenders.
- Control impulsive behavior.
- Reduce distress produced by active symptoms of the paraphilic disorder.

- Treat coexisting Axis I and Axis II psychiatric symptoms/conditions that may contribute to offending risk, i.e., negative emotionality (irritability, anger, impulsivity), cognitive impairment, bipolar disorder, depression, traumatic brain injury.

Pharmacologic Agents

Androgen-Lowering Medications

Androgen-lowering medications should be considered for sexual offenders presenting with intense symptoms of a paraphilic disorder, such as intrusive thoughts, fantasies, or urges toward violent or "hands-on" behaviors. Convicted sexual sadist and serial killer Michael Ross wrote:

> The drug (Depo-Lupron) clears my head of the vile and noxious thoughts of rape and murder that plagued my mind for so long; the drug eliminates the previously uncontrollable urges that drove me to commit the crimes that put me here on death row. That monster still lives in my head, but the medication has chained him and has banished him to the back of my mind. And while he is still able to mock me, he can no longer control me - I control him; I am human once again. (Ross, 1996, p. #)

Surgical castration has been historically recognized to markedly reduce or eliminate sexual drive in animals and humans. Most studies since the mid-1960s show that orchiectomy reduces sexual offender recidivism with rates of re-offending between 0 and 10 % (Weinberger, Sreenivasan, Garrick, & Osran, 2005).

Individuals whose sexual offending is primarily driven by antisocial behavior or psychoses are unlikely to benefit from androgen-lowering medications. For individuals whose offending behaviors are related to psychotic disorders, treatment of the underlying psychotic disorder is the preferred treatment intervention. For those with antisocial personality disorder, antiandrogen medication would not be medically indicated where there is no evidence of a paraphilic disorder or any other condition responsive to this class of medications. Antiandrogens decrease but do not necessarily eliminate the risk of re-offending. However, given the overall data on efficacy, it would be counter-therapeutic *not* to offer these medications to symptomatic paraphilic sexual offenders, especially those with violent urges or those who are expressing a fear of losing control. The courts have upheld the duty of physicians to provide effective, available treatments. The case of *Osheroff v. Chestnut Lodge* (1984) Civil Action No 66024, Circuit Court for Montgomery County, Maryland, emphasizes that a failure to use all available and appropriate treatments could be grounds for malpractice. Dr. Osheroff, a nephrologist with a 2-year history of anxiety and depressive symptoms, was treated for 7 months with psychotherapy alone without improvement at Chestnut Lodge, a prestigious psychoanalytically oriented psychiatric hospital in Rockville, Maryland. Dr. Osheroff was then transferred to another facility where he was treated with psychotropic medications and rapidly improved. He then sued Chestnut Lodge and received a settlement (Klerman, 1990).

This concern would be especially true if it involves voluntary outpatient settings where there are no overt issues of coercion. Not educating a prospective and symptomatic patient about antiandrogen medications could be similar to failing to provide antidepressants or antipsychotic medications to a depressed or psychotic patient, respectively. There may be legal pressures not to withhold medications to those that are civilly committed since the failure to provide reasonable treatment would undermine part of the premise of their commitment. In short, medications should be considered both for the benefit of the individual and society that ultimately bears the consequences of sexual offending behavior. The successful use of resources in the community would also afford substantial cost savings. Community-based treatments operate at a fraction of the cost of inpatient treatment in hospitals or in correctional facilities.

The androgen-lowering medications such as cyproterone acetate (CPA), medroxyprogesterone acetate (MPA), and luteinizing hormone-releasing hormone agonists (LHRH) have been found to be effective in reducing sexual fantasies, desire, and urges in carefully selected and properly diagnosed patients (Bradford, 2001; Briken, Hill, & Berner, 2003). For example, leuprolide acetate, goserelin, and triptorelin are gonadotropin-releasing hormone (GnRH) analogues that have been used to treat paraphilic sexual offenders. Cyproterone acetate (CPA) is not available in the United States.

CPA is an androgen-lowering agent with antiandrogenic and antigonadotropic properties (Gilman, Rall, Nies, & Taylor, 1990; Goldenberg, Bruchovsky, Gleave, & Sullivan, 1996) that exerts its anti-libidinal effects by competitively blocking testosterone and dihydrotestosterone binding to peripheral and central androgen receptors. CPA has been used since the mid-1960s to treat paraphilic patients (Berlin, 1983; Berlin & Meinecke, 1981; Bradford & Pawlak, 1993; Gagne, 1981; Hucker, Langevin, & Bain, 1988; Meyer, Cole, & Emory, 1992). Dose range is oral (100 mg per day) or intramuscular (300 mg every other week). Possible side effects of this class of drugs include nausea, constipation, fatigue, lethargy, depression, headaches, hot flashes, night sweats, breast tenderness, galactorrhea, gynecomastia, decreased libido, thrombophlebitis, anemia, pulmonary embolism, weight gain, hyperglycemia, diabetes mellitus, hypogonadism, and hypospermia (low semen volume). Elevation of liver enzymes and hepatitis are also a concern. Bone demineralization, a potential side effect, has to be monitored and treated. Low-dose testosterone, calcium, vitamin D,

and bisphosphonate agents, such as alendronate, have been helpful in antiandrogen-related osteoporosis (Blake, Sawyerr, Dooley, Scheuer, & McIntyre, 1990; Goldenberg & Bruchovsky, 1991; Jurzyk, Spielvogel, & Rose, 1992; Levesque et al., 1989). Suffice to say, caution is required when prescribing testosterone to offenders receiving androgen-lowering medications.

Medroxyprogesterone acetate (MPA), a synthetic progestational agent, commonly used as a contraceptive in women, has been used in the treatment of paraphilic sexual offenders since the late 1960s. Injections have more predictable absorption than the oral route. Oral MPA is given in doses of 100–500 mg per day. The injectable form is given in doses of 100–1,000 mg per week although individual dosing may be increased or decreased, depending on the response (Guay, 2009). MPA exerts its anti-libidinal properties by lowering levels of circulating testosterone (Berlin & Schaerf, 1985; Gordon, 2008a, 2008b; Maletzky, Tolan, & McFarland, 2006). Adverse effects of MPA are similar to those of CPA and include weight gain, headache, nausea, gynecomastia, lethargy, elevated blood pressure, hot flashes, and thromboembolic events. Loss of bone density is also a serious potential adverse effect and must be carefully monitored in those receiving this treatment.

Leuprolide acetate (leuprolide), a synthetic analogue of endogenous gonadotropin-releasing hormone (GnRH analogue), with androgen-lowering properties and synthetic LHRH agonists such as leuprolide, triptorelin, and goserelin, is more potent than the LHRH secreted by the hypothalamus. Leuprolide has been found helpful in the treatment of paraphilias (Krueger & Kaplan, 2001; Saleh, Niel, & Fishman, 2004; Schober et al., 2005; Thibaut, Cordier, & Kuhn, 1993). Neuroimaging studies suggest leuprolide may decrease the brain activation responses to visual sexual stimuli in some pedophiles (Moulier et al., 2012).

Extensive experience and knowledge has been gained by the use of leuprolide in treating prostate cancer (Smith, 1986; Williams et al., 1983). GnRH analogues have also been used to treat paraphilic sexual offenders. Doses range from 3.75 to 7.5 mg per month. LHRH agonists like leuprolide cause an initial transient elevation in testosterone that may result in an increase in sexual drive. This risk can be lessened with the concurrent use of a testosterone-lowering agent. A transient increase in testosterone levels with increased sexual drive and fantasy has been reported during the first 2 months after leuprolide treatment cessation has been reported (Koo et al., 2013).

Adverse effects of leuprolide include bone mineral loss, nausea, weight gain, hot flashes, local reactions at the site of injection, blood pressure changes, depressive symptoms, and gynecomastia.

Selective Serotonin Reuptake Inhibitors (SSRIs)

Tricyclic and specific serotonin reuptake inhibitor drugs have been used in the general management of sexual offending (e.g., both paraphilic and paraphilic-like behavior) as well as "hypersexuality" (Greenberg & Bradford, 1997). While it appears to be beneficial to some individuals, the response to serotonin-enhancing drugs has not been comparable to hormonal treatments in controlling sexual offending behavior in those with paraphilic disorders.

Unlike antiandrogen drugs, the neurobiological rationale for the use of SSRIs in the treatment of paraphilic disorders remains somewhat speculative. Low brain serotonin states have been associated with both pathological impulsivity and obsessive-compulsive disorder. SSRI use in those treated for anxiety, depression, and obsessive-compulsive disorder has been associated in some cases with sexual side effects such as decreased libido, erectile difficulties, ejaculation failure, and delayed or absent orgasm. These side effects are estimated to occur in 2.7–75 % of users and are dose dependent (Baldwin, Thomas, & Birtwistle, 1997; Balon, 2006). If the primary mechanism of the "antiparaphilic" effect of these drugs is based on sexual side effects, it would be a problem since these side effects are not predictable and enduring. Of the four phases of the normal human sexual response cycle—desire, excitement, orgasm, and resolution—SSRIs predominantly affect ejaculatory function and orgasm but sexual desire is decreased unevenly or not at all (Ashton, Hamer, & Rosen, 1997; Keltner, McAfee, & Taylor, 2002; Rothschild, 2000; Seidman, 2006; Williams et al., 2006). Tolerance to SSRI-induced sexual side effects is common (Zajecka, 2001). Placebo-controlled studies and clinical trials assessing the efficacy of SSRIs in paraphilic sexual offenders have not been published (Baldwin et al., 1997; Montejo-Gonzales, Llorca, & Izquierdo, 1999; Stark & Hardison, 1985; Zajecka, Mitchell, & Fawcett, 1997).

Nonsexual side effects include gastrointestinal distress, hyperactivity/behavioral activation, "manic switch," akathisia, apathy, affective blunting, forgetfulness, and, in rare cases, the potentially life-threatening serotonin syndrome.

Selected Studies Pertaining to SSRIs and the Paraphilic Disorders

Stein et al. (1992) retrospectively studied five males ranging in age from 23 to 40 years old with sexual sadomasochism, pedophilia, fetishism, and cross-dressing in an open-label trial. Medications included clomipramine (an anti-obsessional medication) 200–400 mg for 3–6 months, fluoxetine 60 mg for 2–7 months, and fluvoxamine (an

antidepressant) 200–300 mg for 8 weeks. There were no changes in fantasies or sexual symptoms in any male except one who had decreased masturbation from impotence. Significant improvement was noted in OCD (obsessive-compulsive disorder) symptoms.

Kafka and Prentky (1992) treated 20 patients over a 3-month period. Subjects were diagnosed with either paraphilia or "non-paraphilic sexual addictions," with fluoxetine, mean dose of 39 mg per day. Paraphilic symptoms decreased after 4 weeks, but normal sexual behavior was maintained.

Kafka (1994) treated 24 men with paraphilia (exhibitionism, fetishism, transvestic fetishism, telephone scatologia, and voyeurism) or paraphilic-related disorders. Patients were treated with sertraline, 25–250 mg per day from 4 to 64 weeks. Nine sertraline nonresponders were switched to fluoxetine from 10 to 80 mg per day. Seventy-one percent improved with either sertraline or fluoxetine.

Bradford, Greenberg, Gojer, Martindale, and Goldberg (1995) treated 18 pedophiles with sertraline, mean daily dose of 131 mg. Deviant sexual arousal was self-reported and penile plethysmograph was reduced. Normal arousal was preserved and was increased in two patients.

Strohm and Bernerbtreated 16 male outpatients; age range was from 30 to 70 years with hands-on and hands-off (noncontact) paraphilias. Significant comorbidity was noted in the group. Duration of treatment was 23 months (ranging from 2 to 78 months). All patients also received psychotherapy. Marked reduction in paraphilic fantasies and masturbation was noted (Hill, Briken, Kraus, Strohm, & Berner, 2003).

SSRI efficacy has been assessed in open-label and retrospective studies with significant sampling bias. Sampling bias, the absence of placebo-controlled double-blind studies, halo effects, and uneven response raise concern about its use in paraphilic offenders (Saleh, 2009).

Other Drugs Used for Treating Paraphilic Disorders and Sexual Offending Behavior

A number of psychotropic drugs have been tried with this population. The published data is mostly anecdotal, with small sample size or single case reports with inadequate control of selection criteria and comorbidities of non-paraphilic disorders. It is not clear, for example, if the symptomatic relief in paraphilic symptoms is the result of treating comorbid conditions that help general self-regulation (e.g., by decreasing depression, irritability) or if there may be other underlying processes that directly affect the paraphilic disorder.

Lithium, a mood stabilizer, has been used for treating autoerotic asphyxia and other paraphilic behaviors (Cesnik & Coleman, 1989; Zourkova, 2000). Anticonvulsant drugs such as carbamazepine and topiramate for pedophilia and fetishism, especially in brain-damaged individuals (Goldberg & Buongiomo, 1983; Shiah, Chao, Mao, & Chuang, 2006; Varela & Black, 2002); neuroleptics such as haloperidol, thioridazine, and clozapine have been used to control sexually deviant behavior (Bartholomew, 1968); buspirone, an antianxiety medication, for transvestic fetishism (Fedoroff, 1992).

The Role of Medications in Treating Comorbid Axis I and Axis II Conditions

The assessment of sexual offenders requires that underlying mental disorders that may be a factor in the offending be carefully considered and appropriate treatment provided.

Both Axis I and Axis II mental disorders may be relevant in criminal and sexual offending. Sexual deviancy (i.e., the presence of active symptoms and severity of a paraphilic disorder) and criminality are the two basic independent variables that determine risk of offending. Other than paraphilic disorders, Axis I disorders include psychotic, mood, anxiety, impulse control, cognitive, and sleep disorders. Serious mental illness such as schizophrenia and bipolar disorder may increase the risk for violence especially when coupled with substance abuse disorders (Elbogen & Johnson, 2009; Fazel, Grann, Carlström, Lichtenstein, & Långström, 2009). Tourette's disorder has been associated, albeit rarely, with sexual offending behavior, including, but not limited to, indecent exposure and public masturbation (Jankovic, Kwak, & Frankoff, 2006).

Axis II disorders are enduring conditions such as personality disorders and mental retardation. Hanson and Morton-Bourgon (2005) identified individuals with Cluster B personality disorders (i.e., antisocial, narcissistic, and borderline) to be at higher risk of sexual re-offense. Individuals who feel hostile, victimized, and resentful and those who are vulnerable to "emotional collapse" when stressed are at higher risk of sexual re-offense. In addition to antisocial personality disorder, narcissistic, sadistic, borderline, and schizoid spectrum personality disorders also tend to be associated with paraphilic individuals. Paraphiliacs with comorbid autistic spectrum disorders may have impaired emotional appreciation and volitional problems. Self-absorbed and "odd" individuals are overrepresented among sexual offenders and the sexually deviant (Ahlmeyer, Kleinsasser, Stoner, & Retzlaff, 2003; Bogaerts, Daalder, Vanheule, Desmet, & Leeuw, 2008; Herkov, Gynther, Thomas, & Myers, 1996; Silva et al., 2004; Worling, 2001).

Medications such as SSRIs, anticonvulsants, and atypical antipsychotics have shown to be helpful in treating personality disorders, especially borderline personality disorders (Simeon & Hollander, 2009). Anticonvulsants and atypical

antipsychotics may be helpful in treating impulsive behavior in the intellectually disabled. Some studies suggest antiandrogens help in the management of intellectually disabled sexual offenders (Sajith, Morgan, & Clarke, 2008).

In an individual with multiple Axis I and II disorders, a sexual offense may involve varying levels of contribution from some or all of the coexisting conditions; for example, a pedophile or sexual sadist with antisocial personality disorder whose offenses occur only when they are off their mood stabilizer or when actively using cocaine or methamphetamine. Only a careful examination by a clinician knowledgeable in psychiatric differential diagnosis and phenomenology may recognize the possible contributions of hypomania or delusional psychoses in a sexual offense.

Axis III medical disorders such as traumatic brain injury, temporal lobe epilepsy, frontotemporal dementia, strokes, and brain tumors have been associated with sexual offending behavior.

Antipsychotic medications, anticonvulsants, mood stabilizers, and psychostimulants have been reported as being helpful in case reports (Guay, 2009).

Choice of Treatments

As noted above, the ultimate choice of which medications are used to treat a specific offender depends on the unique history of the offender. Treatment must be individualized to address the offender's underlying diagnosis, history of offending, risk of recidivism, and current medical condition. For paraphilic offenders with low risk of sexual violence, treatments might start with psychotherapy, SSRI medications, and oral antiandrogens. For those paraphilic offenders with more serious, violent offenses, treatments would more likely include psychotherapy, combination therapy of SSRI, and antiandrogen medications, with consideration given to injected antiandrogen medication where treatment adherence may be at issue. For increasingly severe risk profiles and paraphilic symptoms, treatments might include long-acting GnRH agonist medication, in combination with psychotherapy. An algorithm for the treatment of paraphilic disorders that designate different levels of treatment, based on severity of symptoms and behaviors, with the use of more aggressive and invasive therapies for those patients with the most severe paraphilic symptoms who are at highest risk for violence.

Psychotherapy is recommended for all offenders; typically, cognitive behavioral therapy has been recommended or utilized as the therapy of choice. Combination psychotherapy and medication therapy for paraphilic offenders have produced better outcomes than medication therapy alone (Hall & Hall, 2007). Per systematic reviews, cognitive behavioral therapy has been correlated with reducing rates of recidivism in some populations of offenders (Alexander, 1999; Gallagher, Wilson, Hirschfield, Coggeshall, & MacKenzie, 1999), although random controlled studies have failed to show differential effects between such treatment and control groups (e.g., Hanson et al., 2002). Current psychotherapies utilize both individual and group modalities, with an emphasis on relapse prevention. Treatment should also include therapies to address substance use disorders.

Psychiatric and Psychological Evaluation for Pharmacotherapy

As indicated earlier, individuals may engage in sexual offending behavior for a variety of reasons. A detailed psychiatric history, including family history, history of psychiatric treatment and hospitalizations, substance abuse history, criminal history, sexual developmental history, and sexual behaviors and relationships, should be obtained. The presence of comorbid Axis I, Axis II personality disorders, intellectual disability, and medical/neurological conditions should be thoroughly investigated and documented by both through an examination of the patient and thorough review of collateral data, particularly available records. Such collateral data should be as comprehensive as possible since the self-reports of sexual offenders cannot be relied upon exclusively. Where available, additional data should include victim statements, police/probation/parole reports, prior mental health and medical records, juvenile and adult criminal records including violent and sexually violent behavior while in custody, and forensic reports.

Formal assessment tools may include the Multiphasic Sexual Inventory (Nichols & Molinder, 1984), the Multiphasic Sexual Inventory II (Nichols & Molinder, 2000), Greenberg Sexual Preference Visual Analogue Scale (Greenberg, 1991), Sexual Interest and the Sexual Activity Rating Scale (Bancroft, Tennent, Loucas, & Cass, 1974), the Wilson Sex Fantasy Questionnaire (Baumgartner, Scalora, & Huss, 2002; Wilson, 1988), penile plethysmography (Blanchard, Klassen, Dickey, Kuban, & Blak, 2001; Freund, 1991), and the sexual history polygraph. A detailed substance abuse history should be obtained, including using formal screening tools, such as the Michigan Alcohol Screening Test (Seltzer, Vinokur, & Van Rooijan, 1975). It is critical to be mindful about the limitations of any assessment tool, particularly their transparency in the face of impression management and denial/minimization on the part of the sexual offender.

Failure to recognize and treat comorbid psychiatric disorders, particularly personality disorders, ADHD and cognitive limitations, may result in poor self-control or even sexual offending behavior. Psychological testing, and in some instances neuropsychological testing, may be warranted to identify the presence and severity of such conditions.

Medical Workup

A complete medical psychiatric workup is essential, both to rule out any medical conditions that might impact the use of medications and to rule in or rule out comorbid medical conditions.

The laboratory workup should include a complete blood count, serum electrolytes, lipid profile, liver function tests, blood urea nitrogen (BUN), creatinine and thyroid levels, urinalysis, and urine drug screen. A lipid profile should be obtained since several of the drugs used with hormonal and nonhormonal treatments may cause weight gain and elevated lipids. All medications that the patient is taking should be assessed for potential drug-drug interactions. Hormone levels obtained may include thyroid stimulating hormone (TSH), parathyroid hormone (PTH), free and total serum testosterone, progesterone, estradiol, follicle-stimulating hormone (FSH), luteinizing hormone (LH), and prolactin. Osteoporosis is a serious concern with androgen-lowering medications; therefore, baseline bone densitometry should be obtained. Electrocardiogram and vital signs should be recorded for all patients receiving psychiatric medications with cardiovascular side effect profiles. Tests should be repeated as often as clinically indicated. Electroencephalogram (EEG) and neuroimaging studies may be warranted in some instances.

Informed Consent

All psychiatric medications can have serious and potentially life-threatening side effects. Many medications considered for sexual offenders treatment may involve "off-label" use (i.e., use of a medication in a manner that is not specifically approved by the Food and Drug Administration) so risk-benefit advisement with the patient should be thorough and well documented (Giltay & Gooren 2009). The process of informed consent requires that patients be competent, that they give consent voluntarily and that they not be coerced, and that they be informed of both the benefits and risks involved. Consent obtained from substituted decision makers brings another level of complexity. A properly conducted and thorough informed consent should be obtained prior to treatment, outlining the full scope of the risks and benefits of the proposed treatment. The risks and benefits of alternative treatments and of no treatment should also be thoroughly reviewed. The second and third elements of the informed consent doctrine may be somewhat problematic in some settings. In order for consent to be considered valid, it has to be given "voluntarily" without undue influence or coercion. Important as that is, the majority of patients that require or are likely to benefit from it are typically under some form of judicial control and/or in the criminal justice system, raising concerns about the true voluntariness of their consent. Ethics guidelines have been provided by organizations such as the American Psychiatric Association and the American Academy of Psychiatry and the Law (AAPL; Zonana & Buchanan, 2009).

Legal and Ethical Issues in the Treatment of Sexual Offenders

Prescribing medications to help manage paraphilic disorders and other problematic sexual behavior among those who are not under judicial control and deemed to be competent should present no ethical or standard of care issues as long as a well-conducted informed consent process is followed. Prescribing medications, especially androgen-lowering medications, to individuals who are civilly committed or subject to outpatient commitment, incarcerated, or on probation/parole raises complex legal and ethical concerns (Ward et al., Mellela, Travin, & Cullen, 1989; Miller, 1998).

In the United States, at this writing, nine states authorize some form of mandated treatment (commonly referred to as "castration") as an adjunct to parole or probation supervision for certain sexual offenders for whom release to the community, from incarceration, is being contemplated. Texas (Tex. Gov't Code Ann., 2003) provides for voluntary surgical castration as the only treatment option. Four states allow for some provision of either chemical castration or voluntary surgical castration—California (Cal. Penal Code, 2003), Florida (Fla. Stat. Ann., 2002), Iowa (Iowa Code, 2003), and Louisiana (La. Rev. Stat. Ann., 2003). Four additional states permit the use of pharmacotherapy (chemical castration) only—Georgia (Ga. Code Ann, 2002), Montana (Mont. Code Ann., 2002), Oregon (Ore. Rev. Stat., 2001), and Wisconsin (Wis. Stat. Ann., 2002). In addition, numerous other states have either considered such laws or have judicial decisions addressing the process without legislative authority (see *State v. Brown* 1985 and *People v. Gauntlett* 1984). The practice of some form of physical or pharmacological castration has also been sanctioned in a number of European countries, including at various times, Denmark, Germany, Norway, Sweden, and Switzerland (Druhm, 1997).

The United States has a long history of the use of sanctioned castration to forward what were perceived as legitimate societal goals. The forced eugenics movement, ostensibly to prevent a new generation of incompetent children who would become a burden on the state, reached its zenith with approval of the process by the US Supreme Court

in *Buck v. Bell*. Although the Court subsequently found that imposed vasectomies on persons convicted of certain crimes violated the Fourteenth Amendment (*Skinner v. Oklahoma*, 1942), it never expressly overruled *Buck v. Bell* (Druhm, 1997). Challenges to the current "castration" statutes have not yet reached the US Supreme Court.

Although full consideration of the legal and ethical issues involved in this topic is far beyond the scope of this chapter, an overview of the issues is provided below. In the various state actions, and in numerous commentaries (see Scott & Holmberg, 2003; Miller, 1998; Rice & Harris, 2011; Winslade, Stone, Smith-Bell, & Webb, 1998), such challenges are usually organized on a variety of grounds. Arguments based on Eighth Amendment grounds (that the forced treatment is cruel and unusual punishment) are usually counterbalanced by the argument that such treatment has distinct therapeutic value. Arguments on Fourteenth Amendment grounds (that the process is not sufficiently spelled out to satisfy due process concerns) can in some states (such as California) pose a valid concern, while in others, the process to be followed seems to be sufficiently established to address a compelling state interest in public safety without violating fundamental liberty such as a right to refuse treatment or a right to procreate. In addition, since all of the statutes appear to apply equally to women as well as men, an equal protection argument has been raised claiming that the evidence that the medications discussed may not have a demonstrated efficacy at reducing offending behavior by women may lead to disparate treatment of offenders based solely on gender. The issue is further complicated by the fact that the medications have demonstrated efficacy only for offenders whose behavior is based on sexual drive and not for offenders whose behavior is based in anger, hostility, or other dispositional bases. These issues remain to be resolved. Challenges have also been raised on First Amendment grounds—that a person has the right to his/her own thoughts and to refuse treatment. This argument is usually countered by pointing out that, at least with respect to child victims, the US Supreme Court has already held (*New York v. Ferber*, 1982) that where children are victims, a clear and present danger is created and child pornography is therefore not protected by freedom of expression. An adequate informed consent process as outlined herein should help address the right to refuse issue.

Finally, the statutes mentioned do not all provide for discrimination among offenders to ensure that only those who would actually benefit from treatment are actually receiving the treatment. This is a flaw that will have to be resolved by the courts if mandated pharmacological treatment is to proceed within the dictates of Constitutional law as it currently is understood.

Conversely, the clinician has to consider withholding a medication that may (1) help decrease a person's subjective distress or out of control feelings or impulses, (2) lessen the intensity of paraphilic fantasies and urges to facilitate fuller participation in a psychotherapy program, and (3) help the patient better manage behavior that could possibly keep him in longer confinement or return him to prison or a forensic hospital.

Within the California Department of Mental Health sexual offender commitment facilities, there are a number of individuals who have obtained surgical castration on their own initiative. The US Supreme Court in *Kansas v. Hendricks* (1997) ruled that the state can civilly confine (sexual offenders) in secure mental health facilities for custody and treatment. Withholding medications that could be particularly helpful for some sexual offenders might be construed as promoting confinement without adequate treatment.

Conclusion

Evidence suggests that medications can help some sexual offenders. Androgen deprivation and other drug treatment for sex offenders have side effects, but they are comparable to other extensively used psychotropic drugs (Berlin, 2009). The human and financial cost of sexual crimes in society calls for the use of every effective strategy in dealing with it. Sexual offending behaviors motivated by an underlying paraphilic disorders, paraphilias, or paraphilic-related disorders are best understood in a biopsychosocial context. Thus, it is known that the remediation of depression can be helped by exercise, cognitive behavioral therapy, and medications alone or in combination. In a similar manner, medications should have an increasing and cost-effective role in the overall management of sexual offenders (Garcia, Delavenne, Assumpção, & Thibaut, 2013; Rosler & Witztum, 2000).

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Surgical Castration and Sexual Recidivism Risk

Shoba Sreenivasan and Linda E. Weinberger

Introduction

The efficacy of using castration to lower criminal sexual recidivism among sex offenders, especially those considered to be high risk, and in an uncontrolled release environment remains a controversial issue. The existing literature regarding castrated sex offenders reveals a very low incidence of sexual recidivism. However, the low sexual recidivism rates may not be generalizable to modern sexual violent predator assessments given the various methodological limitations inherent in these studies. Animal studies demonstrate that castration results in a loss of sex drive and an abolishment of mating behavior and that such a drive could be restored by testosterone replacement. While hormonal therapy is more widely accepted as a method of reducing testosterone among sex offenders, surgical castration (i.e., bilateral orchiectomy) is also presently used, albeit to a very limited extent.

Ethical issues raised by surgical castration as the treatment of choice for a sex offender: assessing whether the choice to submit to orchiectomy is done freely or is due to coercive elements inherent to the individual's situation (i.e., the individual opts for a drastic procedure in order to facilitate obtaining freedom from custody). The evaluator considering risk in surgically castrated offenders should be familiar with the impact of bilateral orchiectomy upon sexual function, the translation of such data to risk assessment when considering offenders who may be released under non-supervised conditions, and the potential for adverse outcomes if offenders access testosterone replacement. Orchiectomy may have a role in risk assessments; however, other variables should be considered, particularly as the effects can be reversed by replacement testosterone (Weinberger, Sreenivasan, & Garrick, 2005).

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The purpose of this chapter is to (1) review existing studies involving surgical castration of sex offenders, (2) review ethical issues raised by bilateral orchiectomy of involuntarily committed sex offenders, and (3) provide a framework for the impact of bilateral orchiectomy in assessing risk reduction (Weinberger, Sreenivasan, Garrick, & Osran, 2005).

Brief Overview of Antiandrogen Treatment and Sex Offenders

The production of testosterone in males occurs primarily through the secretions of the Leydig cells of the testes. Testosterone and dihydrotestosterone are the hormones responsible for maintenance of sexual behavior. The Leydig cells are stimulated by the release of luteinizing hormones from the anterior pituitary gland and are related to the release of gonadotropin-releasing hormones from the hypothalamus. Androgen receptors are found in several regions, including the midbrain limbic structures (as well as the hypothalamus), the spinal cord, and the penis. Antiandrogenic hormones were used to treat paraphilics and sex offenders before cognitive-behavioral therapy interventions were developed for sex offenders (Reilly, Delva, & Hudson, 2000). The first time these agents were used was in 1966 at Johns Hopkins University (medroxyprogesterone acetate) and at the Institute for Sex Research in West Germany (cyproterone acetate). Money (1986) conducted a number of studies and found that medroxyprogesterone acetate "suppresses or lessens the frequency of erection and ejaculation and also lessens the feeling of sexual drive and the mental imagery of sexual arousal" (p. 219). Current medical interventions in sex offender treatments include hormonal treatments that reduce testosterone levels, such as injectable Lupron (leuprolide acetate depot), Lupron implant, goserelin, Depo-Provera (medroxyprogesterone acetate), and cyproterone acetate (Bradford, 2001).

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Research Literature on the Use of Surgical Castration Among Sex Offenders

The practice of surgical castration on human beings is not a recent phenomenon. In Europe, the use of castration as a form of treatment for sex offenders has been in existence since the early twentieth century. The Danish pioneered the first laws legalizing this type of medical intervention for sex offenders in 1929; soon thereafter, Germany (1933), Norway (1934), Finland (1935), Estonia (1937), Iceland (1938), Latvia (1938), and Sweden (1944) enacted similar laws. Bilateral orchiectomy (i.e., the surgical resection of the testes) results in a dramatic reduction of the production of testosterone.

The theoretical underpinning of the European castration laws was the elimination of sexual urges believed to be the dominant etiological factor in sexual criminal behavior. The first empirical studies examining the impact of surgical castration on sex offender recidivism were conducted in Europe (predominantly in Germany and Denmark) and date from the pre-World War II to postwar period. The original literature is difficult to assess because research methodology in these older studies was not well specified or performed to current standards. Freund (1980) previously provided a review of pharmacological sex drive reduction, including use of surgical castration.

A complete listing of the data for these European and Californian studies can be found under the article on this topic by Weinberger et al. (2005). A summary of the findings of data from studies published in English and reviewed by Freund and others, as well as a summary of other European articles that were translated and subsequently reviewed by Heim and Hursch (1979) and Heim (1981), is presented below. In addition, data from one United States study of castrated sex offenders conducted in California is reviewed (Smith, Brown, & Beck, 1952). The theory underpinning these studies was that the elimination of testosterone via orchiectomy would lead to a complete reduction of sexual deviancy, thereby assuring safe release of sex offenders into the community. However, these studies did not address directly whether there was an established linear relationship between low- or near-absent levels of testosterone and sexual interest, drive, and erectile capacity following orchiectomy.

Europe

As cited in our prior article on this topic (Weinberger et al., 2005), between 1934 and 1944, at least 2,800 sex offenders were compulsorily castrated in Germany, and between 1955 and 1977, 800 sex offenders were castrated in West Germany. The German data for the period arose from the "Nazi German Act" of November 24, 1933, which resulted in the involuntary castration of sex offenders. Germany enacted laws governing voluntary castration for sex offenders that remained effective after 1945.

Denmark

Danish laws governing castration began in 1929 and stemmed from the government's intent to protect society from recidivistic rapists (Sand, Dickmeiss, & Schwalbe-Hansen, 1964). These laws also allowed for persons to be castrated if they believed that their sexual drive placed them in danger of committing a crime and were amended to include castration for persons whose sexual drive produced considerable psychological suffering or social devaluation. From the years between 1929 and 1973, Heim and Hursch (1979) estimated that there were approximately 1,100 cases of orchiectomy in Denmark. The Treatment Institution at Herstedvester in Denmark, a penal institution, recorded 285 surgical castrations performed on the Institution's inmates between 1935 and 1970. Less than 10 % of these 285 castrates were serious sex offenders.

Stürup (1968, 1972) reported findings from the early Danish studies in a 1968 monograph for 900 patients who were castrated throughout Denmark between 1929 and 1959 and followed for at least 6 years, with 39 % followed for more than 10 years. According to Stürup, 44 % were "mentally defective" and 25 % were identified as "psychopaths"; only 13 % were described as sexually abnormal with another 10 % being labeled as "borderline cases" regarding sexual deviancy.

Norway

Bremer (1959) published data on 216 male Norwegian castrates. However, only 7 % (or 16 subjects) were described as "sexual deviates." Most were suffering from some form of schizophrenia, thus raising serious questions about the generalizability of these findings to sex offenders with a paraphilic process as their primary disorder. Bremer noted that the majority were identified as oligophrenics (51 %, $N=109$), followed by schizophrenics (25 %, $N=53$). Thirty-two percent (68) asked for castration and 68 % (146) were castrated at the request of another person. Of the 216 total samples, the results of recidivism for only 102 of the individuals were noted. Of these subjects, 58 % (59) re-offended prior to the castration, with 34 % having more than one previous re-offense. The follow-up period ranged from 1 to more than 10 years; however, most were followed for less than 5 years. Within this group of 102 subjects, there was a 2.9 % (3) rate of sexual re-offenses following castration. A subsample of

41 cases was observed for 5–10 years; this group had a 7 % recidivism rate. Of this group of 102 castrates, 41 % (37) were satisfied with the operation, 26 % (23) were dissatisfied or bitter, and 33 % (29) were indifferent. Several methodological limitations are apparent in this study. First, there was no comparison group of non-castrates, and, second, the castrated sample suffered primarily from severe psychiatric pathology other than sexual deviancy disorders. As with the Danish reports, the generalizability of these data to those whose sex crimes are driven predominantly by sexual psychopathology is potentially restricted.

Germany and Switzerland

Heim and Hursch (1979) reviewed many of the significant European castration articles, including those by Langelüddeke in 1963 and Cornu in 1973. Langelüddeke's data consisted of an archival review of criminal records of 1,036 German castrated sex offenders released into the community (the criminal records dated back to 1953). The castrated group consisted of 638 males who were castrated between 1934 and 1938, 259 males castrated between 1939 and 1941, and 139 males castrated between 1942 and 1944. These sex offenders were released soon after their involuntary castration. The comparison group consisted of 685 released, non-castrated sex offenders. With respect to sexual recidivism, 84 % (870) of the 1,036 castrated sex offenders had at least two convictions (numbers ranged from two to more than eight) for sexual crimes before castration. The sexual recidivism rate for the castrates dropped to 2.3 % (24 of the 1,036 castrates re-offended at least once after surgery). This rate rose to 2.6 % when corrected for those individuals who died; that is, a 10 % assessment was taken of the total sample, thus reducing the sample to 932 with 24 castrated recidivists. The nature of the sexual crimes (i.e., contact, noncontact, child molestation, rape) was not specified. Ten of the recidivists were castrated between the ages of 20 and 30, and these offenders showed a higher recidivism rate than offenders castrated at an older age. The time interval for recidivism after castration and release ranged from 6 weeks to 20 years. Castrated inmates who were sent to prison once or twice had a lower rate of recidivism than those castrates with three or more convictions. Nine of the 24 castrates who re-offended sexually did so 5 years after release; 20 committed nonsexual offenses in addition to sexual crimes. The non-castrated sex offenders had a sexual recidivism rate of 39.1 % (268). A follow-up study of 89 interviewed castrates from this 1963 sample revealed that 65 % (58) reported that their libido and potency were immediately or soon after extinguished following castration, 17 % (15) reported significant fading followed by extinction of sex drive, and 18 % (16) stated that they were still able to have sexual intercourse more than 20 years post-castration. Of the 15 castrates over the age of 50 (51–70), 80 % (12) described extinction of potency soon after castration, 7 % (1) described potency as obviously weaker, and 13 % (2) described potency as still present or weakened slightly. For those in the 31–40-year-old age group (28), 64 % (18) experienced extinction of potency soon after castration, 21 % (6) described obvious weakening of potency, and 14 % (4) stated that potency was still in effect or slightly weakened. A small percentage of the sample developed somatic sequelae. Nine percent (8) developed subcutaneous fat tissue similar to that of females, 11 % (9) had "strong" gynecomasty, and 25 % (22) developed "weak" gynecomasty. Fifty-one percent (45) of the individuals had soft or more compliant skin, beard growth in 17 % (15) of the castrates was weaker, and 69 % (59) had reduced body hair. Only one of the individuals developed osteoporosis. Twenty percent (18) stated that the operation positively influenced their life, with reports of feeling calmer and more balanced; however, 31 % (27) complained that since the operation, they were more depressed and felt inadequate, isolated, and passive. Fifty-two percent (46) said they were content with the outcome of the operation, while 26 %(23) were ambivalent; the remaining 22 % (20) expressed feeling markedly discontent.

Cornu in 1973 in Switzerland (and as reviewed by Heim & Hursch, 1979) examined 127 castrates who were sex offenders released postsurgery to the community and who were evaluated at least 5 years following discharge. The comparison group consisted of 50 non-castrated sex offenders who refused to undergo the procedure. The follow-up period ranged from 5 to 35 years. Of the 121 castrated subjects assessed during follow-up, 7.44 % (9) sexually re-offended; in contrast, 52 % (26) of the comparison group sexually recidivated. The comparison group of non-castrates committed sexual crimes within 10 years after castration was recommended to them. There were no significant differences between the two groups in regard to psychiatric diagnosis, sexual deviation, life history, or marital status.

Sixty-eight of the castrates in the Cornu sample were later interviewed. Sixty-three percent (43) described that their libido and potency extinguished quickly after castration, while 26 % (18) said that there was a gradual decline of sex drive. Ten percent (7) of those castrated stated that they were able to achieve sexual intercourse 8–20 years post-castration. Significant somatic sequelae included 51 % (21) who were extremely overweight and 82 % (49) who developed osteoporosis. Of those dissatisfied with having been castrated, 13 % (9) felt effeminate and mutilated, and 32 % (22) reported feeling miserable after the operation with complaints of depression, irritability, and isolation. Forty percent (27) of the castrates described feeling calmer, happier, and more active after the operation. Seventy-one percent (48) of the subjects interviewed were acceptant of and content with

their decision to be castrated. These individuals cited the positive benefits of castration as having decreased their abnormal sex drive, prevented their confinement, or improved the possibility of marriage.

Both the Langelüddeke (1963) and Cornu (1973) studies could be criticized on several methodological grounds. In the Langelüddeke sample, the castrated subjects had a sexual recidivism rate of 84 % prior to their surgery, while the non-castrated subjects had a sexual recidivism rate of 39.1 %. These rates suggested that the two groups differed beyond their surgical status. That is, the non-castrated group appeared to be at lower recidivism risk by base rate and may not have represented an adequate comparison group. It is possible that those subjects who were in the comparison group as non-castrates were not selected for castration because of a perceived low recidivism risk. Other than castration, it was unclear whether the individuals in both Langelüddeke's and Cornu's studies were treated differently (e.g., whether there was a higher level of social control during community supervision for the castrates). Also unknown was whether the castrates and comparison groups came from the same time cohorts and were followed for an equal length of time. Cornu's matched group consisted of those who refused castration and had to endure long periods of confinement. In addition, these non-castrates in Cornu's sample appeared to have a higher rate of alcoholism, were described as exhibiting diminished mental soundness, and came from more disruptive family backgrounds than the castrated sample. Further, the nature of the sex crimes (e.g., pedophilic, rape) were not specified for either the Langelüddeke or Cornu samples.

Another study from Germany was conducted by Heim (1981). He examined the sexual behavior of 39 West German sex offenders released from prison after voluntary surgical castration with no follow-up as to sexual recidivism. The offenders consisted of 12 (31 %) rapists, 12 (31 %) heterosexual pedophiles, 4 (10 %) homosexual pedophiles, 4 (10 %) bisexual pedophiles, 1 (3 %) sexual murderer, and 6 (15 %) homosexuals. Thirty-three (85 %) offenders committed two or more sex crimes prior to castration. Their mean age was 49.3 years, ranging between 32 and 69. The mean age at castration was 42.5 years, ranging in age from 25 to 50. The median time the offenders were in the community was 4.3 years, ranging between 4 months and 13 years. This study assessed the subjects' sexual functioning pre- and post-orchiectomy through questionnaires. Overall, the subjects reported a statistically significant decrement in the frequency of sexual intercourse, masturbation, and sexual thoughts after castration. However, 11 of 35 subjects reported the ability to have sexual intercourse after castration even though the procedure occurred several years (mean time was 4.8 years, range 1.3–9.5 years) previously. This study found that castration had the strongest effect on sexual behavior in those who were castrated between the ages of 46 and 59. The study is hampered by the lack of objective assessment of sexual functioning and interest (e.g., plethysmograph), relying instead on self-report data. In addition, the recidivism rates for these castrated individuals were not reported.

Wille and Beir (1989) reported recidivism rates for both castrated and non-castrated applicants to the general medical counsel in Germany for the period between 1970 and 1980. Initially, there were 104 castrated and 53 non-castrated applicants. The 53 non-castrated subjects consisted of those who were not castrated because their application was rejected by the authoritative commission (17), they canceled their application before the commission could render a decision (30), and they canceled their application after the commission granted their request (6). Among the castrated, 22 % (23) were described as "aggressive" offenders and 73 % (76) as pedophilic offenders. Of those who were not castrated, 28 % (15) were described as "aggressive" offenders and 49 % (26) as pedophilic offenders. These descriptions were based on offenses prior to application for castration. The average number of sex offenses was fairly similar for the two groups, with the castrated offenders having an average of 3.27 offenses and the non-castrated offenders having 2.87 sex offenses. Wille and Beir offered conflicting numbers as to the offense history of the non-castrates citing either 6 or 8 as having committed no sex offense.

For purposes of assessing recidivism, certain individuals from both the castrated and non-castrated groups were excluded from the analysis. They included those who had no sexual offenses prior to the application for castration (4), those for whom castration was not permissible under German Law (2), those who were castrated due to psychosis (2), those who were not traceable (7), and those for whom there was no valid follow-up (8). These exclusions reduced the number to 99 castrated and 35 non-castrated applicants. Among the castrated group, three sexually re-offended, yielding a recidivism rate of 3 %. Of the non-castrated applicants, 16 sexually re-offended for a 46 % recidivism rate.

While all castrates in the Wille and Beir sample experienced a reduction in sexual interest and activity, erotic fantasies, and capability of spontaneous or stimulated erection postoperatively, an examination of their sexuality 5-years after surgery revealed varying degrees of libido and sexually activity as related to age. Of a total of 81 subjects where data were available, the effects of castration on postsurgical sexual functioning at 5 years were reported. Among the castrates in the 30–44-year age group, 33 % (16/48) could function sexually, 20.8 % (10/48) required intensive stimulation, and 12.5 % (6/48) reported only reduced sexual activity and libido. Among those aged 45–49, 10 % (2/20) reported sexual activity with intensive stimulation, and only 5 % (1/20) reported non-drastic reduction of activity and libido following castration. Among castrates aged 60 and over, only 7.7 %

(1/13) experienced sexual capacity. These data underscored that castration was most effective in the reduction of libido and sexual activity among those who were aged 45 and older.

Seventy-seven of the castrated applicants were evaluated regarding their satisfaction with their current situation and the surgical procedure. Seventy-one percent (55) said they were pleased, 20 % (15) said they were undecided, and the remaining 9 % (7) said that they were dissatisfied. Methodologically, this study offered descriptors of the offense types as well as a comparison group of non-castrates with a similar average number of sexual offenses prior to intervention as the castrated group. The very low re-offense rate in castrates (3 %) compared to the much higher rate in non-castrates (46 %) could be argued more credibly as related to surgical intervention. However, a noteworthy limitation of the study is the small sample size.

Denmark

In 1997, Hansen's and Lykke Olsen's (1997) review of the treatment of sex offenders in Denmark summarized the history of the Treatment Institution at Herstedvester, a Danish prison facility that provides psychiatric care to inmates. Hansen (1991) followed 43 inmates who were sentenced to Herstedvester for extended detention for committing crimes of violent rape or another violent crime (e.g., murder, attempted murder, or severe bodily injury in connection with a sexual offense). Twenty-one of these inmates opted for surgical castration and early release on probation (i.e., 6–18 months after the operation). Originally, 24 inmates refused surgical intervention and remained incarcerated for an extended period of time; however, two later underwent castration after they were released and sexually re-offended. Two of the 21 castrates committed another sexual crime more than 15 years after their orchiectomy. These new sex crimes occurred after their physicians gave both individuals testosterone substitution therapy. Of those 24 inmates who were not castrated initially, 10 sexually re-offended (including the two subjects who had an orchiectomy after re-offending). Their new crimes occurred despite a lengthy incarceration for their original sexual crimes (non-castrates spent an average of 8 years in detention versus 2 years for the castrates). Therefore, the comparative rates for sexual recidivism were 10 % (provided replacement testosterone at 15 years) for the castrated group and 42 % for the non-castrates (unknown follow-up period).

United States

One report from the 1952 California legislative subcommittee on sexual crimes (Smith et al., 1952) stated that 60 individuals underwent orchiectomy in San Diego County since 1937, and further details as to demographics can be found under Weinberger et al. (2005). For those castrated, records revealed a 0 % rate of sexual recidivism: "he records reflect that not one of these individuals has committed a further sex offense" (p. 47). However, nonsex crimes were committed in some cases. The document provided limited information on 44 convicted sex offenders who underwent surgical castration between 1937 and 1948 and were released from custody. The document was unclear as to the period of time that each individual was followed after orchiectomy or when they were released to the community. It noted that a preliminary report was filed on March 8, 1950, and as best as can be determined, this date may represent the end of the follow-up period. However, the report was so limited in explanation that an assumption about the individuals' date of release into the community could not be made.

Despite the sparseness of data reported in this legislative document, it contained some case information with details as to provide a picture of the types of offenders who did not re-offend sexually after orchiectomy. Of the 44 cited cases, the instant offenses for 40 individuals met the criteria for clear "hands-on" offenses such as rape and/or child sexual molestation. With respect to the demographic breakdown of these 40 cases, the legislative document described 39 as White and 1 as Mexican; 39 were employed largely in lower middle to middle-class occupations, with the unemployed individual described as having subnormal intelligence. Regarding marital status, 15 were married, 12 were single, 7 were divorced, 4 were separated, and 2 were widowed. The age range of the castrated offenders was between 24 and 72. The level of education ranged from persons with a second grade level of education (1) to those with a medical degree (2).

The limited description of the 40 offenders and their offenses restricts an assessment of their risk level prior to surgical castration. Examination of the subjects' criminal history prior to the instant sex offense revealed that 60 % (24) of the sample had no prior crimes, 22.5 % (9) had a prior sexual offense, and 17.5 % (7) had a history of nonsexual offenses.

This legislative report is a highly relevant document that describes and follows a number of convicted sex offenders who were surgically castrated in the United States. However, it is not readily available within the public domain. Therefore, specific information *from the report is presented as a table for those who* may want to view data on the individual cases and can be found in the article by Weinberger et al. (2005).

Summary

The overall rate of sexual recidivism following castration is very low, ranging between 0 and 10 %. However, the 10 %

rate occurred in a small sample ($N=21$) where both of the re-offending castrates were given testosterone injections. The low sexual recidivism findings remained robust across the studies even though they varied in terms of methodology and had a variety of limitations. Many of the studies were hampered by the following: no presurgery base rate risk for sexual recidivism, lack of a true comparison group, no baseline data regarding pre-intervention offending and offense types, and small sample sizes. Further, there was a lack of corroboration postsurgery of deviant sexual interest via penile plethysmography, a method useful for assessing sexual deviancy among those seeking community release.

Orchiectomy and Sexual Behavior

The theory underpinning these studies was that the elimination of testosterone via orchiectomy would lead to a significant reduction of sexual deviancy, thereby assuring safe release of sex offenders into the community. However, these studies did not directly address whether there was an established linear relationship between low- or near-absent levels of testosterone and sexual interest, drive, and erectile capacity following orchiectomy. Testicular and prostate cancer studies that examine sexual functioning among "normal" males postsurgery offer one body of empirical data by which to examine the relationship between serum testosterone levels and behavior. These studies, in contrast to surgical castration of sex offenders, have the advantage of controlled designs that offer demonstrated markers of sex hormone level, drive, and function. Generally, the studies found that the sexual desire of testicular cancer patients who underwent bilateral orchiectomy was uniformly reduced or eliminated; however, their capacity to have an erection to sexually stimulating material was not eliminated. Of specific relevance to risk assessments of bilaterally castrated sex offenders is Van Basten et al.'s finding of laboratory confirmation of erectile capacity in those who self-reported such difficulty. These results highlight the need for laboratory corroboration of self-reports of diminished or absent sexual desire and capacity among sex offenders who have been surgically castrated.

Ethical Ramifications of Surgical Castration as a Treatment Choice

Ethical arguments have been made against and in favor of the use of surgical castration as a treatment option for high-risk sex offenders. Indeed, some professional organizations have taken a position against surgical castration as an intervention for sex offenders based on the availability of antiandrogen medications that can achieve similar results (ATSA, 2003). Still, others question the very capacity of a person under involuntary civil commitment, for example, to be able to choose surgical castration. In their review of 9 states where chemical and/or surgical castration statutes have been enacted, Scott and Holmberg (2003) raised ethical concerns as to the capacity of convicted sex offenders to make informed decisions regarding surgical or chemical castration.

Whether this type of treatment is medically appropriate is another ethical consideration. As Berlin (2003) noted, such intervention may be medically appropriate under narrow circumstances (i.e., where there is evidence that the sex offender's actions are mediated by intense, obsessional, and recurrent paraphilic urges and fantasies). In some of the states with castration statutes, there is no requirement for a psychiatric evaluation of the offender; therefore, the medical appropriateness of such treatment cannot be determined. However, it could be argued that under certain circumstances the most invasive treatment might be the only effective alternative for a high-risk sex offender. Winslade et al. (1998) outlined circumstances under which surgical castration of pedophiles may be legally and morally defensible.

Normative versus consequential ethics offers a template for viewing the ethical issues raised by bilateral orchiectomy of sex offenders. The normative approach assumes that there is a universal norm of right and wrong. Therefore, rules of conduct are black and white. The normative view may state that the procedure of surgical castration, given the invasive and in essence irreversible nature of the procedure, is not medically justifiable under any conditions. Consequential ethics offers another philosophical concept: that the circumstance dictates the ethics. In that view, there may be situational factors that in an applied context justify an action. Consequential ethicists would argue that surgical castration might provide a much better quality of life for the sex offender facing indefinite commitment in a prison or hospital setting in that the procedure would offer the potential of release. It would also potentially address the public's concern for safety in that the sex offender has taken severe means to greatly reduce or eliminate deviant libido.

Orchiectomy and Risk Reduction Among Sex Offenders: A Model

The orchiectomy studies highlight the complex nature of sexual functioning in human males who have undergone bilateral removal of the testes.

While orchiectomy can decrease the intensity of sexual motivation, it does not always eliminate sexual capacity. Men with low or no testosterone levels were still able to perform sexually and achieve functional erections as demonstrated in the cancer studies measuring penile tumescence to erotic visual stimulation (Rhoden, Teleoken, Sogari, et al., 2002). The studies of nonsex offender males who

underwent bilateral orchiectomy demonstrated that while testosterone might mediate physical sexual arousal, it was not uniformly essential to male sexual functions. Moreover, castrated individuals can achieve erections after surgery. The data from normal males suggest that erectile capacity occurred in response to stimuli they found to be erotic. It could be argued that erectile capacity in castrated sex offenders does not mean they will sexually recidivate, only that they are capable of sexual intercourse. However, when the arousing stimuli for the castrated sex offender remain deviant, then the prudent evaluator would need to consider erectile capacity as a variable in sexual recidivism risk.

The next portion of the chapter will provide a framework for addressing risk reduction among surgically castrated high-risk offenders that could be applied to a clinical risk assessment.

Framework for Assessing the Impact of Bilateral Orchiectomy in Assessing Risk Reduction

A framework for surgical castration of sex offenders as moderating their risk for sexual recidivism is considered below and as previously discussed by Weinberger et al. (2005). Since the original Tarasoff (1976) ruling, mental health professionals have incurred increased responsibility in the recognition and assessment of violence risk potential in psychiatric patients. Subsequent case law and legislation has charged mental health professionals with the responsibility of identifying potentially violent patients and protecting the public from them and as well in the realm of sexual offenders with the onset of the civil commitment statutes. A risk appraisal approach based upon a sole variable, such as bilateral orchiectomy, raises several questions: that of public safety, peer accepted standards of practice, liability issues, and concordance with evidence-based medicine practice (Sreenivasan, Kirkish, Garrick, Weinberger, & Phenix, 2000). Leading researchers and theoreticians have identified and advocated a heteromethod for understanding the relevant prediction factors for any future event. Such factors would include mitigating and aggravating risk factors (Heilbrun, 1996). This approach is widely used in medicine where the relevance of the person's unique individual strengths and weaknesses is considered when determining treatment options and likely outcome. Evidence-based medicine, in particular, is based upon the notion that individual patients typically differ from study samples in various ways and that clinical judgment must be utilized to determine how these differences impact the prognosis.

As the above discussion of the surgical castration review indicates, the bilateral orchiectomy studies are compelling due to the very low rates of sexual recidivism demonstrated among released sex offenders. However, as this review has also underscored, the studies are methodologically suboptimal, and the generalizability of findings to a present-day high-risk sex offender remains problematic. As noted, the sexual recidivism percentages were calculated from groups of highly variable castrated sex offenders whose conditions of release were not well specified. As we articulated in a prior article (Weinberger, Sreenivasan, & Garrick, 2005), the clinician should be even more circumspect when applying such data to an SVP/SDP sample that represents a small subgroup of extremely dangerous sex offenders.

Of primary concern in terms of public safety is that there is little empirical data regarding the recidivism rate of high-risk sex offenders who are surgically castrated, released, and free of community supervision. For those individuals who harbor entrenched pedophilic or sadistic sexual preoccupation, the removal of the testes without accompanying psychotherapy may leave the potent psychological risk factors in place. Those who are found to meet the sexually violent predator (SVP)/sexually dangerous person (SDP) civil commitment criteria (Weinberger et al., 2005) and who face indefinite hospitalization, by their very characteristics, are apt to represent the highest risk subsample of sex offenders. A recurrent pattern of sex offending suggests the ingrained nature of deviant sexual interests. Orchiectomy alone, without attendant psychological change, may be insufficient to mitigate sexual recidivism when high-risk offenders are in the community and subject to temptations. Community supervision allows for a safe way of monitoring "in vivo" how the high-risk sex offender copes with stress and how he handles risky situations (e.g., going to the grocery store and seeing young boys). As Hansen and Lykke Olsen (1997) noted, surgical castration is a treatment of symptoms and not a cure. The latter must be emphasized as orchiectomy of high-risk sex offenders may create an artificial sense of safety.

We do not mean to imply that the existing orchiectomy data are of little or no value in current sex offender risk assessment; rather, the risk analysis should reflect a prudent application of the orchiectomy data to the assessment of the *individual* sex offender. Each assessment should address some, if not all, of these four points:

1. Is the data set to be utilized detailed sufficiently so that the clinician can have a high degree of confidence that the sex offender being evaluated is similar to those examined within the study sample?
2. Are there non-testosterone-dependent neurobiological factors present that could drive sexual recidivism?
3. Are there psychological risk factors present that could increase sexual recidivism?
4. What is the risk that this individual will secure exogenous testosterone and/or other libido potentiating drugs if released?

Evidence-based medicine is based upon the notion that individual patients typically differ from study samples in various ways and that clinical judgment must be utilized to determine how these differences impact the prognosis (Braitman & Davidkoff, 1996). The low probabilistic sexual recidivism rates found in the sex offender orchiectomy studies should not be ignored. However, that data should be interpreted within a context. Therefore, we offer the following suggested conditions for use of the existing surgical castration recidivism rates in applied sex offender risk assessments: for those individuals where a persuasive argument can be made in support of their similarity to a sex offender orchiectomy data set, where there is no evidence of continued preoccupation with children or aggressive material as arousing sexual pleasure, where there is a pattern of involvement in interventions that demonstrates awareness of psychological and other risk factors and where the individual appears to have made substantial internal and behavioral changes, and where, as a result of these or other factors, the likelihood of access to exogenous testosterone and other drugs that enhance sex drive is low. Under such circumstances, it could be concluded that the confluence of variables, with orchiectomy as one, suggests that the individual would not present a "likely risk" and could be released into the community even with little to no supervised control. As remarked on by us previously (Sreenivasan et al., 2000), assessment for any purpose is a complex enterprise requiring understanding of research-based assessment tools and a solid theoretical framework that guides acquisition of relevant individual (clinical) information. Neither clinical judgment unguided by the research literature nor the use of a sole variable or model would meet judicially determined or professional standards of practice. Integrating these data is the acceptable standard of practice, and we would argue the same conceptual process applies when considering the impact of surgical castration in sexual recidivism risk assessments.

The current review underscores the difficult decisions to be made regarding the ethical use of surgical castration for select populations. The overall rate of sexual recidivism following castration is very low, ranging between 0 and 10 %. Parenthetically, the 10 % rate occurred in a small sample ($N=21$) after both of the re-offending castrates were given testosterone injections. The low sexual recidivism findings remained consistent across the studies even though they varied in terms of methodology and had a variety of limitations. Many of the studies were hampered by the following: no presurgery base rate risk for sexual recidivism, lack of a true comparison group, no baseline data regarding pre-intervention offending and offense types, or small sample sizes. Further, there was a lack of corroboration postsurgery of deviant sexual interest via penile plethysmography, a method useful for assessing sexual deviant interest among those seeking release into the community.

Moreover, surgical castration in and of itself is not a complete treatment for sex offenders. Consequently, the deliberate evaluator should consider carefully the impact of bilateral orchiectomy on the reduction of risk in sex offender populations, particularly those under civil commitment as a sexually violent predator or sexually dangerous person (Sreenivasan et al., 2000), and not weigh this variable with an inflated degree of importance.

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Civil Commitment of Select Recidivistic Sexual Offenders Deemed Likely to Sexually Reoffend

Harry M. Hoberman and Rebecca L. Jackson

Introduction

In the United States, the civil commitment of recidivist sexual offenders concerns the indeterminate detention for the purpose of public safety (to reduce or prevent future sexual offending) of a select subset of sexual offenders (those deemed at particularly higher risk by virtue of certain psychological and/or psychiatric ("mental" or "personality") characteristics). Almost all such sexual offenders are persons who have completed an incarceration in the criminal justice system, typically with their most recent crime being a sexual offense. Such action necessarily involves the balancing of liberty interests or freedom of those select recidivist sexual offenders with public safety concerns about their potential persisting dangerousness, specifically the likelihood of their future sexual offending. Managing sexual offenders who have committed multiple and/or extreme sexual offenses as the result of some psychological or psychiatric conditions has long been a concern for Western society. Over the past 100 years, in the United States, public policy has shifted among different approaches to dealing with recidivistic sexual offenders perceived as still at elevated risk for sexual offending, sometimes emphasizing enhanced criminal sanctions, sometimes opting to offer a hypothesized therapeutic approach, and sometimes utilizing both increased criminal and civil commitments. The purpose of this chapter is to consider the current civil commitment of recidivistic sexual offenders, typically referred to as sexually violent offenders or "predators" (CCSVP) and to provide an overview of the key elements of so-called sexually violent predator (SVP) statutes, the characteristics of and evaluation of the sexual offenders considered for and currently committed under these statutes and aspects of the civil commitment programs for such individuals.[1]

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History of Civil Commitment of Sexual Offenders in the United States

The civil commitment of recidivistic or "higher-risk" sexual offenders is certainly not new. As early as 1931, the state of Michigan had adopted such a statute. Such laws were initially enacted to allow for the prolonged commitment of a subgroup of identified sexual offenders. During the 1930s, a consensus developed that some individuals' sexual offending was a function of some form of "mental illness" and that these offenders might benefit from treatment as opposed to just punishment. Thus, early "sexual psychopath" laws were enacted to help society deal with sexual offenders who were viewed as "too sick to deserve punishment" (Janus, 2000). Under these statutes, treatment of the more dangerous sexual offenders generally *replaced* punishment or incarceration; thus, these statutes originally represented an attempt to place a small group of identified sexual offenders in secure hospital settings for treatment and not in prison. In some states, once attempts at treatment had taken place, individuals could also be required to serve a portion of a criminal sentence too, while in other states if treatment was deemed successful, persons were released back to society often years before the typical criminal sentence might have allowed. By 1971, as many as 31 states had implemented what were originally termed "sexual psychopath" statutes.

In 1939, the US Supreme Court upheld the constitutionality of Minnesota's "psychopathic personality" statute, one of these sexual psychopath statutes. That is, civil commitment

[1]For purposes of clarity, the term civil commitment of sexually violent predators, abbreviated as CCSVP shall be used to describe this domain.

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of a select group of sexual offenders was found to be constitutional in the United States some 70 years ago. However, over time, this approach fell out of favor. It appears by the latter part of the century, political opinion began to change about both the effectiveness and the necessity of providing mental health treatment for sexual offenders instead of just punishment by incarceration. Most specifically, the movement to repeal sexual psychopath statutes was driven primarily by "disenchantment with the efficacy of treatment for sex offenders" (APA, 2000); thus, the impetus to shift repeat sexual offenders back into the criminal system was rooted in the belief that they were untreatable, at least from the then traditional psychiatric perspective. Similarly, per some writers, the sexual psychopath statutes fell into disfavor after sexual offenders reoffended after being released from civil commitment and the completion of sex offender treatment (e.g., Frances, Sreenivasan, & Weinberger, 2008). Formal opposition to civil commitment of "sexual psychopaths" was registered by significant professional organizations such as the American Bar Association and the Group for the Advancement of Psychiatry. Subsequently, by 1994, only 13 states continued to maintain their previous sexual psychopath statutes, and in many of those jurisdictions, such statutes were rarely utilized.

However, in the late 1980s and early 1990s, the tide again began to shift among states toward adopting a new generation of statutes designed to identify, detain, and treat persons designated most commonly as so-called sexually violent predators (SVPs). Concomitant with the decreased support for the previous sexual psychopath commitments, many states had switched from indeterminate to determinate sentences for sexual offenses as well as other types of crime. As a consequence, criminal offenders, including sexual offenders, were released at the end of a sentence without any determination of the degree of dangerousness for future sexual offending that might characterize them or with identified mechanisms for managing possible risk factors for dangerousness. However, shortly after eliminating their sexual psychopath statute, the state of Washington experienced a number of egregious sexual offenses by recidivistic sexual offenders who had been recently released from incarceration and had been viewed as still "dangerous" and committed sexual offenses. In Washington, without a sexual psychopath statute, no mechanism existed for evaluating, let alone detaining, identified sexual offenders deemed at elevated risk to sexually reoffend once their prison sentence had been served. Subsequently, the Washington Task Force on Community Protection issued a number of recommendations that were adopted as part of a "Community Protection Act" in 1990; among these was a new statute providing for the involuntary civil commitment of select sexual offenders, identified as sexually violent predators (SVP), following the expiration of their prison terms. Ironically, given that a perception that sexual offender treatment was not an effective mechanism of management leads to the rejection of the first generation of sexual predator statutes, the Washington legislature indicated that the basis for the second generation of civil commitment of sexual offenders was based on a poor prognosis for rehabilitating such individuals in a prison setting and the long-term treatment needs of such persons.

Subsequently, following the enactment of Washington's SVP statue in 1990, 20 other jurisdictions either have established similar laws or refined existing statutes regarding sexual offenders viewed as at elevated risk for sexual offending yet again [AZ, CA, FL, IA, IL, KS, MA, MN, MO, NE, NH, NJ, NY, ND, PA (targeting only juveniles aging out of juvenile correctional system), SC, TX (only outpatient civil commitment), VA, and WI and the US Federal Government.] In most states, such individuals are identified as a "sexually violent predator" (SVP); in other jurisdictions, they are referred to as sexually dangerous persons or similar terms. Thus, currently, 40 % of the United States have one or more laws permitting the civil commitment of recidivistic or higher-risk sexual offenders. The stated primary purpose of these SVP statutes was to provide one means of protection for society from a relatively small group of sexual offenders who were deemed to be characterized by psychological and/or psychiatric ("mental" or "personality") characteristics viewed as related to a higher risk of sexual offense recidivism. The great majority of the newer versions of these more recent "second-generation" statutes involve making a determination that a person meets criteria as a "sexually violent predator" and involuntarily and indeterminately committing them to a secure hospital setting. As noted, in the great majority of instances in the application of contemporary SVP statutes, identified sexual offenders are held indefinitely *after* they have served a criminal sentence, typically for a sexual reoffense. Thus, this "second generation" of commitment laws was enacted primarily as a public safety measure in extending the incapacitation of offenders who had already served their criminal sentences. In this newer model, sexual offender treatment typically followed incarceration or punishment for one or more sexual offenses.

The Constitutionality of Civil Commitment of Sexual Offenders in the United States

The first US constitutional review of civil commitment of sexual offenders occurred over 70 years ago. In 1939, the Minnesota legislature had defined a "psychopathic personality" (PP) as "the existence in any persons of such conditions of emotional instability **or** impulsiveness of behavior **or** lack of customary standards of good judgment **or** failure to appreciate

the consequences of personal acts **or** a combination of any such conditions, as to render such persons irresponsible for personal conduct with respect to sexual matters and thereby dangerous to other persons" (emphasis added). That statute was challenged for "vagueness" by a sex offender (Pearson), who had been committed as a PP. In response to that challenge, the Minnesota Supreme Court had narrowed the interpretation of the PP statute indicating that it should apply only to "Persons who, by a [1] habitual course of misconduct in sexual matters, have evidenced an [2] utter lack of power to control their sexual impulses and who, as a result, are [3] likely to attack or otherwise inflict injury, loss, pain or other evil on the object of their uncontrolled and uncontrollable desire." In 1940, *Pearson vs. the Probate Court of Ramsey (County)* was heard by the US Supreme Court. That Court upheld the constitutionality of Minnesota's statute, referring to the statute and the decision by the Minnesota Supreme Court. The Court wrote:

> "These underlying conditions, calling for evidence of past conduct pointing to probable consequences, are as susceptible of proof as many of the criteria constantly applied in prosecutions for crime…The question, however, is whether the legislature could constitutionally make a class of the group it did select. That is, whether there is any rational basis for such a selection. We see no reason for doubt upon this point. Whether the legislature could have gone farther is not…the question. The class it did select is identified by the state court in terms which clearly show that the persons within that class constitute a dangerous element in the community which the legislature in its discretion could put under appropriate control." (p. 309)

The US Supreme Court adopted the Minnesota Supreme Court's construction of the statute when it stated: "[The statute] intended to include those persons who, by a habitual course of misconduct in sexual matters, have evidenced an *utter lack of power to control their sexual impulses* and who, as a result, are likely to attack or otherwise inflict injury, loss, pain or other evil on the objects of their uncontrolled and uncontrollable desire" (309, emphasis added). Thus, the early sexual psychopath statutes were determined to be constitutional.[1]

Washington's SVP statute has served as a template for most other state's more recent adoption of statues for the civil commitment of recidivistic or higher-risk sexual offenders. However, the constitutionality of such contemporary statutes did not come before the US Supreme Court until *Kansas v. Hendricks* (1997) decision. In *Hendricks*, the Court upheld the state's police power rights and legitimized the constitutionality of SVP commitment laws. The Kansas statute allowed for the commitment of "any person who has been convicted of or charged with a sexually violent offense and who suffers from a mental abnormality which predisposes the person to commit sexually violent offenses in a degree constituting such person a menace to the health and safety of others" (Kan. Stat. Ann. 59-29[a], 1994). Following his commitment under the Kansas statute, Hendricks appealed the constitutionality of this law, based on double jeopardy and ex post facto arguments. His appeal was eventually denied by the US Supreme Court on both of these grounds. In *Hendricks*, the Court ruled that:

> " …the Kansas court's determination that *the Act's 'overriding concern' for the 'segregation of sexually violent offenders'* is consistent with our conclusion that the Act establishes civil proceedings…especially when that concern is *coupled with the stated goal of providing treatment to those offenders, if such is possible*. While we have upheld civil commitment statutes that aim both to incapacitate and to treat…we have never held that the Constitution prevents the state from civilly detaining those for whom no treatment is available, but who nevertheless pose a danger to others." (p. 366; emphasis added)

The *Hendricks* decision all but put to rest constitutional challenges based on double jeopardy and ex post facto claims.

Another avenue for direct statutory attacks on state civil commitment laws was closed by the US Supreme Court in *Seling v. Young* (2001). In this case, Young argued that, despite the constitutionality of sexual offender civil commitment laws in general (as determined by *Hendricks*), Washington's law as applied to him specifically was unconstitutional (a so-called as applied challenge). The US Supreme Court rejected Young's claim. Although Vlahakis (2010, pp. 2–5) characterized the *Seling* decision as the end to statutory challenges against sexual offender civil commitment, he notes that it "open[ed] the door to indirect attacks" based on civil rights violations, such as conditions of confinement, use of seclusions and restraints, and adequacy of treatment.

Constitutional issues of sexual offender civil commitment were again addressed by the US Supreme Court in *Kansas v. Crane* (2002). Crane, after his commitment as a SVP under the Kansas statute, argued that *Hendricks* required a complete lack of control of sexual impulses and behavior. He argued that, since he retained some control, he was ineligible for civil commitment. However, the US Supreme Court disagreed and denied his appeal. Rather, they concluded that "serious"—but not complete—volitional impairment was required for commitment. Most recently, in 2010, the US Supreme Court affirmed the constitutionality of civil commitment in *US v. Comstock*. They found that it was constitutional for the US Department of Justice to commit "a mentally ill, sexually dangerous federal prisoner beyond the date the prisoner would otherwise be released" (p. 1).

[1] In 1994, the psychopathic personality statute was modified by the Minnesota legislature and is currently known as the sexual psychopathic personality statute.

Indeterminate Commitment of Sexual Offenders in Canada, the United Kingdom, and Other Countries: Dangerous Offender and Similar Statutes

The United States is not the only country that has attempted to indeterminately detain individuals, particularly sexual offenders, deemed to be particularly dangerous to the public. In Canada, within the criminal justice system, a convicted person who is designated as "dangerous offender" may be subjected to an indeterminate prison sentence, whether or not the crime carries a life sentence. The purpose of the legislation is to detain offenders who are deemed too dangerous to be released into society because of their violent tendencies, but whose sentences would not necessarily keep them incarcerated under other legislation. The prosecution is required to prove that the individual qualifies as a dangerous offender. Once an individual has been deemed a dangerous offender, the National Parole Board is required to review the case of an offender with a dangerous offender label after seven years, and parole may be granted as circumstances warrant, but the offender would remain under supervision indefinitely. After the initial review at 7 years, the Parole Board must conduct subsequent reviews every 2 years. As in the United States, in Canada the dangerous offender provisions have been found constitutional: "The individual, on a finding of guilty, is being sentenced for the 'serious personal injury offence' for which he was convicted, albeit in a different way than would ordinarily be done. He is not being punished for what he might do. The punishment flows from the actual commission of a specific offence" (R. v. Lyons, 1987). In 2006, the Canadian government introduced legislation that made it easier for Crown prosecutors to obtain dangerous offender designations. The proposed amendments provided, among other things, that an offender found guilty of a third conviction of a designated violent or sexual offense acquires the burden of proving that he or she does not qualify as a dangerous offender; that is, they would have to prove that despite the three convictions, they do not qualify as dangerous offenders. In the United Kingdom, modification of criminal law now permits the indefinite detention of persons who are thought likely to represent a serious threat. Such persons mush have a severe personality disorder diagnosis that makes them "more likely than not to commit an offense that might be expected to lead to serious physical or psychological harm from which a victim would find it difficult to recover." In Holland, under "TBS" legislation, offenders convicted of a serious sexual or violent offense and determined to present a higher risk of reoffending can be sentenced by the criminal court to a TBS order. They serve a prison sentence relative to their criminal offense and are later transferred to a TBS facility for treatment at the end of that sentence. They remain within the TBS system indefinitely (subject to regular review by a tribunal), initially in a secure institution and later as conditionally discharged, supervised patients in the community. Similarly, both the United Kingdom and Denmark have dangerous offender statutes as part of their criminal commitment process. Thus, a number of Euro-American countries have enacted particular legislation creating varied systems to address the problem of recidivistic, higher-risk sexual offenders by providing for some means of detaining those individuals for the purpose of public safety.

Prototypical Definition of a Sexually Violent Predator

The definition of a SVP is a legislative one, shaped by subsequent judicial decisions; it is not a term created by or that emerged from the behavioral or medical sciences. Although state-to-state variation exists in the exact language of SVP statutes, generally these statutes share four common elements: (1) at least one or more past act(s) of sexual offending, typically adjudicated; (2) at least one current mental condition(s) or dysfunction, typically referred to as a "mental abnormality" and/or a personality disorder; (3) some particular relationship between the mental condition/dysfunction, deficits in emotional or volitional capacity and/or control, and the likelihood of future sexual offending; and (4) an opinion that the risk of future sexual offending exceeds some threshold, which varies across jurisdictions. Table 1 summarizes the language used in each of the statutes allowing for easy comparison across statutes.

Qualifying Sexual Offending History

All statutes regarding CCSVP require some evidence of a past act or acts of sexual offending. For many states, however, the requirement for this element is met simply by a history of a formal charge and/or conviction for one or more acts of statutorily defined sexual offenses that are deemed as sexual violent ones. However, some states such as Washington and Iowa apparently depart from the statutory criteria and apparently exercise discretion (e.g., typically referred to as "filing standards") and only consider cases for CCSVP where an individual has at least two adjudicated acts of sexual offenses in their history. In some states (e.g., Washington), the sexual offenses of interest are further qualified as "predatory" (e.g., committed against strangers or persons with whom the person had a casual relationship or cultivated the relationship for purposes of sexual gratification) or as constituting acts of "sexual violence," typically identified as an attempted or completed "contact" sexual offense. In other

Table 1 Civil commitment of sexual offenders: statute details by state

State	Year enacted	Eligibility	Standard of dangerousness	Qualifying disorders
Arizona	1997	Convicted, found guilty but insane, or incompetent to stand trial for a sexually violent offense	Likely	Mental disorder: a paraphilia, personality disorder, or conduct disorder or any combination of paraphilia, personality disorder, and conduct disorder
California	1995	Convicted of a sexually violent offense against two or more victims	Likely	Mental disorder: congenital or acquired condition affecting the emotional or volitional capacity that predisposes the person to the commission of criminal sexual acts in a degree constituting the person a menace to the health and safety of others
Florida	1999	Convicted, adjudicated delinquent, or found not guilty by reason of insanity for a sexually violent offense	Likely	Mental abnormality: a mental condition affecting a person's emotional or volitional capacity
Illinois	1998	Convicted, adjudicated delinquent, or found not guilty by reason of insanity for a sexually violent offense	Substantial probability	Mental disorder: congenital or acquired condition affecting the emotional or volitional capacity that predisposes a person to engage in acts of sexual violence
Iowa	1998	Convicted, found not guilty by reason of insanity or found incompetent to stand trial for a sexually violent offense	More likely than not	Mental abnormality: a congenital or acquired condition affecting the emotional or volitional capacity predisposing that person to commit sexually violent offenses
Kansas	1994	Convicted, found incompetent to stand trial, or found not guilty by reason of insanity for a sexually violent offense	Likely	Mental condition, whether congenital or acquired, which affects the person's emotional or volitional capacity predisposing that person to commit sexually violent offenses
Massachusetts	1999	Convicted, adjudicated delinquent, or found incompetent to stand trial for a sexual offense	Likely	Mental abnormality: a congenital or acquired condition that affects the emotional or volitional capacity of the person that predisposes that person to commit sexually violent offenses
Minnesota	1994	Engaged in a course of harmful sexual conduct that creates a substantial likelihood of serious physical or emotional harm to victims	Likely	Sexual, personality, or other mental disorder or dysfunction

(continued)

Table 1 (continued)

State	Year enacted	Eligibility	Standard of dangerousness	Qualifying disorders
Missouri	1999	Pled guilty, found guilty, or found not guilty by reason of mental disease of a sexually violent offense or has been committed as a sexual psychopath	More likely than not	Mental abnormality: congenital or acquired condition affecting the emotional or volitional capacity which predisposes the person to commit sexually violent offenses
Nebraska	2006	Convicted of one or more sex offenses	Likely	Mental illness or personality disorder which makes the person likely to commit future acts of sexual violence and unable to control his or her conduct
New Hampshire	2007	Has committed a sexually violent offense	Likely (serious likelihood)	Mental abnormality: a mental condition affecting a person's emotional or volitional capacity which predisposes the person to commit sexually violent offenses
New Jersey	1998	Convicted, adjudicated delinquent, or found not guilty by reason of insanity for commission of a sexually violent offense or found incompetent to stand trial for commission of a sexually violent offense	Likely	Mental abnormality: a mental condition that affects a person's emotional, cognitive, or volitional capacity in a manner that predisposes that person to commit acts of sexual violence
New York	2007	Convicted of a sexually violent offense	Likely	Mental abnormality or personality disorder that makes him or her likely to engage in predatory sexually violent offenses
North Dakota	1997	Shown to have engaged in sexually predatory conduct	Likely	A congenital or acquired condition that is manifested by a sexual disorder, personality disorder, or other mental disorder or dysfunction
Pennsylvania	2004	Sexually violent delinquent child: found delinquent for an act of sexual violence and remaining in the institution or facility upon attaining 20 years of age ("aging out" juveniles)	Likely	Mental abnormality or personality disorder: congenital or acquire condition of a person affecting the person's emotional or volitional capacity
South Carolina	1998	Convicted of, found incompetent to stand trial, found not guilty by reason of insanity, or guilty but mentally ill of sexually violent offense	Likely	Mental abnormality: mental condition affecting a person's emotional or volitional capacity
Texas (outpatient commitment only)	1999	Repeat sexually violent offender	Likely	Behavioral abnormality: a congenital or acquired condition that affects a person's emotional or volitional capacity

US Federal Government	2007	A person who is in the custody of the Bureau of Prisons, or who has been committed to the custody of the Attorney General , or against whom all criminal charges have been dismissed solely for reasons relating to the mental condition of the person	Serious difficulty in refraining from commitment of a sexually violent act or child molestation	Serious mental illness, abnormality, or disorder
Virginia	2003	Convicted of a sexually violent offense or unrestorably incompetent to stand trial	Likely (Static 99 = 5+)	Mental abnormality or personality disorder: emotional or volitional capacity that renders the person so likely to commit sexually violent offenses that he constitutes a menace to the health and safety of others
Washington	1990	Convicted of or charged with a crime of sexual violence	More probably than not	Mental abnormality and/or personality disorder: a congenital or acquired condition affecting the emotional or volitional capacity which predisposes the person to commit criminal sexual acts
Wisconsin	1994	Convicted of, or adjudicated delinquent for, a sexually violent offense, not guilty of, or not responsible for a sexually violent offense by reason of insanity or mental disease, defect, or illness	Much more likely than not	Mental disorder: a congenital or acquired condition affecting the emotional or volitional capacity that predisposes a person to engage in acts of sexual violence

Note: Adapted from Doren (2010a, 2010b); Jackson & Richards (2007)

states, for example, Minnesota, a "course of harmful sexual conduct" or a "habitual course of sexual misconduct" (e.g., two or three sexual offenses, respectively) must be determined as part of the commitment analysis and case. However, the statute and subsequent case law do not require that the person has a history of formal adjudication for all such sexual offenses but rather that there is sufficient evidence of sexual offending in their history and that such unadjudicated sexual offending is proved at trial or by stipulation by a respondent. In such instances, the burden is on the state to demonstrate that the individual has either offered credible admissions (self-report) of such sexual offending or to prove via witness or other testimony that an individual is characterized by some history of reported but unadjudicated sexual offending. In addition, in Minnesota, under the SDP statute, harmfulness of the sexual offending is at issue; there is a rebuttable presumption that the sexual offending has been physically and/or emotionally harmful for victim(s).

Mental Conditions or Dysfunctions that Constitute a Mental Abnormality and/or a Personality Disorder

All SVP statutes require some finding that the respondent be characterized by some psychological and/or psychiatric characteristics that are related to their sexual offending; these characteristics or "mental conditions" are most commonly referred to as a "mental abnormality" or a "personality disorder." Such a "mental condition" must be one that creates an increased likelihood of sexual offending in the future, typically if the person were to be released unconditionally into the community. As noted previously, the terms "mental abnormality" and even "personality disorder" are defined in a general manner by statute and are not derived from or necessarily synonymous with terms or conditions from the behavioral or medical sciences. This is quite similar to most areas where forensic mental health practitioners are asked to offer opinions: "insanity" and "competency to stand trial" in criminal law, "best interests of a child" in child custody matters, or "mental illness" in civil commitment. Thus, forensic mental health practitioners are applying psychological and/or psychiatric practice, principles, methods, and available knowledge to constructs created in the legal system.

Currently, approximately 70 % of the states that have SVP statutes utilize relatively similar language to define a "mental abnormality," namely, "a congenital or acquired condition affecting the emotional or volitional capacity that predisposes the person to the commission of future sex offenses" or conditions "which makes the person likely to engage in… acts of sexual violence." Some states such as Washington and Kansas also explicitly include a personality disorder as one type of condition that justifies civil commitment as a SVP. In other jurisdictions (such as Minnesota), the mental abnormality is identified as "a sexual, personality, or other mental disorder or dysfunction." It is useful to remember that in the Pearson case from 1939, the US Supreme Court upheld the constitutionality of a Minnesota statute that required that "the existence in any person of such conditions of emotional instability, or impulsiveness of behavior, or lack of customary standards of good judgment, or failure to appreciate the consequences of his acts, or a combination of any such conditions, as to render such person irresponsible for his conduct with respect to sexual matters and thereby dangerous to other persons." Per Pearson (cited in *Hendricks*), the presence of one or more personality dimensions or traits alone can provide an adequate basis for CCSVP, similar to the requisite mental disorder/abnormality or personality disorder referenced in more contemporary SVP statutes. Thus, effectively, the constitutionality of civil commitment of sexual offenders in the United States has been upheld if a sexual offender is characterized by just one or several particular personality dimensions (per Pearson, largely those associated with antisocial personality disorder) that are linked to his potential dangerousness for sexual offending.

In the first contemporary ruling on the constitutionality of civil commitment of sexually violent predators, the US Supreme Court in *Kansas v. Hendricks* found that the Kansas SVP statute was constitutional because of its attempt to narrow its focus so that commitment required some factor beyond simply past sexual offenses as the basis for the commitment. The Court noted that it had historically sustained civil commitment statutes when they had coupled proof of dangerousness (e.g., potential future offenses) with proof of some additional factor involving particular types of mental conditions or characteristics. The US Supreme Court stated:

> the Kansas act is plainly of the kind with other civil commitment statutes: It requires a finding of future dangerousness, and then links that finding to the existence of a 'mental abnormality' or 'personality disorder' that makes it difficult, if not impossible, for the person to control his dangerous behavior. The precommitment requirement of a 'mental abnormality' or 'personality disorder' is consistent with the requirements of these other statutes that we upheld in that it narrows the class of persons eligible for confinement for those who are unable to control their dangerousness. (p. 358)

Further, regarding the nature and definition of the mental condition (e.g., the mental abnormality or personality disorder) to be considered as the basis for commitment, the Court opined that no particular "mental illness" was a necessary prerequisite for civil commitment. Rather, that decision stated "… the term 'mental illness' is devoid of any talismanic significance. Not only do 'psychiatrists disagree widely and frequently on what constitutes mental illness,' *Ake v. Oklahoma*, 470 U.S. 68 (1985), the court itself has used a variety of expressions to describe the mental condition of those properly subject to civil confinement" (p. 359).

The Court further stated: "Those persons committed under the Act are, by definition, suffering from a 'mental abnormality' or a 'personality disorder' that prevents them from exercising adequate control over their behavior." The Court also noted that legal definitions (e.g., insanity and competency) varied substantially from their mental health counterparts and that "the States have, over the years, developed numerous specialized terms to define mental health concepts. Often, those definitions do not fit precisely with the definitions employed by the medical community" (p. 359). It noted that legal definition that take into account "'such issues as individual responsibility … and competency,' need not mirror those advanced by the medical profession." Further, in various statements as part of its decision in *Hendricks*, the Court noted that prior criminal sexual behavior was accorded a particularly significant and prominent role in the identification of a mental abnormality. The Court stated that prior criminal sexual behavior was to be used "for evidentiary purposes, either to demonstrate that a 'mental abnormality' exists…" (p. 362). It also emphasized that a prior conviction for or charged sexual offense as evidence of prior criminal conduct was significant "to determine whether a person suffers from a 'mental abnormality' or 'personality disorder' (their 'mental condition')" [as well as "to predict future behavior" that "poses a threat to the public" (pp. 362)]. Such language clearly directs for as careful an analysis as possible of the available data regarding the actual criminal sexual conduct so as to provide the strongest basis for determining if and/or which elements of a mental abnormality might be implicated in the enactment of sexual offenses. Further, given the prior decision in and continuing recognition of *Pearson*, the Court acknowledged that one or more elements of a mental disorder linked to sexual offending could serve as a sufficient basis for civil commitment relative to problematic, recidivistic criminal sexual behavior.

[It is also notable that the US Supreme Court explicitly recognized that the persons who were sexual offenders CCSVP might not be treatable:

> "Accepting the Kansas court's apparent determination that treatment is not possible for this category of individuals does not obligate us to adopt its legal conclusions. We have already observed that, under the appropriate circumstances and when accompanied by proper procedures, incapacitation may be a legitimate end of the civil law…*we have never held that the Constitution prevents a State from civilly detaining those for whom no treatment is available, but who nevertheless pose a danger to others.*" (p. 365, emphasis added)

Further, the US Supreme Court noted that in Kansas' statute, "the confinement's duration is instead linked to the stated purposes of the commitment, namely, to hold the person until his mental abnormality no longer causes him to be a threat to others."]

Thus, the decision in the Hendricks case indicated that a so-called mental abnormality and/or a "personality disorder" are each conditions that can serve as an element for CCSVP. Moreover, the Court appeared to emphasize that various constructions of a "mental illness" or mental abnormality could serve as the basis for such commitments; the commitment condition that is permissible to serve as a condition for SVP commitment is thus potentially defined quite broadly and by varied perspectives. More specifically, despite the opportunity to privilege a particular diagnostic nomenclature [e.g., the DSM-IV (1994) of that time], the Court indicated that CCSVP does *not* require a specific diagnosis from any formal diagnostic manual such as the more current DSM-IV-Twin Rivers or "5" (APA, 2000, 2013), as examples. Consequently, the opinion of the Court would appear to permit a very broad set of mental conditions to serve as a basis for CCSVP (e.g., including one or more of the four personality dimensions specified in Minnesota's Sexual Psychopathic Personality Statute). Similarly, most state statutes typically contain no language ruling out any specific diagnosis that might qualify as a mental abnormality or personality disorder. In *Brock v. Seling* (2004), US Court of Appeals (Ninth Circuit) identified that *Kansas v. Crane* "does not require specific findings on the nature of the condition responsible for a sexually violent predator's lack of control" and that "some combination of a mental abnormality and personality disorder" associated with sexual offending was sufficient to meet the "Crane standard."

Conventionally, in practice, evaluators in SVP cases have typically (but not exclusively) relied on the DSM-IV (APA, 1994), the DSM-IV-TR (APA, 2000), and now the DSM-5 (APA, 2013) as the primary source of guidelines for identifying "mental abnormalities" and "personality disorders." However, it seems clear that given the general nature of the legal construct of mental abnormality and personality disorder, particularly in the context of the available US Supreme Court cases is not required; the available diagnostic systems provide a convenient "at a particular" time view of how mental health conditions may be best viewed and categorized and were not developed to provide either etiological or treatment guidance. Thus, the DSM-IV-TR and particularly the more recent DSM-5 are clear that, at best, they represent a current, even temporary, "consensus about the classification and diagnosis of mental disorders at the time of its initial publication" (APA, 2000, xxxiii; APA, 2013) [a point validated by the US Supreme Court decision in *Hendricks*]. The APA noted: "In DSM-IV, each of the mental disorders is conceptualized as a clinically significant behavioral or psychological syndrome or pattern that occurs in an individual and that is associated with present distress (e.g., a painful symptom) or disability (i.e., impairment in one or more important areas of functioning) or with a significantly increased risk of suffering death, pain, disability, or an important loss of

freedom." The DSM-IV-TR utilized a categorical system for dividing mental disorders into "types" but explicitly recognizes that within these "types" there will be considerable heterogeneity and "boundary cases." In addition, the DSM-IV-TR itself notes that "specific diagnostic criteria included in the DSM-IV were meant to serve as guidelines to be informed by clinical judgment and not meant to be used in a cookbook fashion…the exercise of clinical judgment may justify given a certain diagnosis other an individual even though the clinical presentation falls just short of meeting the full criteria for the diagnosis as long as the symptoms that are present are persistent and severe" (APA, 2000, p. XXXII). Similarly, DSM-5 states: "Diagnostic criteria are offered as guidelines for making diagnoses, and their use should be informed by clinical judgment…On the basis of the clinical interview, text descriptions, criteria and clinician judgment, a final diagnosis is made" (p. 21). A particular emphasis of the DSM-5 is the increasing evidence that scientific evidence of various types directs "…that DSM, like other medical disease classifications, *should accommodate ways to introduce dimensional approaches to mental disorders, including dimensions that cut across current categories*. Such an approach should permit a more accurate description of patient presentations and increase the validity of the diagnosis" (p. 5, emphasis added). The DSM-5 has gone so far as to provide both a categorical and dimensional sets of criteria for personality disorders for describing the nature of combinations of maladaptive personality characteristics that create impairment for individuals.

Several things need to be drawn from these statements from the most recent DSMs. First, they are guidelines determined by contemporary consensus and not absolutes relative to categorizing the nature and types of mental disorders that actually may exist in persons. Second, there is clear and increasing recognition that a categorical approach to assigning person's mental disorders is most likely a less accurate manner of describing the nature and degree of signs (observable phenomena) and symptoms (subjective report) or actual constellations of demonstrable personality traits that characterize actual persons experiencing mental disorders. Consequently, it makes increasing sense to describe the nature, severity, context, and impairments associated with psychological and/or psychiatric characteristics or features that relate to the actual set of disordered mental signs, symptoms, and/or maladaptive personality traits.

Relative to forensic purposes, the DSM-IV-TR and the DSM-5 both emphasize that the included "diagnoses and diagnostic information may assist legal decision makers in their determinations" (p. 25) but may be insufficient to establish the existence of a legal term or standard. The DSM-5 emphasizes that an individual's elements or dimensions of mental disorders and their effect on particular abilities of an individual, including thoughts, feelings, and/or behaviors (and their related functional impairments) may vary widely within diagnostic categories. Consequently, in forensic contexts, beyond simply signs and symptoms identified as characterizing a disorder, there must be some specification of the relative effect of mental disorders on a person's capacities or ability or inability to perform some act. This relates to the various legal constructs that are central to most areas of the practice of forensic psychology. Just as "mental abnormality" is a legal concept so are such constructs as "insanity," "competence to stand trial," "Best interests of the children," and "personal injury." Greenberg, Shuman, and Meyer (2004) noted the general problems with the reliance on formal psychiatric diagnosis in forensic matters. They point out that "Psychiatric diagnosis provides a 'Good Housekeeping Seal of Approval,' which appears to validate the relevance and reliability of expert testimony in a language that seems familiar, yet professional" (p. 7). However, they note that the language of formal diagnostic systems is problematic for judicial decision-making by "obfuscating" professional opinions and testimony. In particular, they call attention to the fact that a substantial number of required diagnostic criteria reference internal events and thus involve the veracity and/or ability of an individual in providing such self-report. In particular, they emphasize that litigants are likely to be motivated to report symptoms in line with the "incentives" or their goals for a particular legal case. Greenberg et al. argued that in many forensic matters, the key issue is not diagnosis per se but functional capacity and consequently an evaluation should be focused on the actual behavior of a litigant as related to particular psychological factors or dimensions. Again, regarding SVP cases, such a point is validated by the language of the Court in Hendricks with its emphasis on utilizing the "criminal sexual behavior" to infer the presence of a mental disorder, as well as providing the basis or nexus for the particular dimensions or elements of the mental disorder or personality disorder that relate to past sexual offending and the probability of similar future behavior.

Relative to identifying a mental abnormality and/or personality disorder as the basis for issues in control and risk for future sexual offending, certain types of conventional mental conditions have been viewed as particularly relevant to SVP cases (although no disorders are typically explicitly excluded from consideration). In particular, per most state statutes, potentially relevant conditions are those that predispose an individual to committing future sexual or sexually violent offenses. An obvious qualifying set of disorders for CCSVP are the paraphilic disorders. As noted in the *Hendricks* decision, a paraphilia (pedophilia, now identified as pedophilic disorder) was noted to be a condition that the mental health field "itself classifies as a serious mental disorder… which qualifies as a 'mental abnormality' under the Act, thus plainly suffices for due process purposes." Per DSM-IV,

diagnoses of paraphilias were based on "recurrent, intense sexually arousing fantasies, sexual urges, or behaviors," involving particular activities or objects/persons which have occurred over a period of at least 6 months and which the individual has acted on or which have caused the individual distress or interpersonal difficulty. Historically, common paraphilias identified among SVP candidates per the DSM-IV-TR have been pedophilia (now pedophilic disorder per DSM-5) and variants of paraphilia not otherwise specified [(NOS) (now other specified paraphilic disorder per DSM-5)], either subtyped or specified as non-consent (or coercion or rape) or hebephilia [(NOS) (now other specified paraphilic disorder per DSM-5), specified as hebephilia or hebephilic disorder]. Pedophilic disorder involves deviant sexual interest in children, generally under age 14. Hebephilic disorder involves deviant sexual interest in peri- and postpubescent minors (see Stephens & Seto, 2015). Paraphilia NOS (non-consent/coercion) or other specified paraphilic disorder (non-consent/coercion) is applied to persons who have attempted or committed multiple sexual assaults against non-consenting victims and/or in a coercive manner. Per the DSM-5, these conditions would be classified as pedophilic disorder, other specified paraphilic disorder (hebephilia), and other specified paraphilic disorder (non-consent) or sexual sadism disorder.

For a variety of reasons, a particular rape paraphilia was not designated in DSM-IV; consequently, in civil commitment settings. Consequently, "A commonly used solution is to diagnose such individuals as paraphilia NOS, nonconsent" (Witt & Conroy, 2009). Although often attributed as a product of or "creation" of civil commitment proceedings, this nomenclature or designation had been utilized to describe recidivistic rapists case in criminal/judicial and correctional evaluation settings as well. Doren (2002) identified that the term paraphilia NOS (non-consent) was appropriate and accurate in describing a subset of recidivistic rapists and provided some suggested criteria in distinguishing such a designation. Most recently, the proposed paraphilic disorder criteria for DSM-5 originally included a specific diagnosis of coercive paraphilic disorder but prior to publication of the DSM-5 such a diagnostic category was again not identified as a specific paraphilic disorder per se, in part due to the available research indicating the difficulty distinguishing between the source of arousal between persons with so-called sexual sadism and those characterized by what were viewed as a coercive paraphilic disorder. However, subsequent research by Knight, Sims-Knight, and Guay (2012) has indicated that there is evidence that coercive paraphilia may exist as a dimension along an "agonistic continuum." They noted, "The IRT analyses do suggest a potential solution for measuring the Agonistic Continuum. They suggest a single dimension in which coercive fantasies and behavior are at the lower end, moving into arousal to psychological suffering of humiliation and fear, and finally ending at more severe forms of sadism at the higher end. Individuals can be ordered on this continuum according to the level of the scale they manifest" (p. 8). Thus, persons characterized by sexual fantasies, urges, and behavior involving "mere" coercion appear to fall on the lower end of the agonistic continuum, with sexual sadism representing a more extreme form of sexual fantasies, urges, and behavior on the upper end of the continuum. It is notable that a recent survey of case law regarding paraphilia not otherwise specified (non-consent) reported that, to date, all courts that have considered the issue of admissibility of the diagnosis between 2008 and 2011 admitted the conditions, and most courts found it sufficient to support a finding of a mental abnormality or similar condition in SVP proceedings (e.g., King, Wylie, Brank, & Heilbrun, 2014).

DSM-5 appears to have dealt with the dilemma of how to diagnose rape-related paraphilias by largely incorporating them into an expanded concept of sadism. Criterion A can be read as incorporating arousal to rape. In addition, it appears that the text and criteria provide that a diagnosis of Sexual Sadism Disorder can be made on the basis of recurrent 'sexual behavior involving the infliction of pain or suffering on a non-consenting individual' even where this behavior pattern is NOT accompanied by any admission of related sexual fantasies or urges. Further, it is clarified that this recurrence of sexual behavior involving the infliction of pain or suffering on a 'non-consenting individual' is sufficient to meet criterion A and B. Consequently, recurrent behavior involving sexual coercion should be taken as sufficient grounds for inferring that the person experiences sexual arousal from inflicting this kind of psychological suffering. As a result, the practice of diagnosing a paraphilic disorder based on multiple aggressive, forced, and/or violent stranger rapes appears to have been officially legitimated within DSM-5 by being incorporated into one of the specified paraphilic diagnoses (Sexual Sadism Disorder). From this perspective, the construct of Sexual Sadism Disorder has clearly been expanded and clarified to a more subtle and different concept of Sexual Sadism as described in the DSM-IV, one that clarifies and incorporates much of what has been previously viewed as rape-related paraphilic disorders such as the proposed Coercive Paraphilic Disorder. Given the degree to which other Paraphilic Disorders were maintained with no or little change in their substantive criteria, the changes in the language of Sexual Sadism Disorder appears particularly significant. Further, it appears convergent with the aforementioned research findings of Knight et al. (2012).

In addition to paraphilic disorders, personality disorders, particularly antisocial and narcissistic personality disorders, are common conditions of concern for evaluators in CCSVP. Studies have identified that many individuals present with maladaptive personality traits from several different specific personality disorder categories and show more of a mixed

versus a "single category" presentation (e.g., Verheul & Widiger, 2004). Research has demonstrated that across the recent DSMs, "Personality Disorder Not Otherwise Specified (e.g., PDNOS) or what had previously been termed a 'Mixed' Personality Disorder, are typically one of the most common 'PDs' identified by clinicians in practice and a meta-analysis across both structured and unstructured assessments" (e.g., Widiger & Trull, 2007). Thus, PDNOS is used to designate SVP candidates with a mixed presentation of maladaptive personality traits and/or who meet criteria for more than one specific personality disorder. [It is noted that in the case of *US vs. Murdoch* (1996), the US Ninth Circuit Court referenced DSM-IV and concluded that personality disorder NOS "comports with the general connotation of a 'disease or defect' in that it is neither a temporary condition nor a chosen way of responding but rather a systemic, impairing psychiatric abnormality" (p. 480).]

Finally, psychopathy is a well-recognized mental disorder, condition, or dysfunction that is not specifically identified in the DSM-IV or DSM-5 although it is referenced within the diagnostic criteria for antisocial personality disorder (ASPD). However, psychopathy (either measured as a category or dimensionally/linearly) has been identified as having a unique association with higher rates of criminal, violent, and sexual offending behavior (e.g., Hanson & Morton-Bourgon, 2004; Hare, 2003a, 2003b, 2003c; Hemphill, Hare, & Wong, 1998; Hemphill, Templeman, Wong, & Hare, 1998). Per a more recent meta-analysis, a higher degree of psychopathic traits is associated with a greater degree of sexual offending; persons with higher degrees of psychopathy appear to constitute a subgroup of sexual offenders who are more predisposed to future sexual offending (e.g., Hawes, Boccaccini, & Murrie, 2012). It is notable that some states' statutes pertaining to SVPs require consideration of psychopathy as part of the evaluators determination of mental disorder. Other states have recognized psychopathy as a distinct mental abnormality and/or personality disorder.

Each of the DSM-IV or DSM-5 diagnostic categories most commonly identified as mental abnormalities and/or personality disorders characteristic of SVPs has been the subject of criticism or attack. The prior use of a paraphilia NOS (non-consent/coercion/rape) diagnosis was attacked for evaluators following the current DSM-IV-TR criteria for relying on "just" a pattern of coercive or forced sexual behaviors to assign a diagnosis of a rape paraphilia (although the same criticism could be leveled against pedophilia or now pedophilic disorder). However, as noted by King et al. (2014), in the period between 2008 and 2011, to date all courts that reached the issue of the admissibility of this diagnosis both admitted it as a potentially viable mental abnormality and most found it sufficient to support classifying an individual as a SVP. Hebephilic disorder [or other specified paraphilic disorder (hebephilia)] has been argued to represent a normative phenomenon such that many males may show arousal to adolescents, particularly female adolescents; nonetheless, the ICD-10 includes early pubertal age in its definition of pedophilia, and studies of pubertal development indicate that aspects of pubertal development may not occur until age 15 among some youth. Some have contended that antisocial personality disorder is not an appropriate diagnosis to support civil commitment as a sexually violent predator. Such a personality disorder has been argued to be insufficient as a diagnosis because a large number of persons with this condition have no apparent history of sexual offending and/or engage in a broad range of antisocial behavior, inclusive of sexual offending. However, in *Kansas v. Crane*, a CCSVP was upheld for a sexual offender with a diagnosis of antisocial personality disorder (in addition to exhibitionism), following the respondent's plea to aggravated sexual battery. [It is notable that after being released from sexual offender treatment after his commitment was overturned by the Kansas Supreme Court, Mr. Crane was subsequently arrested for attacking a woman and charged with five counts of sexually motivated crimes.] Significantly, from an epidemiological perspective, only about 50 % of persons in the United States who meet diagnostic criteria for ASPD have an official record of some criminal offending (Robins & Regier 1991). That is, while a number of persons meet criteria for ASPD, many have not engaged in violent behavior but rather have enacted other rule-breaking and criminal behavior, demonstrated irresponsibility, or disregard for others. This suggests that half of the individuals who meet criteria for ASPD who are detected by the criminal justice system are somewhat distinct as persons with ASPD. In addition, while most persons with antisocial personality disorder may be more likely to commit nonsexual criminal offenses, the question for CCSVP purposes is one of whether a particular sexual offender diagnosed with antisocial personality disorder and under consideration as a potential SVP, with a history of one or more sexual offenses, satisfies the statutory risk threshold for as a SVP. That is, while an individual with ASPD may be at risk to commit other crimes as well as sexual offenses, SVP statutes only require that his risk to commit sexual offenses as a function of his particular set of maladaptive antisocial personality traits affects his emotional and volitional control to a serious degree relative to their sexual offending history. As Elwood (2009) explained, while behaviors such as cigarette smoking may be associated with various health conditions, that does not minimize or change the finding that such risk factors are, in fact, associated with specific conditions. Similarly, while ASPD is associated with various problematic conditions or behaviors, that does not minimize or change the empirical findings that this condition is particularly strongly associated with sexual offense recidivism. Case law exists for most states with SVP statutes validating that ASPD has been found to be sufficient as a mental abnormality and/or a personality disorder as the

basis for commitment; effectively, the US Supreme Court in *Kansas v. Crane* affirmed that position as well.

More generally, across states with SVP statutes, district court and appellate court decisions have upheld the commitment of sexual offenders with diagnoses of pedophilia, paraphilia NOS (non-consent/coercion), hebephilia, antisocial personality disorder, and personality disorder NOS. To date, both the state and federal judicial system has affirmed such disorders as a legitimate basis for CCSVP despite the varied criticisms of such diagnoses. In addition, in certain states and federal court, various other conditions apart from paraphilias have also been found to constitute mental abnormalities relative to repetitive sexual offending, including alcohol or substance abuse/dependence, borderline personality disorder, bipolar affective disorder, sexual disorder not otherwise specified, intellectual and developmental disabilities, and schizophrenia. Further, a qualifying "mental abnormality" has also been determined by courts to be a product or interaction among aspects of several mental and/or personality disorders or a combination of mental/personality characteristics. Again a case to this point is that of Mr. Crane who was determined to be a SVP based on the combined presence of ASPD and exhibitionism but not either condition on its own.

Looking to the future, as with other areas of forensic mental health, it seems likely that there is an increasing convergence of expert professional forensic opinion and the evolution of comprehensive, dimensionally based diagnostic systems. Relative to the former, Greenberg et al. (2004) have identified that "…the circumstantial use of diagnosis in the forensic setting is potentially more misleading than helpful to the trier of fact…We therefore urge that, as a general rule, forensic mental health professionals not testify in terms that include psychiatric diagnoses, unless they are required to do to address the applicable legal standard" (p. 13). Rather, Greenberg and Shuman encouraged the utilization of more specific psychological elements, characteristics, processes, and so on to provide a functional analysis of the relevant capacities, other psychological issues, and/or impairments that are encompassed by governing legal constructs. As Greenberg and Shuman identify with the application of psychological and psychiatric elements to forensic cases more narrowly, it seems evident from the process and product that was manifest in the development and in the actual presentation of the DSM-5, professionals are increasingly of the belief that in broader clinical application, nosological systems have recognized and have already begun to implement a dimensional approach to psychiatric classification (e.g., for personality disorders) as well as demonstrated increasing recognition of the artificial "overlap" of diagnostic "groups" of disorder. Per the preface of the DSM-5:

> …we recognize that mental disorders do not always fit completely with the boundaries of a single disorder. (p. 5)

In noting that the DSM must evolve relative to research advances, it was noted:

> "One important aspect of this transition derives from the broad recognition that a too rigid categorical system does not capture clinical experience or important scientific observations…These findings mean that DSM, like other medical disease classifications, should accommodate ways to introduce dimensional approaches to mental disorders, including dimensions that cut across current categories. Such an approach should permit a more accurate description of patient presentations and increase the validity of a diagnosis…" (p. 5, emphasis added)

Along these lines, it seems particularly notable that in clinical practice (per the recent DSM-IV), the most common diagnoses assigned in clinical settings were "NOS" or "not otherwise specified diagnoses" (e.g., Verheul & Widiger, 2004; Verheul, Bartak, & Widiger, 2007); thus, in actual mental health practice, most client's presentations of signs and symptoms were those of a "mixed" nature (e.g., across disorders, such as anxiety and depression or antisocial and borderline personality disorders) or did not fully satisfy the formal criteria for the listed specific diagnostic categories. Finally, a review of empirically oriented mental health journals demonstrates that an expanding body of research provides a scientific basis for dimensional models of psychopathology and it's increased and marked utility in providing more coherent and fine-grained applications of such understanding of what would be regarded as maladaptive and dysfunctional experiences and behaviors of individuals (e.g., Krueger et al., 2002, Krueger, Markon, Patrick, Benning, & Kramer, 2007; Krueger, Skodol, Livesley, Shrout, & Huang, 2007; Markon & Krueger, 2005; Markon, Krueger, & Watson, 2005).

The Nexus Between Mental Disorder and Elevated Risk for Sexual Offending: Emotional and Volitional Impairment and Predisposition

As with other aspects of the statutory and/or judicial language defining SVP, additional legally created terms that have some relationship to the behavioral, psychological, or psychiatric fields are also important factors in the determination as to whether a particular sexual offender meets criteria as a SVP. The most common statutory language, as noted previously, indicates that a diagnosis or some other described mental/personality sign, symptom, disorder, or dysfunction (problematic or abnormal characteristics) per se is often considered insufficient on its own to meet the criteria of a "mental abnormality." Rather, those statutes either direct or suggest that the so-called mental abnormality for a particular individual must have some particular characteristics or qualities relating to the "mechanism" of and probability for

committing future sexual offenses. First, as indicated previously, the most common definitions of "mental abnormality" indicate that as a mental disorder, it must affect or change a sexual offender's "emotional or volitional capacity." Second, most commonly the condition(s), disorder(s), or dysfunctions, through this effect, must *predispose* or influence a person to commit additional sexual offenses. Impairment is typically understood as or defined as involving "damage" or "diminishment to some functioning"; thus, a "mental abnormality" must be one or more signs or symptoms such that it "damages" or "alters" positive or negative emotional capacity and/or "volitional" capacity to a degree that effective functioning is decreased. Regarding emotional capacity, a disorder might affect an individual in several ways. First, emotional capacity might involve the threshold (e.g., lower) or intensity of the potentiation, elicitation, or intensification of a *positive* emotional state (e.g., the pleasure of sexual arousal; the hedonic anticipation of some set(s) of sexual behavior; generalized arousal; persistence of general, hedonic, or sexual arousal; and/or broad-spectrum thrill-seeking) and/or a negative emotional state (e.g., anger, distress, or, in some cases, sexual urge or desire). In these instances, the nature of the affective experience (low threshold to stimulation, heightened sensitivity, frequency of stimulation, pronounced reactivity—intensity—and delayed refractory capacity) could singly or in combination predispose someone to sexual offending. Second, emotional capacity might be affected by assorted conditions that limit or negate certain affective experiences that might inhibit sexual offending such as guilt or empathy. Thus, individuals with a variety of characteristics (evidence of callousness, a generalized lack of emotionality, lack of guilt or empathy, or particular attitudes about the perceived lack of effects of sexual offending on others or the perceived self-reward associated with obtaining general or specific sexual gratification) might be predisposed to sexual offending because they are deficient in emotional and/or cognitive capacities that might limit or inhibit the enactment of an incident of sexual assault or violence.

Regarding volitional capacity, a disorder would need to affect the persons' ability to recognize or manage/regulate an impulse or urge for inappropriate sexual behavior, either by "permitting" or aggravating/amplifying a "press" toward a particular behavior (e.g., sexual arousal and desire, thrill-seeking, entitlement, self-gratification) by undermining proximal self-control and/or by compromised executive functioning. One can easily understand how various deficits in the multiple aspects of cognition [e.g., both in terms of cognitive processing and content (beliefs or schemas)] or insensitivity to social norms or values could each or in differing combinations be of sufficient intensity or frequency that it would affect an individual's self-regulation relative to predispositions toward sexual harm toward others. Further, issues in emotional capacity likely interact with cognitive capacity and do so to varied degrees across persons (e.g., less to more). Certain affective states (either positive ones such as sexual arousal or negative ones such as anger or frustration)—"hot" experiences or situations—might additionally or further compromise different dimensions of cognitive self-regulation or executive functioning, that is, even generalized arousal can become transformed into sexual arousal by virtue of context or situational cues.

A sexual offense, as a sexual behavior, is motivated behavior; a person seeks out a particular sexual activity or experience as an end or goal that is desired. Sexual desire or arousal regarding an object, part-object, activity, and/or person is viewed as a motivational state, influenced by both internal and external factors. That desire could be long-standing and/or episodic, or it could be more fleeting and momentary for an individual. For persons with paraphilias and paraphilic disorders, it is likely that there is regular or recurrent sexual fantasy that leads to heightened sexual arousal; that sexual arousal could be generalized toward a particular category of victims or particular acts and/or it could be directed at a specific person or types of sexual activities. Sexual arousal, in and of itself, is almost always a hedonic state, and, depending on a person's degree or intensity of generalized sexual preoccupation and their responsivity to the experience of arousal, it may lead to sexual urges and a desire for release or gratification and at various levels of intensity. For sexual offenders not characterized by one or more paraphilias, their sexual urges are more likely a function of one or more additional factors—e.g., of emotional arousal determined by both generalized arousal (e.g., anger, distress, loneliness) and/or more immediate sexual arousal. In particular contexts or situations that contain perceived high generalized sexual stimulation or perceived sexual provocation and/or perceived opportunity, particular individuals are likely to act on the "totality" of their arousal and seek more heightened sexual stimulation and gratification to obtain some release from their generally aroused state(s). Alternately, for persons who seek sexual contact for predominantly (or even exclusively) nonsexual motivation, various personality traits [(motivators per Hoberman (2015)] and dimensions of disinhibition are associated with sexual reoffending. Both paraphilic and non-paraphilic sexual offenders can be subject to particular personality traits or states where they are characterized by various non-sexual motivators as well as a lack of internal affective controls (e.g., empathy, guilt), deficits in select internal cognitive controls (e.g., a lack of "moral" values, the ability to weigh alternative courses of action, attitudes supportive of general or more specific sexual offending or of persons as sexual objects) and/or an indifference to external controls (e.g., the

belief that they will not be caught and/or will not receive significant consequences for sexual acting out). While some sexual offending by some sexual offenders will be characterized by extensive fantasy, rehearsal, and planning, other sexual offending by some sexual offenders will be of a more impulsive, "non-reflective," or reactive nature. Both paraphilic and non-paraphilic offenders may be characterized by sexual offending that is either more or less anticipated or impulsive at particular times.

Additionally, sexual offending, like other behavior is a function of situational or contextual factors, such as real or perceived opportunity. Thus, Mischel (2004) pointed out that individual differences are expressed less in consistent cross-situational behavior and more in distinctive (but relatively stable) patterns of "if, then situation behavior relations" that form what he describes as contextualized, psychologically meaningful *personality signatures* (e.g., "he does A when X, but B when Y"). Such "if, then" patterns or "personality signatures" (or behavioral scripts) are likely to be activated in relation to the perception of specific situations; those scripts would be similar across perceived similarities in particular situations but might vary when such contexts were perceived as or were/are different. Further, various acute variables such as situational emotional states, cognitive beliefs elicited in particular situations, and, in particular, the disinhibiting or stimulating influence of alcohol and drugs can further increase the probability of acting upon either long-standing or more immediate sexual and/or nonsexual urges at particular times. Consequently, while sexual fantasies and urges may remain persistent, albeit fluctuating experiences over time (e.g., it is likely that no person has such occurrences *all* the time), the enactment of sexual offending will be function of a relatively "person-specific" sexual elements such as the availability of an "appropriate" victim (characterized by relatively preferred sexual stimuli) and perceived relatively permissive circumstances or context. The significance of context is reflected in the observation that effectively no sexual offenses against children or older (e.g., adolescent or adult) females occur while, sexual offenders are institutionalized.

As noted, SVP laws often require that combination of one or more "mental abnormalities" or personality disorders and their associated "impairment(s)" *predispose* an individual to commit sexual offenses. Most generally, a predisposition is simply a tendency to act in a particular or expected way or susceptibility toward particular behavior or actions. As Elwood (2009) has written, the most useful definition of "predispose" in this context is that "the effect of the mental disorder [is] to increase the incidence of sexual recidivism," such that "predisposition is equivalent to a risk factor and can be established by a statistical association, without having to invoke a casual mechanism (e.g., how it leads to such an increase)" (p. 401).

Serious Difficulty in Control in Relation to Emotional and Volitional Impairment

CCSVP is similar, relative to other types of civil commitment, in the requirement that an individual's dangerousness or severe impairment (in this case, likely difficulty controlling their sexual offending) be associated with or linked to some mental condition(s), a "mental abnormality" or personality disorder. As noted above, the most common type of SVP statute defines the mental abnormality as a condition affecting emotional and/or volitional capacity. Thus, a mental abnormality is not just a mental disorder per a DSM-5 diagnosis or some similar diagnosis. According to DSM-5: "Even when diminished control over one's behavior is a feature of the disorder, having the diagnosis in itself does not demonstrate that a particular individual is (or was) unable to control his or her behavior at a particular time" (p. 25). The issue of volitional capacity and/or impairment or "self-control" has historically played a central role in the CCSVP. As noted, in the first "SVP" case heard before the US Supreme Court in 1939, that Court upheld a Minnesota Supreme Court decision which narrowed the interpretation of an older form of an "SVP" statute to persons with a "habitual course" of sexual offending who "have evidenced an…utter lack of power to control their sexual impulses." Again, in *Kansas v. Hendricks* (1997), the discussion of mental abnormality was linked to an individual's difficulty in regulating and/or "controlling" sexual offending and that volitional impairment limited those individuals appropriate for CCSVP. In such cases, the Supreme Court's judicial language indicated that to be determined to be a SVP, it would have to be determined that it was "seriously" difficult—problematic or "hard"—for the person to manage their potentially dangerous behavior as result of one or more psychological/psychiatric elements or "disorders."

In *Kansas v. Hendricks* (1997), the US Supreme Court explicitly rejected the notion that in order to be determined a SVP, an individual must manifest a total or complete lack of control over their sexual offending behavior. Rather, that decision indicated that a SVP statute would fall within constitutional limits if a mental abnormality and/or personality disorder "indicated that civil commitment of sexual offenders could be applied to 'those who suffer from a volitional impairment rendering them dangerous beyond their control'" (p. 358) and thus concluded that some degree of "volitional impairment" narrowed the group of sexual offenders subject to civil commitment sufficiently so that such civil commitment of sexual offenders was deemed constitutional. It was noted that a finding of volitional impairment served to limit such civil commitment "in that it narrows the class of persons eligible for confinement to those who are unable to control their dangerousness." Subsequently, in *Kansas v. Crane*

(2002), a committed sexual offender challenged his commitment by arguing that the degree of "volitional impairment" must be a total or absolute. However, in that case, the US Supreme Court determined that the volitional impairment identified in the *Hendricks* case was not required to be absolute, only "serious." They noted that sexual offenders eligible for commitment would generally find it "particularly difficult to control their behavior." The decision stated, "in recognizing that fact, *we did not give to the phrase lack of control a particularly narrow or technical meaning*. And we recognize that in cases where lack of control is at issue, *inability to control behavior will not become demonstrable with mathematical precision. It is enough to say that there must be proof of serious difficulty in controlling behavior*" (emphasis added; p. 413). As was clear by the majority opinion in *Crane*, that decision did not provide any specific standard for determining serious difficulty in controlling behavior rather noting, "safeguards of human liberty in the area of mental illness and the law are not always best enforced through precise bright-line rules" (p. 407). Further, the Supreme Court in the *Crane* matter also noted that there might be "considerable overlap" between emotional and volitional abnormality or capacity. Per Kirwin (2010), "the Court appeared to indicate that commitment would be permissible in cases of 'emotional' abnormalities, as well as 'volitional' ones." The Court stated,

> "*Hendricks* must be read in context. The Court did not draw a clear distinction between the purely 'emotional' sexually related mental abnormality and the 'volitional.' Here, as in other areas of psychiatry, there may be 'considerable overlap between a… defective understanding or appreciation and....[an] ability to control…behavior. Nor, when considering civil commitment, have we ordinarily distinguished for constitutional purposes among volitional, emotional, and cognitive impairments." (p. 811)

By this discussion, the Court was apparently recognizing that "serious difficulty in controlling behavior" could arise not only where the person's disorder renders him unable to avoid sexual assault, despite his desire to avoid it, but also in situations where the disorder causes the person to want to engage in sexual assault (emotional incapacity) or causes the person to not understand or appreciate the nature of what he is doing (cognitive incapacity).

Consequently, "serious difficulty in control" (SDC) is an issue that is typically addressed in civil commitment cases either as an independent element of criteria specified for determination as a SVP in some states (e.g., Missouri) or, in other jurisdictions (e.g., Washington, Arizona), as part of the determination of the presence of and effects of a mental abnormality and/or personality disorder. For example, Washington Courts addressed the issue of volitionality in the case of In re the detention of Thorell (2003). Here, the Washington Supreme Court rejected the claim that *Hendricks* or *Crane* required a separate finding of impaired volitionality. Instead, *Thorell* clarified that "a *lack of control determination may be included in the finding of mental abnormality*" *(p 375). Thorell* further stated, "What is critical to both *Hendricks* and *Crane* is the existence of 'some proof that the diagnosed mental abnormality has an impact on offenders' ability to control their behavior" (p. 376). [It should be noted that two US Court of Appeals decisions in the Seventh and Ninth Circuit concluded that CCSVP does not require a separate factual finding regarding SDC because such a finding is implicit in the finding of the presence of a mental abnormality linked to a particular level of risk for sexual offender recidivism [e.g., *Laxton v. Bartow* (2005) and *Rose v. Mayberg* (2006)].

Starting with a straightforward semantic examination of these terms provides assistance in understanding the potential meaning and implication of these terms. Per Webster's New Collegiate Dictionary, "serious" is defined as "important" or "requiring much thought or work" or having "important or dangerous consequences"; "difficulty" refers to the state of something being hard to do or hard to carry out or "hard to deal with, manage or overcome"; and "control" is defined as "to exercise restraint" or "directing influence" or "to have power over" and/or "regulation." Consequently, one can suggest that "serious difficulty in control" involves conditions or characteristics that are important (in part because of their significant consequences) and involves a lack of or diminished restraint or self-management, self-control, or self-regulation (that precedes and is related to sexual offending) or where self-control or behavioral restraint is "hard" or "effortful." Similarly, the notion of "volitional impairment" can be better understood by examining how the term is used in other domains. For example, a "cognitive impairment" has been identified as a condition where a person has "more difficulty with a mental task or tasks than the 'average' person" or where a person has some problems with ability to think and learn. Thus, volitional impairment, as applied to a sexual offender, would suggest that an offender has more difficulty with controlling his sexual offending behavior relative to the average or typical offender.

From the perspective of forensic mental health and general criminal behavior, several writers have proposed domains for consideration regarding the presence of some degree of such self-regulatory impairment. Gottfredson and Hirschi (1990) suggested that the primary cause of criminal behavior is deficient self-control, with persons more motivated to pursue immediate desires for the satisfaction of pleasure and other rewards. They suggested that criminal behavior involved a number of elements relevant to compromised self-control including that criminal behavior was stimulating and thrilling; often required little planning or skill; provided immediate, easy, and simple satisfaction of desires; and had few or insufficient long-term benefits. In addition, Gottfredson and Hirschi (1990) emphasized that higher rates

of socially deviant and criminal behavior involve relatively immediate gratification of desires in conjunction with perceived or actual opportunity. Whiteside and Lynam (2001) used factor analysis of well-identified personality factors and found four distinct personality facets associated with impulsive-like behavior including sensation-seeking, urgency, (lack of) premeditation, and (lack of) perseverance (persistence). Thus, impulsivity reflects both motivational elements (urgency, sensation-seeking) and limitations in executive, self-regulatory functions including compromised foresight and persistence in resisting motivators. Somewhat similarly, Doren (2002) suggested that the issue of emotional and volitional impairment could be understood along two dimensions. First, he suggested that problems in control could be a function of a sexual offender's compromised ability to learn from experience. Second, he suggested that in some cases the sexual offender's desire for atypical or illegal sexual behavior "is sufficiently strong that it overwhelms the individual's ability to consider various options and consequences…It is not the desire per se that is the problem, but the strength of the desire relative to other actively considered options" (p. 17). Alternatively, Rogers and Shuman (2005) offered another very basic set of considerations. They suggested that that four areas should be explicitly addressed as a minimum standard in evaluations: (1) lack of choicefulness, claiming that evidence of planning or rational decision would support the capacity to choose; (2) disregard for personal consequences evidenced by attempts to reduce negative consequences of sexual offending (e.g., arrest); (3) incapacity for delay (of sexual gratification); and (4) chronicity, with the behavior representing an enduring characteristic or stable trait.

However, an increasing body of statute, appellate law in specific states, and recent Federal Appellate decisions provide direction as to the breadth of the requisite degree of volitional impairment necessary as a factor related to civil commitment of SVPs. On the state level, in Minnesota there have been an extensive number of state appellate decisions regarding the meaning of the legal construct of "utter lack of power to control" under the sexual psychopathic personality statute and related judicial decisions regarding the "control" or "volitional impairment" (VI) issue under Minnesota's more contemporary sexually dangerous persons (SDP) statute. The Minnesota Supreme Court in *In re Linehan* (VI) found that the SDP statute required that the sexual offender's mental "disorder or dysfunction does not allow [him] to *adequately control* his sexual impulses" or "does not allow the person to *adequately control* his sexual behavior" (emphasis added).

Several authors have examined the relatively extensive set of Minnesota appellate decisions regarding the "control" or "volitional impairment" issue, including Kirwin (2008, 2010, 2014) from a legal perspective and Mercado, Schopp, and Bornstein (2005) from a forensic mental health perspective. It can be argued that "an utter lack of power to control" (ULPC) is a more stringent construct than that of "serious difficulty in control" or "volitional impairment." The available reviews noted above identify several major points regarding the multiple perspectives that the Minnesota appellate courts have brought to bear on the ULPC (and not reversed by the Minnesota Supreme Court or any higher court to date). Mercado, Bornstein, and Schopp (2006) suggested that their review (largely based on Minnesota appellate cases to that date) suggested four factors seemed primary related to volitional impairment: (1) verbalized lack of control, (2) history of sexual crimes, (3) lack of offense planning, and (4) substance use. While noting such elements as well, Kirwin (2008, 2010, 2014) consistently identified the following domains as identified by the increasing Minnesota appellate case law regarding serious difficulties in self-control and/or volitional impairment.

1. *The respondent need not be out of control all the time.*
   In Minnesota, the two SVP statutes each have unique elements concerning the issue of relative control regarding sexual offending; the sexual psychopathic personality (SPP) statute requires evidence of utter lack of power to control (ULPC), while the sexually dangerous person statute requires evidence that a disorder or dysfunction does not allow a person to "adequately control" his sexual behavior. Per *In re Pirkl* and *In re Irwin*, Courts of Appeals held that a person could meet the ULPC standard without being out of control all the time. Similarly, a Court of Appeals in *In re Mattson* found that the respondent showed an utter lack of control when he acted out sexually, although he did not do so 24 hours a day. The court explained: "Lack of control is situational and will occur when the impulses arise or manifest themselves." In *In re Krueger*, the appellate court also found that contextual factors were central as to determining control and sexual reoffending, noting that "given an available victim, available means, and available circumstances," the individual was unable to control his sexual behaviors. In *In re Hommes*, the Court of Appeals noted that, "once the opportunity for sexual behavior presented itself, Hommes did not have the ability to control his impulses." Thus, several Minnesota judicial decisions emphasized that a lack of control was relative to context or situational factors; such a person who committed a sexual offense demonstrated ULPC when an "appropriate" victim was encountered and the appropriate means and a permissive situation were present. Similarly, appellate courts ruled that a failure to act out sexually while in custody (e.g., *In re Rubin*) or while on conditional release (e.g., *In re Preston*) or even while in the community for a limited period of time without being detected for a new sexual

offense did not contradict a finding of an "utter lack of power to control" (e.g., *In re Eberhart*). Finally, in two cases Minnesota appellate courts held that failure to reoffend or act out sexually while in prison did not demonstrate that the person has the ability to control his sexual behavior (e.g., *In re Rubin* and *In re Carner*). Similarly, the Court held that a 12-year period of no apparent sexual offending did not preclude a finding of ULPC, writing that because the person had been incarcerated or in residential treatment the majority of time, "his opportunity to reoffend has been minimal."

Regarding the lack of adequate control, the appellate courts have applied almost identical criteria as constituting evidence for "adequate control" of sexual behavior as those for ULPC, including an extended time since the person's last detected sexual offense, including a 10-year gap in offending history, relapse in alcohol or drug use leading to sexual misconduct, a long history of impulsive and noncompliant behavior (e.g., back to adolescence and/or childhood), failing to accept that the individual has a problem with sexual offending, or refusing sexual offender treatment (cited in Kirwin, 2014). As with the ULPC criteria, for Minnesota appellate courts, a lack of adequate control of sexual behavior clearly does not require that a person lack adequate control over their sexual offending either all or much of the time.

2. *Planning/grooming does not preclude an inability to control.*
Contrary to the proposition by Rogers and Shuman, numerous Minnesota Courts of Appeals have concluded that planning, premeditating, or facilitating the circumstances prior to attempting a sexual offense are not contradictory to a finding of ULPC. Rather, they appear to recognize that intermittent or repetitive planning (as exemplified by grooming of child victims) itself represents a lack of control, particularly when grooming has historically led to a sexual offense given opportunity.

Per *In re Bieganowski*, it was noted: "Although the 'grooming' process requires time, thus eliminating any 'suddenness' regarding the sexual activity, the habitual nature of appellant's predatory sexual conduct indicates an inability to stop the 'grooming behavior.'" In *In re Preston*, the court said: "Though grooming and planning behavior can show the ability to control the sexual impulse, where the grooming behavior itself is uncontrollable, the impulse is likewise not controllable." In *In re Adolphson*, a Court of Appeals held that a pedophile's "grooming" behavior does not preclude a finding of utter lack of power to control, "where there is an inability to stop such behavior." The court explained:

> "The fact that appellant engaged in 'grooming' behavior does not preclude a finding of utter lack of power to control, where there is an inability to stop such behavior and other indications of lack of control. *Appellant's behavior, which has elements of both control and impulse, appears to be a paradox, but closer examination reveals this is not the case. The planning and sex acts are a single unit of compulsive behavior, triggered by the presence of [appropriate victims], and played out in a predictable sequence of events.*" (emphasis added)

Similarly, the court of appeals in *In re Hart* held that a pedophile who used "isolation, bribes, threats, force, and alcohol' to approach, groom, and molest children met the utter-lack-of-power-to-control standard." More generally, In *In re Pirkl*, a commitment was upheld even though the respondent's actions involved a "fair amount of planning and deliberateness." In *In re Mayfield*, a Court of Appeals found an "utter lack of power to control" even though the sexual offender had stalked his victims and his actions were "deliberate to some degree." Further and more generally, *In re Mattson*, the court of appeals wrote: "Lack of control is situational and will occur when the impulses arise or manifest themselves." Thus, in Mattson, the Court effectively endorsed the model of "personality" or "behavioral" signatures defined by Mischel (2004) and signified that lack of control or volitional impairment may most often be an "if, then" phenomena demonstrated when appropriate victims and perceived permissive circumstances co-occur and an offender acts out sexually.

3. *Lack of insight showing inability to control*.
A number of Minnesota appellate court decisions have held that an inability to control sexual impulses can be determined by an offender's lack of insight into his sexual offending as a problem generally and/or the specific circumstances and factors related to sexual offending. In *In re Irwin*, the court of appeals credited testimony from an expert that "an important factor in determining whether one has power to control sexual impulses is *whether the person feels he has a problem*; if so, he at least has some control since he knows he is flawed, and *may be more vigilant in seeking assistance* …Without this basic insight, appellant has the utter lack of control" (emphasis added). Similarly, the Court of Appeals in *In re Adolphson* concluded that an individual's lack of insight and remorse was an indicator that the offender had an "utter lack of power to control." The court stated that Adolphson was aware that his conduct was against the law, yet had an "entrenched belief" that sexual activity with young boys was acceptable and was convinced that "he has provided a service to young men, and that the law is wrong. This complete lack of will shows he continues to have an utter lack of control." In *In re Beiganowski*, an appellate panel noted that the failure of an individual to remove himself from opportunities to offend and his failure to avoid precursors (e.g., substance use) that had historically triggered his impulsive behavior were indicative of an "ULPC."

4. *Sexual offending despite prior negative consequences shows a lack of control.*
   A number of courts have found that a person's failure to recognize or respond to consequences of his sexual misconduct (e.g., the harm it produces for victims) relates to reflect an utter lack of control of one's sexual impulses. In *In re Kunshier*, the court of appeals emphasized the finding that an offender who had committed sexual assaults without regard to consequences to victims was demonstrative of an ULPC. In the same case, the court also concluded that an utter lack of power to control sexual impulses was evidenced by and offender who had committed sexual assaults *without regard to consequences* to himself as well, including the commission of sexual offenses while on probation and after completing sexual offender treatment. More generally, in *In re Mattson*, the Court of Appeals cited an expert testimony that "when a person engages in behavior despite repeated consequences, it evidences a lack of control."
5. *Specific psychosexual facts about the respondent.*
   In *In re Reb*, the Court of Appeals indicated that ULPC was demonstrated by a respondent's continuing deviant sexual fantasies, his history of impulsivity and sexually acting out, his large number of victims, and the relative length of his period of sexual offending. In *In re Mattson*, the Court of Appeals cited an expert testimony that "the utter lack of control was demonstrated by the fact that, even when appellant was in a structured setting, he had difficulty refraining from the use of pornography." Again, specific situational or circumstantial factors related to a particular offender's sexual or criminal offense cycle have also been identified by Minnesota appellate courts as potentially demonstrating an ULPC including the following: failure to remove oneself from high-risk situations, failure to remove himself from situations that provide the opportunity for similar offenses, failure to avoid precursors that trigger impulsive behavior (e.g., the consumption of large quantities of alcohol), evidence of failure to engage in rule-abiding and/or appropriate programming while on conditional release has also been highlighted as related to an ULPC such as committing new sexual offenses while on conditional release, acting out sexually when discovery was likely or within a short time after release from confinement, and refusing sexual offender treatment.

From a statutory perspective, the Adam Walsh Act (the federal statute related to CCSVP) also offers instruction as to the determination of "serious difficulty in refraining from sexually violent conduct or child molestation if released." The statute states:

> "In determining whether a person will have 'serious difficulty in refraining from sexually violent conduct or child molestation if released,' Bureau [of Prison] mental health professionals may consider, but are not limited to, evidence: (a) Of the person's repeated contact, or attempted contact, with one or more victims of sexually violent conduct or child molestation; (b) Of the person's denial of or inability to appreciate the wrongfulness, harmfulness, or likely consequences of engaging or attempting to engage in sexually violent conduct or child molestation; (c) Established through interviewing and testing of the person or through other risk assessment tools that are relied upon by mental health professionals; (d) Established by forensic indicators of inability to control conduct, such as: (1) Offending while under supervision; (2) Engaging in offense(s) when likely to get caught; (3) Statement(s) of intent to re-offend; or (4) Admission of inability to control behavior; or (e) Indicating successful completion of, or failure to successfully complete, a sex offender treatment program."

[As suggested above, it should be noted that across several jurisdictions, there have been judicial findings that in situations where individuals have committed no additional sexual offenses while incarcerated [most likely because they had not had any meaningful opportunity (permissive circumstances) to reoffend against appropriate victims, such as children or adult females], while limited by terms of conditional release (bail, parole, or probation) or despite 5–12 years in the community without a known or detected sexual offense or lack of possession of particular erotic materials, did not mitigate against a finding of serious difficulty in control. Thus, while committing additional acts of sexual violence or possessing materials indicative of potential sources of deviant sexual arousal while confined or under conditional release can serve as indicia of SDC/VI/ULPC, the absence of such findings has not been regarded as dispositive but rather the expected behavior of confined or detained individuals.]

The broader construct of SDC (as opposed to the semantically narrower ULPC) would appear to encompass situations where an individual's self-regulation or self-control over personal, dispositional, or situational factors relating to perpetrating sexual offending is impaired. It can be impaired or difficult because they lost control in the face of appropriate victims or permissive circumstances or because they planned or facilitated the opportunity to act and failed to resist the push or pull (urge) to act. Thus, SDC includes the person who impulsively responds to a situation that involves attempted or actual sexual offending as well as other individuals who premeditate, plan, and then more carefully enact a situation that involves harm to another. Regardless of premeditation, it appears to be the repetitive enacting (or attempting to enact) of a sexual offense, particularly after sanctions or treatment, or when other potential options exist. It is notable that in Kansas *v. Crane*, a paraphilia, in that case specifically pedophilia, was seen as "…a mental abnormality that critically involves what a lay person might describe as a lack of control" (p. 7). Thus, one can surmise that the Supreme Court found that a person characterized by recurrent sexual fantasies, urges, or behaviors involving potential

victims was a sufficient basis for determining a serious difficulty in control.

Relative to "volitional incapacity" or "impairment," *Linehan v. Milczark* (2003) is a Minnesota case that was *filed* with the US Court of Appeals for the Eighth Circuit after the *Hendricks* decision was decided but *before* the *Crane* decision was announced. In this case, the Eighth Circuit Court considered a challenge to the Minnesota SDP statute regarding the construct of the constitutionality of civil commitment where the "volitional impairment" issue was framed as a "lack of adequate control." In this case, a respondent had been civilly committed as an SDP based on his criminal sexual history, a diagnosis of antisocial personality disorder, and a finding of being "highly likely" to sexually reoffend and that the respondent was characterized by "a lack of adequate control." In its original decision that Mr. Linehan met the criteria as a SDP, the trial court had concluded that since the respondent had been incarcerated for a long period, it needed to "look for more subtle signs than rape and killing when evaluating his condition and making its findings." The Minnesota Supreme Court concluded that Mr. Linehan lacked "adequate control" based on Mr. Linehan's diagnosis of antisocial personality disorder, his commission of an offense after one incarceration (during an escape) when he had the opportunity, his inability to delay masturbation in response to apparent stimulation by the presence of his young stepdaughter during family visits, and his continuing aggressive tendencies toward prison and hospital staff (Linehan IV, 594 N.W.2d 867, Minn. 1999).

Relying on the Hendricks decision, Linehan contested these findings by the Minnesota Appellate and Supreme Court, claiming that a lack of adequate control was insufficient to serve as the basis for civil commitment. The US Court of Appeals noted that Hendricks did not require proof of a complete lack of control, but rather required impairment of the ability to control one's behavior, specifically the Minnesota statutory requirement. In *Linehan v. Milczark* (2003), Eighth Circuit Court of Appeals concluded that the record showed that Mr. Linehan demonstrated a disorder that made it difficult, if not impossible, for him to control his dangerousness. That Court wrote:

> "We conclude that the Minnesota Supreme Court reasonably applied the clearly established Federal law when it considered the constitutionality of the stand for civil commitment under the SDP Act. The standard enunciated in Linehan IV requires a finding of lack of adequate control in relation to a properly diagnosed disorder or dysfunction, as well as findings of past sexual violence and resultant likelihood of future sexually dangerous behavior. This combination of required findings will adequately distinguish an offender subject to civil commitment, who has difficulty controlling his behavior because of a disorder or dysfunction, from the more typical offender with behavioral problems, who is best dealt with in the criminal system. Since the Court's application of Hendricks to the SDP Act meets constitutional requirements, it cannot be considered an unreasonable application of Supreme Court precedent." (p. 12)

In many ways, this decision was similar to that in *In re Thorell*. Similarly, also from the Ninth Circuit Court of Appeals in Brock v. Seling (2004), it was clarified that the Crane speaks to outer limits rather than specific elements. Crane does not require total or complete lack of control, but only some showing an abnormality that makes it difficult, if not impossible, for the dangerous persons to control their dangerous behavior and that finding a serious difficulty of controlling behavior by a trier of fact without specifying that it was emotional or volitional in nature was sufficient for commitment.

Two other US Court of Appeals decisions in the Seventh and Ninth Circuit [e.g., *Adams v. Bartow* (2003) and *Rose v. Mayberg* (2006), respectively] have subsequently cited with approval the Eighth Circuit decision in *Linehan v. Milczark*. Thus, in the former case, it was found that an individual with ASPD "…was eligible for civil commitment, not just because he suffered from APD but also because the specific nature of his disorder made him 'dangerous beyond [his] control'" (p. 963). In *Laxton v. Bartow* (2005), the US Court of Appeals Seventh Circuit concluded that it was reasonable for a trier of fact to conclude that the requisite serious difficulty in control was established when the nexus between a person's mental disorder and dangerousness (risk) was established. Regarding the meaning of "adequate control" relative to risk of future sexual offending, in *In re Ramey*, the Minnesota Court of Appeals wrote that the meaning of that phrase was simple and clear; an offender's history of harmful sexual conduct and the finding of an elevated probability of future dangerousness, coupled with an evidence of "mental illness" or dysfunction, demonstrated that an offender will find it difficult to control the behavior. That is, if a trier of fact concluded that a mental disorder was identified as characterizing an individual such that it was associated with the identified degree of likelihood or probability that an individual would engage in future acts of sexual offending (e.g., that the mental condition was predisposing to sexual offending), then that represented a conclusion that the person was also characterized by serious difficulty to control.

In short, the available state, appellate, and USSC decisions appear to make it clear that SDC is a relatively broad concept, as opposed to an absolute or narrow one. Various behaviors related to a mental abnormality or personality disorder, both distal and/or proximal, both related to general dysregulation or rule-breaking and specific to past history of sexual offending and opportunities to avoid sexual offending, are all potential factors to be considered as manifestations of mental conditions that increase the probability of future sexual offending by indicating limitations on self-control of either an emotional or volitional nature.

Assessing the Elements for Commitment as a SVP

The assessment of a sexual offender being considered for CCSVP must be a careful and comprehensive one. SVP evaluations have been conceptualized as a series of interrelated questions (Rogers & Jackson, 2005). Each question roughly corresponds to one of the four prongs of the laws: (1) one or more past acts of sexual offending, (2) the presence of a current mental disorder and/or abnormality (and/or personality disorder), (3) a finding of risk of future sexual offending, and (4) some relationship between the mental abnormality and the likelihood of sexual violence. As noted in previous sections, in the forensic mental health community, it is understood that legal constructs defined by legislatures and the judiciary are often different from psychological and psychiatric terms and constructs; such a disjuncture exists in many or most areas of psycholegal interest (e.g., insanity, best interests of the children in custody case, the issue of "psychological damages" related to a tort). Consequently, in considering individual, specific case, forensic mental health professionals rely on their relative expertise in psychological theory, methods, and science and attempt to apply that knowledge within the parameters of statute and case law in the SVP realm of a particular jurisdiction as the basis for their opinions.

An evaluation must attempt to provide an opinion as to the presence or absence of each of the statutory elements: (1) past history of sexual offenses, (2) a current mental abnormality and/or personality disorder, (3) a finding of risk of future harmful sexual behavior, and (4) some relationship between the mental abnormality and/or personality disorder, "serious difficulty in control," and the likelihood of future sexual offending, including sexual violence.

History of Sexual Offending

The determination of detected sexual offenses, particularly in states that require a charge or conviction for a sexually violent offense (as the predicate offense) is largely a function of reviewing an individual's official criminal history. [Available records also frequently contain previous admissions or self-reports of undetected sexual offenses that should be reviewed and considered as part of an evaluation.] As suggested by the US Supreme Court in *Hendricks*, the specific details of past sexual offenses provide the essential basis for identifying relevant aspects of potential mental abnormalities and personality disorders as well as that of determining the elements to be considered as more or less significant regarding the risk of future sexual offending.

The Determination of Mental Abnormality, Personality Disorder, and Serious Difficulty in Control

Principles of general forensic mental health assessments and evaluations have long emphasized the importance of multimethod, multi-measure data collection. Among others, Heilbrun (2003) has identified that primary principles of forensic assessment of significant or necessary connections between "clinical conditions" and the presence or absence(s) of functional abilities should include at least three components: (1) the review and application of nomothetic evidence (e.g., group data from testing and scientific study), (2) scientific knowledge and reasoning, and (3) idiographic evidence (e.g., case-specific data). An important possibility regarding forensic assessments is that such processes do not occur in a vacuum but rather in an adversarial context, often with high-stakes outcomes. Similar to Heisenberg's Uncertainty Principle finding that the act of observing something "changes it," being the subject of a forensic assessment is likely to change what is potentially reported and/or observed by the evaluator. This is likely to be particularly true for forensic assessments where the process is perceived by a litigant as a potentially adverse one. Consequently, standardized procedures of assessment should take on paramount importance in the evaluation of SVP candidates as they do in other areas of forensic assessment; psychological and/or physiological assessment should occur under customary circumstances. For such reasons, attorneys are never in attendance in forensic assessments of litigants in the set of personal injury or discrimination matters or child custody evaluations; they are also not in attendance at those forensic assessments that occur in the criminal realm such as matters of competency to stand trial and insanity questions. However, in many jurisdictions, attorneys are permitted by statute or judicial decisions to be in attendance at assessments involving psychological testing, interviews, and even the interview portion of psychophysiological testing. Notably, they are only present for what might be deemed as adverse assessment procedures and not for the assessments conducted by evaluators they retain. As a violation or at least a distortion of recommended administration protocols for such assessments, it raises questions about the integrity of the results (the validity and the content) of those assessment procedures.

Both the paraphilic and personality disorders are most likely to be diagnosed largely from past behavior, either described in formal or self-reported personal, diagnostic, and criminal histories. Various authors regarding the evaluation of sexual offenders have recommended a comprehensive evaluation of the presence of multiple paraphilias/paraphilic disorders and/or personality disorders (e.g., Hoberman,

1999; Jackson, 2008a). The emphasis of the diagnostic criteria for recent DSMs has been on behavioral "symptoms" or "traits, as well as signs or self-report," to provide the primary basis for diagnosis; consequently, archival records as vast repositories of behavioral history typically provide the primary source of information for making such diagnoses. Records regarding an individual's criminal history, prior evaluations, and/or treatment records are all particularly important sources of information. As numerous writers have articulated, the records as collateral sources of information almost always serve as the key basis for forensic evaluations (e.g., Hoberman, 1999; Hoberman & Jackson, 2015; Meloy, 1989). Typically, in the assessment and evaluation of candidates for SVP status, there may be a limited amount of information relative to "signs," the self-report of maladaptive features, particularly at the time of the assessment and as they relate to legally and socially "disapproved" categories of behavior such as deviant sexual fantasies and urges and even problematic personality characteristics. Regarding the latter, almost by definition, persons who have grown up manifesting maladaptive personality features may experience them as "ego-syntonic," or acceptable, consistent parts of who they are as persons and not as impairments or dysfunctional. For example, while regarded by others as deceitful, they may regard deceit as an acceptable aspect of what is necessary to live "effectively" in society. Given the noted problems with sexual offenders self-report, primarily defensiveness, denial, and minimization (e.g., Beckett, 1994; Clipson, 2003; Earls, 1992; Gudjonsson, 1990; Langevin, 1988; Marshall & Barbaree, 1989; McGrath, 1990), the centrality of records as collateral sources of information about an individual's behavior and persisting/recurring personality characteristics becomes even more significant. To date, no structured diagnostic interviews with demonstrated reliability or validity have been developed for the range of paraphilias or paraphilic disorders, let alone validated. More generally, for persons with a history of sexual offenses, while sexual fantasies and urges would be expected to be persistent for a significant number of sexual offenders by definition (e.g., those with identified or suspected paraphilic disorders that are typically viewed as chronic and enduring) [albeit fluctuating experiences over time (e.g., it is likely that no person experiences sexual fantasies and urges *all* the time)], the enactment of sexual offending will be function of a relatively "person-specific" sexual elements such as the availability of an "appropriate" victim (characterized by relatively preferred sexual stimuli) and perceived relatively permissive circumstances or context. The significance of context is reflected in the observation that effectively no sexual offenses against children or older (e.g., adolescent or adult) females occur while sexual offenders are institutionalized. It is highly unlikely that there will be overt behavioral evidence of sexual offending for offenders who have resided in institutions for extended periods of time since their last sexual offense. Limited study and anecdotal evidence exist of the frequency of potential proxy or analogue behaviors of indicia of "current" deviant sexual behavior. By nature, sexual fantasies are almost always private mental phenomena and not typically available for most means of observation. All of these factors increase the relative value of available records, particularly past sexual offending behaviors and offender self-report, as providing the significant basis for identifying the key indicia of deviant sexual interest, fantasies, and/or urges.

Given the high frequency of "crossover" of varied deviant sexual interests in detected sexual offenders, respondents should be assessed regarding their *range* of potential deviant sexual interests, including their experience of deviant sexual urges, fantasies, and behaviors. Systematic inquiry about the numerous possible paraphilic conditions is important as research suggests that in the use of unstructured interviews, evaluators will often cease their diagnostic inquiry after one particular condition may be identified (Rogers, 2001). In fact, the typical sexual offenders considered for commitment have been shown to have more than one paraphilia (e.g., Jackson & Richards, 2007). The Multiphasic Sex Inventories [Multiphasic Sex Inventory I and initial interview (Nichols & Molinder, 1984, 2000), both self-report measures, have been identified by several recent studies as providing potentially good indicators of the presence of deviant sexual interests (Craig & Beech, 2009; Stinson & Becker, 2008; Tong, 2007) in both clinical and research settings. For example, Stinson and Becker (2008) examined a combination of instruments (including the PPG, a VTM, and the MSI II), and they found that the combined measures, plus a self-report test of sexual fantasies involving children, identified 98 % of their child molester sample. Similarly, Tong (2007) found convergent validity for three sex deviance measures [PPG, VTM, and MSI II].

Interviews with candidates for CCSVP should be attempted; however, they may not always yield particularly useful or substantive information, particularly about key elements relevant to opinions regarding CCSVP. As Greenberg et al. (2004) pointed out, the self-report of litigants in general should be considered with significant caution given the potential interests at stake for those litigants. More specifically, as numerous writers have pointed out, the self-report of most sexual offenders should be considered suspect, for both personality and context factors, particularly if an evaluation takes place in a forensic context. This is particularly true if the individual is characterized by some elevated degree of psychopathy. Research suggests that, in general, sexual offenders are unreliable in their self-reports (Langevin, 1988; Rogers & Dickey, 1991; Sewell & Salekin, 1997). Most notably, sexual offenders are characterized by denial, minimization, or externalization of blame (Kennedy & Grubin, 1992; Langevin, 1988). Offenders who externalize responsibility tend to acknowledge the offense, but attribute the cause of their behavior to an external force out of their immediate

control (see also Sewell & Salekin, 1997). On its face, within a high-stakes adversarial context, it seems unlikely that an individual will self-report or otherwise admit current sexual fantasies and urges of a paraphilic nature. Evidence exists that many attorneys believe it appropriate and ethical to "coach" their clients in forensic evaluations (e.g., Wetter & Corrigan, 1995). It would not be surprising if respondents in SVP proceedings have been coached by counsel or their own peers relative to each of the elements of SVP statutes; in particular, the version of their sexual offense history provided while awaiting trial for CCSVP may come to vary significantly from all or most previous evaluations and reports.

Experienced forensic evaluators disagree regarding the importance of a clinical interview in the context of a civil commitment evaluation. Jackson and Hess (2007) found that a majority (71 %) of evaluators *recommended* the use of an interview, but only 17 % considered the interview *essential.* However, while interviews may not be a key component of an evaluation, an interview does provide the opportunity for a respondent to participate in the evaluation process and for the evaluator to have a direct set of interactions with the individual. The respondent is provided the opportunity to provide a contemporary version of their personal and offending history, to confirm or refute information in the file, to provide risk-protective information, and/or to supply the evaluator with his representation of information not available in the case file material. In addition, this exchange of information takes place under the observation of and with interactions with the evaluator, and various aspects of interpersonal functioning may be observed. As a result, further benefits of a direct evaluation include the opportunity (1) to conduct structured or semi-structured interviews, such as those associated with Psychopath Checklist-Revised (PCL-R; Hare, 2003a, 2003b, 2003c; Gacono, 2000) or those for personality disorders; (2) to attempt to gather information regarding the offender's current thoughts, feelings, fantasies, and behavior relevant to the diagnosis of paraphilias which are viewed as persisting and chronic; and (3) to assess participation in possible sexual offender treatment and their assessment of their own risk and release considerations.

In select cases, individuals being considered for CCSVP have provided self-report of additional, previously undetected victims as part of earlier evaluations or pre-polygraph interviews; in addition, they may previously have participated in penile plethysmography (PPG) as well. When possible, it is useful to obtain a sexual history polygraph and a penile plethysmograph (PPG) as part of the evaluation of an individual being considered as a possible SVP; in addition, a specific issue polygraph following the PPG assessment regarding possible attempts to suppress or manipulate sexual response is also particularly useful. The Association for the Treatment of Sexual Abusers (ATSA, 2014) most recent practice standards indicated that members "recognize that psychophysiological methods such as phallometry (PPG) may have "particular utility" both to obtain objective data about the client not established through other means and to explore the reliability of the client's self-report. However, per the ATSA, Guidelines, PPG, polygraph, and other psychopysiological assesment findings should not be used as the single source of data for any assessment but rather in conjunction with other sources of case-related assessment data. Further, psychophysiological results are likely to vary as a function of context and the anticipated "use" of obtained results. It is notable that Abel and Osborn (1992) reported that, in a scientific study where paraphilic subjects recruited from various community sources were provided a Federal Certificate (or guarantee) of confidentiality, 62 % of "paraphilics" confronted with their physiologic measurements admitted to *additional* paraphilic interests or behaviors that they had previously denied or not revealed. However, As with other psychophysiological measures, there have been issues raised regarding reliability and validity of the polygraph; in particular, the potential exists for some individuals to use "countermeasures" to regulate and dissimulate their physiological responses. Regarding PPGs, Hall, Proctor, and Nelson (1988) found that fully 80 % of inpatient adult sexual offenders asked to inhibit all sexual arousal were "successful" in doing just that; Looman et al. (1998) reported similar results without instructing offenders. Marshall and Fernandez (2000a, b) concluded, "…numerous studies have shown that rapists and child molesters are able to both inhibit arousal to preferred stimuli and degenerate arousal to nonpreferred stimuli." (p. 293). At contrast, as Jackson and Richards (2007) have noted (among many others), particularly in an adversarial context, the presence of positive indication of deviant sexual interest from the results of psychophysiological assessment likely provides useful information, whereas negative findings from such procedures do not typically provide useful information given the well-recognized ability of both offenders and non-offenders to dissimulate on the PPG. As is well established more generally, the PPG is a particularly sensitive measure (e.g., positive results indicative of deviant sexual arousal identify persons with paraphilic interests); however, such tests lack specificity—results that do not show a positive response to standardized deviant sexual stimuli do not rule out the presence of actual deviant sexual arousal. In addition, in the attempt to standardize PPGs, it may be the case that key features of sexual behavior, target/potential victim characteristics, and/or context related to a particular individual's sexual fantasies or urges are not well-represented in the conventional visual or audio stimuli. Consequently, individual sexual offenders may show no or little arousal to standardized stimuli utilized in PPGs. While PPGs may provide useful information in a more clinical context, there is no substantive body of data that would indicate that sexual offenders demonstrate expected levels or degree of sexual arousal in the context of all forensic contexts. In addition, on its face, within a high-stakes adversarial context,

it seems reasonable or likely that an individual will engage in behaviors to limit demonstrated arousal to current sexual fantasies and urges of a paraphilic nature.

Personality disorders, including antisocial personality disorder, narcissistic personality disorder, and other potentially relevant personality disorders (e.g., borderline, avoidant, schizoid, and/or dependent personality disorders) are best evaluated through Structured Psychological Assessment (SPA; Hoberman & Riedel, 2015). Otto (2002) demonstrated that traditional psychological testing was widely utilized by forensic evaluators for addressing a range of forensic issues; Archer, Stredny, and Wheeler (2013) reported that such tests have become widely accepted for use in forensic evaluation. Personality tests such as the MMPI-2 and the MCMI-III, and in adversarial settings, provide the most established methods across various forensic contexts for collecting information about the presence or absence of maladaptive personality traits and/or personality disorders and other mental disorders (e.g., Jackson, 2008b; Weiner, 2003). In particular, the MMPI-2 is the most commonly utilized psychological test in the forensic evaluation of sexual offenders (e.g., Lally, 2003). As Heilbrun (2003) and others have emphasized the use of self-report SPA as a primary means of obtaining information about a litigant's response style in the forensic context, this would seem to be of particular value in the assessment of SVP candidates. In addition, computerized interpretive systems for such tests provide actuarial-based interpretations of the sexual offender's own *self-report* in response to test items and can provide valuable information about the presence and degree of personality traits relative to diagnoses of personality disorders (as well as those related to varied aspects of emotional and volitional impairment). Further, in many cases, previous administrations of such psychological tests can be found in an individual's file. Consequently, a current administration of such personality and related tests provides a mechanism for comparing possible areas of relative stability or changes in reporting in various personality domains. Similar to forensic sexual offender evaluations more generally, given the potential utility of psychophysiological measures directed at the areas that most sexual offenders are most likely to dissimulate about (e.g., deviant sexual experiences and behavior), measures of personality (e.g., self-perceived or represented affect, attitudes, impulsivity, general and interpersonal behavior) may be particularly valuable, and attempts to include such practices as a standard part of forensic (including SVP) evaluations are highly recommended by a number of authorities.

While this should be obvious and well known to professionals working in legal and/or forensic contexts, including attorneys representing alleged or adjudicated sexual offenders, testing is intended to be administered under standardized conditions. Per the American Psychological Association (APA, 2007): "Psychologists enhance the validity of evaluation results by adhering to standardized procedures (when the techniques they use outline standardized administration procedures) and by developing and sustaining rapport with the examinee. In most testing manuals, standardized procedures and recommended practices for developing and sustaining rapport specify that only the psychologist and the examinee are present in the assessment setting." (p. 1). The APA notes studies showing various compromised findings when testing is administered with third-parties present; such findings also have been demonstrated with interviews. As the APA (2007) has noted such effects have been identified with litigant-provided interview data in forensic evaluations. Having additional persons present or observing the testing or other standardized assessment procedures may be quite likely to have particularly significant effects in forensic contexts, particularly when the outcomes are viewed as "high stakes" by the litigant.

However, the utility of the results of SPA such as standardized self-report personality, structured and semi-structured interviews, and as well as psychophysiological measures, when obtained in a uniquely high-stakes, adversarial context cannot be relied on without careful scrutiny of the results, particularly in comparison to previous similar testing and the respondent's and other's prior self-report contained in available records. As we have noted elsewhere (e.g. Hoberman & Jackson, 2015), in forensic or "clinical"/forensic settings, one must be aware that there is evidence that a significant number of attorneys may attempt to "coach" or advise their clients in responding to standardized psychological assessment. For example, in one study, almost half of a sample of practicing attorneys and somewhat smaller percentage of law students surveyed believed that when clients were to participate in a direct evaluation involving psychological testing, the client should "always" or "usually" be given information about the nature of validity scales used in such testing, as well as coaching as to what types of answers to provide or to avoid (e.g., Wetter & Corrigan, 1995). As Heilbrun (2001) noted the more information a subject possesses about validity scales of psychological tests, the more effectively they can dissimulate substantive "findings" on those tests; in situations, where an evaluatee produces test results markedly discrepant from collateral sources, this possibility should be considered. Consequently, there is always reason to be concerned that some individuals who are provided with or obtain information about the nature of tests and rating scales may be able to affect their presentation style on a test or to manipulate detection of maladaptive symptoms and traits. Practically speaking, it is important to ask an examinee in what ways he has prepared for the evaluation. Specifically, he should be asked generally what he has read or been told in forensic or clinical/forensic settings, one must be aware that there is evidence that a significant number of attorneys may attempt to "coach" or advise their clients in responding to standardized psychological assessment. For example, in one study, almost half of

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In addition, various information about psychological tests and clinical ratings scales is now available on various publically accessible web sites and, anecdotally, in correctional and other institutional facilities across jurisdictions from both peers and other advisers.

Practically speaking, it may be important to ask an examinee in what ways he has prepared for the evaluation. Specifically, he might be asked generally what he has read or been told about the proposed nature, content, or approach for the evaluation, whether he has read or been told about any material regarding the specific tests and other assessment measures chosen for administration (e.g., books or other materials about specific tests, rating scales, interviews and/or psychophysiological procedures), whether he has received advice from *any person* as to recommended responding for the specific tests, ratings or other assessment procedures chosen for administration, or if he has sought or received information from the Internet or other sources about evaluations or specific assessment procedures and what he knows about how responses to the particular tests or ratings may be utilized. This may become a particularly important concern if an offender's most recent test results are markedly discrepant from the results of previous testing or if the offender seems unusually "prepared" for the direct evaluation with circumscribed, seemingly "pat" descriptions of his sexual offense history. This may particularly significant if current accounts of sexual offending history are markedly discrepant from multiple, previous and convergent ones and/or the individual now blames external systems or factors for prior sexual offense admissions and/or the evaluatee now represents that he misunderstood terms used in other evaluations or settings (e.g., when he previously admitted to sexual arousal to children he now claims that they meant persons of age less than 18 or claims that they didn't understand the meaning of "forced" relative to a sexual offense). The evaluator may also ask the offender whether he has read or received verbal or other information or advice regarding the subject of risk assessment and/or ask him to affirm that he has not done so (as part of informed consent, for example).

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In addition, the face validity of a self-report test becomes paramount. As a result, those self-report tests that are particularly transparent (e.g., it is easy to detect items more or less indicative of antisocial attitudes and behaviors) may lead to "surprising" results; persons with long, definitive, and/or extreme antisocial histories may produce particularly low scores on such measures, particularly in an adversarial context. Anecdotally, for example, it is striking how many individuals considered for or found to be SVP show unusually low scores on the "Antisocial" (ANT) scale of the Personality Assessment Inventory (PAI; Morey, 2007). Often, a careful inspection of the specific item responses indicates that an offender has provided a more or less minimized perspective of elements of antisociality relative to those indicated by his personal and criminal history.

As noted previously, the use of structured and semi-structured interviews for personality disorders is also recommended by numerous authorities, perhaps especially in forensic contexts. Such procedures have an established reliability and validity (e.g., Widiger, Mangine, Corbitt, Ellis, & Thomas, 1995). High levels of psychopathy are also frequently identified among civilly committed sexual offenders (Jackson & Richards, 2007; Vess, Murphy, & Arkowitz, 2004). Experts who conduct civil commitment evaluations routinely assess psychopathy; 76 % of evaluators indicated the assessment of psychopathy is essential in assessment for CCSVP (Jackson & Hess, 2007). As noted, several structured or semi-structured interviews have been developed to collect information in a structured or semi-structured manner that can be utilized in rating the individual on the Psychopathy Checklist-Revised (PCL-R) (Gacono, 2000; Hare, 2003a, 2003b, 2003c).

Currently, available scientific evidence demonstrates adequate reliability for the determination of mental abnormalities and personality disorders. Packard and Levinson (2006) reported on the inter-rater reliability of various diagnoses offered by evaluators in Florida SVP commitments. They noted that in an earlier paper by Levenson (2004), kappa values measuring the degree of agreement between raters were, in fact, statistically significant. In reanalyzing the original data of Levenson, Packard and Levenson further concluded that various measures of inter-rater agreement were statistically significant, including proportion of agreement, odds and risk ratios, and estimated conditional probabilities. Packard and Levenson summarized their results, stating:

"Agreement on the existence of the majority of the diagnosed disorders was rather high…indicating that, overall, civil commitment evaluations were a reliable process" (p. 1). Wilson, Pake, and Duffee (2011) reached similar conclusions in applying proposed diagnostic criteria for DSM-5 to civilly committed individuals.

Assessing Emotional and Volitional Impairment and Serious Difficulty in Control

Relative to the issue of volitional impairment, again there are various sources of information to inform an opinion regarding this issue. In effect, per the US Supreme Court in *Kansas v. Crane*, persons who commit sexual offenses as the result of a paraphilia would be likely to be described as demonstrating serious difficulty in controlling behavior; the Court identified pedophilia as "…a mental abnormality that critically involves what a lay person might describe as a lack of control" (p. 7). Per the various extant decisions by the Federal Circuit Courts, the identification of a mental abnormality or personality disorder or some combination of those conditions may, in and of themselves, be sufficient to arrive at an opinion that SDC is present (e.g. Pedophilia per Kansas v. Hendricks). While researchers (e.g., Jackson & Richards, 2008; Mercado et al., 2005) have noted the complexity inherent in assessing volitionality, particularly in its dimensional form, current evidence suggests that evaluators evaluate volitionality in line with the guidelines provided by the courts (e.g., *In re Thorell*, 2003). For example, Jackson and Hess (2007) reported that evaluators commonly considered the combined aspects of mental illness and past behavior when evaluating volitional impairment. The most commonly endorsed method or basis for evaluating the degree of volitional impairment was the combination of a personality disorder or paraphilic disorder and the available history of previous sexual offending.

Further, from *Linehan v. Milczark* and related appellate court decisions, the issue of volitional impairment includes both issues in self-control relative to sexual behavior and to behavior more generally; thus, an evaluator is looking broadly at the degree to which mental abnormalities and/or personality disorders lead to "serious difficulty in control." The presence of the various factors identified earlier as related to control and volitional impairment can be investigated via careful record review and per varied judicial decisions provide the best or most significant basis for determining evidence of SDC or VI. The archival records and/or collateral reports of the respondent's past (and sometimes current behavior) typically provide important information about the nature and degree to which respondent's have displayed "volitional impairment" in the past. In addition, as noted, the results of interpretations of current and past psychological tests such as the MMPI-2 and the MCMI-III have long been relied upon by evaluators and courts in Minnesota as a key means of identifying personality characteristics related to both "an utter lack of power to control" and "inability to adequately control" sexual behavior. Such tests as actuarial interpretations of respondents' self-report offer potentially powerful sources of information about personality characteristics relating to the likely nature and degree of a respondent's SDC or VI, including potential motivators or factors of disinhibition (Hoberman, 2015a, 2015b).

Risk Assessment

The final prong of SVP statutes concerns developing an opinion that the specific sexual offender under consideration is characterized in such a manner that his likelihood or probability of committing an additional act of sexually motivated criminal behavior, whether it is detected or not, exceeds some threshold for a particular jurisdiction. In many states, the risk assessment outcome is not simply another sexual offense or a "harmful" sexual offense but more particularly "predatory acts of sexual violence," which involve a subset of physical contact sexual offenses. Given the nature of SVP statutes as currently written and interpreted by various courts, the likelihood of reoffending or the degree of risk posed by a sexual offender does not necessarily involve simply whether an identified sexual offender is detected and/or legally processed for a new sexual offense (e.g., not simply a future arrest or conviction). Thus, the last element to be considered in the evaluation of whether a specific sexual offender meets the criteria for SVP is the likelihood of sexually *reoffending* per se (almost all of which is most likely to be undetected, as will be discussed). To be eligible for CCSVP, a particular sexual offender must have some set of characteristics that individually or collectively indicate that he meets or exceeds a statutorily defined level of risk (e.g., "likely," "more likely than not," "more probable than not," or "highly likely" to commit a future sexual offense). Thus, an evaluator strives to provide an informed, comprehensive opinion regarding the probability of that a particular recidivistic sexual offender will commit at least one additional sexually motivated offense. In turn, a trier of fact will then consider that opinion, in the context of all other information provided at trial, to reach an ultimate opinion as to whether the risk for future sexual offending meets or exceeds the particular statutory definition.

Jackson (2008) wrote: "Risk assessment is the *sine qua non* of civil commitment evaluations." Risk assessment is the process of identifying the *probability* or *likelihood* of future dangerousness or harm, such as a future sexual offense for a particular individual. It is practically and scientifically impossible to *predict* any future event with 100 % certainty, including the likelihood that a specific person will commit a

particular act, including a future sexual offense. If such methodology existed, there would be no or diminished need for evaluations by trained forensic mental health practitioners; triers of fact and/or law would possess a valid finding about this element of the SCCSVP proceedings. Consequently, a risk assessment will always involve some degree of uncertainty about identified probabilities of future sexual reoffending generally and, more specifically, for an individual. In reality, risk assessments are relatively common experiences of mental health practitioners generally and forensic mental health professionals more particularly. Conroy and Murrie (2007) pointed out that risk assessment had become increasingly common across a verity of criminal justice [e.g., defendants pursuing not guilty by reason of insanity findings (NGRI)] and mental health settings (e.g., various types of mental illness commitments). A significant subset of such risk assessments is conducted for persons considered as potentially NGRI or as mentally ill and dangerous (MID); outcomes of such proceedings typically lead to indeterminate and/or long-term detention, similar to CCSVP. However, it is quite interesting that procedures and practices utilized in risk assessments related to CCSVP have been subject to much more contentious scrutiny, while a relatively minimal scientific and professional literature has developed around the methods employed for risk assessment of NGRI and MID individuals.

The task of risk assessment within the CCSVP is to strike a scientific and ethical balance in utilizing the best available set of practices for determining the likelihood of recidivism for a sexual offender while optimizing public safety. Since the focus of risk assessment for CCSVP is the degree of risk posed by a specific sexual offender with a particular history and set of characteristics, that risk assessment necessarily involves a balance between nomothetic and idiographic approaches. In the former approach, methods from research utilizing aggregated data from group samples provide the basis to develop a particular perspective regarding risk of future sexual offending relative to the individual of concern; in the latter, particular characteristics of that person (or case-specific information) are considered relative to their risk, particularly when such characteristics are related to information not included or covered by available nomothetic methods. Consequently, risk assessment regarding sexual offenders typically starts with various types of group data. Risk for a particular sexual offender is initially considered based on the degree to which the individual under consideration possesses one or more characteristics (or typically some varied collection of characteristics) similar to those sexual offenders studied in available data sets and then applying those set of characteristics to obtain sexual offense recidivism risk probabilities for groups of sexual offenders with some specified number or density/degree of risk factors. In addition, specific information about the specific sexual offender under consideration (typically information not included or adequately addressed by available "group data" or unique to the individual) may be considered. Since various studies have demonstrated the weaknesses of unstructured clinical judgment regarding the relative or absolute risk for determinations of sexual offender recidivism (e.g., Hanson & Morton-Bourgon, 2004) from a scientific perspective, empirically demonstrated approaches to risk assessment, particularly actuarial measures, have taken a prominent position in risk assessments. However, in virtually all known jurisdictions, appellate courts have specifically adopted a balanced perspective, allowing testimony about the results of standardized or nomothetic approaches (e.g., so-called actuarial instruments and structured professional judgment) but only or largely in the context of allowing or requiring evaluators to present and consider the totality of information bearing on risk that an evaluator feels is "case relevant" regarding a specific sexual offender's risk for sexual offense recidivism. For example, a Minnesota Supreme Court Case (*In re Blodgett,* 1994) wrote:

> "In applying the *Pearson* test, the court considers the nature and frequency of the sexual assaults, the degree of violence involved, the relationship (or lack thereof) between the offender and the victims, the offender's attitude and mood, the offender's medical and family history, the results of psychological and psychiatric testing and evaluation, and such other factors that bear on the predatory sex impulse and the lack of power to control it."

Similarly, other Minnesota Supreme Court decision (typically referred to as Linehan I & III) wrote:

> "[T]he trial court, in predicting serious danger to the public, should consider the following factors if such evidence is presented: (a) the person's relevant demographic characteristics (*e.g.,* age, education, etc.); (b) the person's history of violent behavior (paying particular attention to recency, severity, and frequency of violent acts); (c) the base rate statistics for violent behavior among individuals of this person's background (*e.g.,* data showing the rate at which rapists recidivate, the correlation between age and criminal sexual activity, etc.); (d) the sources of stress in the environment (cognitive and affective factors which indicate that the person may be predisposed to cope with stress in a violent or nonviolent manner); (e) the similarity of the present or future context to those contexts in which the person has used violence in the past; and (f) the person's record with respect to sex therapy programs."

As noted, the US Supreme Court identified that a respondent's behavioral criminal history provided the basis for a determination of his risk of future sexual offending. To the extent that risk assessment has been addressed by appellate courts, it appears that they have emphasized that individual courts should not consider any one particular approach (e.g., so-called actuarial risk assessment) as dicta or controlling but rather that courts should consider the totality of the evidence and identify relevant factors of significance in a particular case. Thus, currently, while so-called actuarial risk assessment instruments most often are utilized as a central component of evaluator's perspective's on the like-

lihood of future sexual offending most generally, the legal system takes a broader approach in the application of that information to a particular sexual offender and most commonly privileges other specific information about an offender's history that bears on their probability of sexual offense recidivism.

Of note, forensic mental health professionals have also recommended a broad and inclusive approach to risk assessment of violent behavior, including sexual offending. Conroy and Murrie (2007) recommend a comprehensive model for risk assessment regarding risk for violence, including sexual offending. They write:

> "A broad model for risk assessment helps guide evaluators through the process of collecting and considering relevant data, but also contextualizing this data to form and communicate opinions. It is essential to rely on scientific research in almost every risk assessment and to use formal tests or instruments in some. However, neither consideration of research nor testing is sufficient to constitute a thorough risk assessment *process*."

Further, violence risk assessment in general and sexual offense recidivism risk assessment are areas of increasing study and rapid revision of existing methods and the development of new ones. Regarding sexual offense recidivism risk assessment, Harris and Hanson (2010) described an "explosion" in the development, refinement, and use of risk assessment tools regarding sexual reoffending. They wrote:

> "In our view, the development of risk assessment has been somewhat like rebuilding a ship at sea, continually replacing one plank at a time when we sprang a leak. We view this rebuilding as a strength, not a problem. The willingness to update and change releases us from the Darwinian extinction that has claimed so many other psychological instruments and assessment processes in the past." (p. 12)

Clearly, quantifying the likelihood of future sexual offending for persons being considered for possible civil commitment is problematic for several reasons as it is more generally for any sexual offender. First, currently available follow-up studies range from estimates of 5 years to 10 years, with only a few limited studies providing estimates for longer periods, not "lifetimes" (the period of time required for consideration for the present purpose). Second, current research measures future re-offenses predominantly via rearrest or reconviction; it is the consensus, if not the unanimous perspective, of scientific research regarding this area, that rates of arrests and convictions for sexual offenses "significantly" underestimate the true rate (detected + undetected) of sexual offenses. Third, similar to criminal offenders, a significant percentage of sexual offenders are rearrested, jailed, and/or re-incarcerated for nonsexual offenses or conditional release violations with a brief period of time after release from prison and are thus lack the opportunity to reoffend. In addition, particularly over the past 15–20 years, sexual offenders were subject to longer and sometimes indeterminate sentences in the criminal justice system and consequently were not released to the community, and they too lacked the opportunity to reoffend. Finally, most follow-up studies for sexual offense recidivism have relied on "point base rates" and not survival analysis. Survival analysis provides perhaps the best or optimal means to account for only "opportunity time," time when an offender is actually in the community and not jailed, imprisoned or otherwise detained. Relative to this point, Langan, Schmitt, and Durose (2003) found that 43 % of sexual offenders were rearrested for some crime (75 % of which were felonies) within 3 years of their release from prison. Even more recently, Durose, Cooper, and Snyder (2014) showed that 71 % of violent offenders (including sexual offenders) were rearrested for some criminal offense within 5 years of release from prison. Consequently, some sizeable portion of those sexual offenders who would likely be regarded as at higher risk for sexual offense recidivism have not been available for follow-up study for potentially significant amounts of time and thus did not have the opportunity to commit an additional sexual offense.

Available scientific attempts to determine the true rate of actual offenses committed by sexual offenders are obviously problematic for a variety of offender, victim, and agency practices. From an offender perspective, to be forthright and honest about the actual number of such offenses places an offender at risk of additional and more extensive incarceration and other negative consequences. An extensive body of research now exists which indicates that the self-report of sexual offenders as to their sexual offending behavior is unreliable and invalid (e.g., Abel et al., 1987, Abel & Rouleau, 1990; Ahlmeyer, Heil, McKee, & English, 2000; English, 2003; Kaplan, Abel, Rathner, & Mittleman, 1990; Marshall & Barbaree, 1989; Weinrott & Saylor, 1991). From a victim perspective, the data indicates that not more than 1/3 of adolescent and adult victims of sexual assaults and fewer than 20 % of child victims of sexual offending even report their victimization to authorities (e.g., Bonta & Hanson, 1994; Craig, Browne, & Beech, 2008; English, 2003). Thus, most sexual offenses are not even reported to some authority or agency. Further, as English pointed out, the detection by authorities or agencies of alleged acts of sexual offending against both children and adults is rare and even that reduced group of alleged sexual offenses reported to authorities rarely result in arrest. That is, even in those limited instances when sexual offenses are reported in some manner, such events do not necessarily enter into systems where they are likely to "register" or "be counted" (e.g., Falshaw, Bates, Patel, Corbett, & Friendship, 2003; Marques, Day, Nelson, & West, 1994; Marshall & Barbaree, 1989). In short, the available cumulative studies indicate that a substantial number of "reported" sex offenses do not "enter" the formal legal system and/or result in new criminal charges or arrest, let alone a conviction for a sexual offense. Even when reported sexual offenses do "enter" the formal legal system and/or result in

new criminal charges, the "sexual motivation" element of an offense incident or episode may be "lost." Research has demonstrated that a significant number or percentage of what are recorded as violent arrests or convictions are, in fact, very or highly likely to be sexually motivated (e.g., Rice et al., 2007) and their recommendation to utilize "sexually informed" rap sheet data in considering sexual offense recidivism rates. In short, most sexual offenses (particularly those against youth) go unreported and undetected; official records of rearrests and reconvictions represent significant underreporting of the frequency of reported sexual offending (e.g., they may represent only a 10–33 % of all such offenses). Consequently, it is almost certain that all formal measures of sexual offense recidivism substantially underestimate the "true" rate of sexual offenses actually enacted either first-time or recidivistic sexual offenders.

A number of approaches have been developed to provide estimates of the probability of sexual offense recidivism for groups of sexual offenders in general. Best practices for risk assessment for sexual offenders have been identified by ATSA (2005, 2014) and by Craig and Beech (2010). These approaches include base rates, individual risk factors, actuarial risk assessment instruments (ARAI), and structured clinical or professional judgment (SPJ). The first three areas can be considered nomothetic approaches, relying on the availability of various group data. In addition, there may be person- or subgroup-specific factors that are related to sexual offending which may or may not be found in the available research but may constitute a risk factor for either the individual or subgroup of sexual offenders; these case-specific or idiographic considerations are also considered key to risk assessment of violent behavior generally and future sexual offending. SPJ can provide a more idiographic dimension to risk assessment, as can consideration of so-called dynamic or psychologically meaningful risk factors (DRF) or criminogenic needs. Each or all of these approaches offer particular utility relative to providing estimates of the likelihood of sexual offense recidivism for a particular individual by considering and integrating both group and person-specific groups of detected sexual offenders.

Several significant caveats must be identified at this point. First, effectively no follow-up or outcome data exists on persons who were deemed eligible for CCSVP released into the community. Obviously, since no outcome data is available, no sexual offense recidivism is available for extended or indefinite follow-up periods. Consequently, evaluators are left to rely on the approaches described just above as applied to general sexual offenders', and not a more narrow group defined by the presence of a mental abnormality or personality disorder, serious difficulty in control of their sexual offending behavior and for extended periods of time. By necessity then, an evaluator's development of an opinion regarding the probability of a specific individual being considered for CCSVP must rely on risk assessment approaches developed for and applied to more typical sexual offenders and a consideration and integration of various types of group data along with relevant specific aspects of the particular individual under consideration. Just as in other areas of forensic mental health, an evaluator's opinion about the psycholegal issues in a particular case must be largely based on the specific person's personal history, structured psychological and/or psychophysiological assessments of an individual (within the constraints of a high-stakes forensic context), and case-specific issues and factors, all considered within the measures of the best available related nomothetic data (e.g., available normative groups) from the general scientific literature regarding sexual offenders.

The base rate refers to the percentage of individuals in a group with a certain characteristic. Regarding sexual offender recidivism, base rate refers to the percentage of particular types of or subsets of sexual offenders who reoffend over some particular period of time; the base rate may vary as a function of the nature or composition of study sample (which sexual offenders are "available" to be studied), the length of the follow-up, the conditions applied to offenders during the follow-up period (e.g., supervision, re-incarceration), the measure of recidivism, and other factors. Base rates can be used to provide a benchmark for the likelihood of sexual offender recidivism for general or select groups of sexual offenders. Harris and Rice (2007), in reviewing the accumulated studies of sexual offender recidivism for general, non-selected sexual offenders, found that studies converged in identifying approximately 30 % of those "general" sexual offenders as being detected for subsequent sexual offenses at follow-up. In a later publication, they noted that the very high correlation (.81) between length of follow-up and recidivism, indicating that rates of sexual offense recidivism should/will rise as offenders, is followed for longer periods of time. Harris and Hanson (2004) in a meta-analysis of predominantly low-to-medium risk sexual offenders determined that 24 % of the samples were detected for another sexual offense over a 15-year follow-up period but noted that the rates were "double" for those sexual offenders with a previous sexual offense conviction. Doren (1998) pointed out that sexual offenders identified as candidates for potential CCSVP are a unique subset of more general detected sexual offenders, noting that most state systems only consider 1–10 % of the larger group of incarcerated sexual offenders for CCVP. This seems borne out by research such as that of Milloy (2007). She followed 135 sexual offenders who had been screened and recommended for civil commitment in the state of Washington but where no petition was filed, and they were released to the community and followed for a uniform period of just 6 years. Of the 135 offenders, 23 % committed some type of new felony sexual offense that resulted in a criminal *conviction* (84 % of this group were arrested for a felony sexual offense involving physical contact). In total, approximately 29 % of these sexual offenders committed an

additional sexual offense within just 6 years after being released from detention. Milloy concluded: "…the distinctiveness of the select population of sexual offenders in the current study is clearly illustrated by a comparison of this group's recidivism rates to those of an overall population of released Washington State sex offenders" (p. 8).

In addition, research has identified largely static or historical risk factors that can be used to identify those sexual offenders at a higher risk to reoffend. Sufficient studies of sexual offender recidivism have accumulated that researchers have been able to conduct "meta-analyses" or studies of the findings across multiple studies (e.g., studies of existing individual studies). Such studies identify the broad dimensions of risk factors while potentially missing select idiographic or less frequently studied variables. Hanson and Bussiere (1996, 1998) conducted a meta-analysis of general sexual offense recidivism studies to identify factors associated with such recidivism as defined by subsequent arrest or conviction. In summarizing their findings, Hanson and Bussiere identified that sexual offense recidivism was best predicted by *sexual deviancy variables* (deviant sexual interests and victim choices such as boys or strangers, prior sexual offenses), *general criminological factors* (younger age, total prior offenses), and *failure to complete treatment* (treatment failure). *Personality disorders* were also related to sexual recidivism, particularly *antisocial personality disorder*. More recently, Hanson and Morton-Bourgon (2004, 2005) selectively updated the earlier meta-analysis. This most recent meta-analysis of risk factors for general sexual offense recidivism found that the following domains were associated with a greater risk of sexual reoffending: deviant sexual arousal/interests, antisocial orientation, personality disorder(s), indices of rule violations (e.g., parole/probation violations, conduct violations), and issues (e.g., absence of or conflicts) in intimate relationships. Most recently, Mann et al. (2010) provided a meta-analytic summary of the empirical evidence as to whether specific risk factors were empirically supported, promising, "unsupported but with interesting exceptions," or "worth exploring." In addition, Mann et al. wrote: "We do not believe that the factors mentioned so far are an exhaustive list of possibly relevant risk factors. Further research is likely to identify new risk factors and refine the definitions of the factors already shown to empirically predict recidivism." Per the study by Jackson and Hess (2007), over 90 % of the evaluators reported that a consideration of static risk factors was essential to their evaluations.

Relative to the consideration of risk factors in some aggregated or nomothetic form, there has been an ongoing controversy, regarding how to combine information about risk factors for sexual offender recidivism. Generally, this position is one described as professional judgment versus an actuarial approach. Different investigators working with different sets of information available to those investigators about particular sexual offender samples have combined individual risk factors into risk assessment instruments have resulted in various risk assessment instruments. Some of these instruments are identified as actuarial risk assessment instruments (ARAI), while others are identified as structured professional judgment (SPJ). Actuarial methods are most commonly utilized by insurance companies involved in the computation of the probability of the occurrence of such events as illness, accidents, and death, using information that has been demonstrated to be related to the outcome of concern. The likelihood of the event of interest as determined by statistical combinations of identified risk factors is utilized to determine the costs associated with obtaining insurance relative to a particular individual's risk. Regarding ARAI, the recent meta-analyses of the sexual offender recidivism literature and other studies have identified select largely "static" or historical factors that are empirically related to recidivism. From this body of research and other studies, ARAI can be considered as attempts to develop adjusted base rates for groups of sexual offenders with particular numbers and types of easily measured risk factors. These so-called actuarial methods are ones that rely on objectively identified factors associated with an outcome of interest; an actuarial scale specifies *which empirically identified factors* are selected for examination and the relative *weight* that factor has as part of the particular instrument's assessment of some outcome.

Relative to sexual offending, actuarial scales represent statistical means of selecting and combining easily obtained information and examining the degree to which those particular variables are associated with some future outcome (e.g., predictive accuracy). Starting in the mid-1990s, several actuarial scales were developed that have been repeatedly demonstrated to show moderate predictive accuracy of sexual offender recidivism for adult male sexual offenders. More specifically, these actuarial instruments provide estimates of the degree of risk (probability) of a future sexual offense for sexual offenders with particular numbers of and/or degree of risk factors (Doren, 2002; Hanson, 1998; Quinsey, Harris, Rice, & Cormier, 1998; 2006; Harris, Rice, Quinsey, & Cormier, 2015). Different instruments rely on different "outcomes" to measure sexual offender recidivism, ranging from "rap sheet" convictions or arrests that have been demonstrated to "miss" or "mislabel" a significant number of sexually motivated violent criminal behavior; further, other instruments rely on broader outcomes [e.g., "informed" rap sheet-based sexual offenses or violent offenses which show a stronger association to specific sexual offending recidivism (e.g., Rice & Harris, 2015) to attempt to rectify the substantial underreporting of sexual offending. In short, actuarial measures have been developed which utilize statistical combinations of a limited number of risk factors and their association with the likelihood of rearrests or reconvictions for different behaviors providing varied but empirically demonstrated measures of future sexual offenses.

ARAIs include the Static-99 (Hanson & Thornton, 2000), the Static-99R (Hanson, Thornton, Helmus, & Babchishin, 2015; Helmus, Hanson, & Thornton, 2009; Helmus, Hanson, Thornton, Babchishin, & Harris, 2012a; Helmus, Thornton, Hanson, & Babchishin, 2012b; Helmus, Thornton, Hanson, & Babchishin, 2015), the Static-2002R (Hanson & Thornton, 2003; Helmus, Hanson, et al., 2012; Hanson et al., 2015), the Minnesota Sex Offender Screening Tool-Revised (MnSOST-R: Epperson, Kaul, & Hesselton, 1998; Epperson, Kaul, Huot, Goldman, & Alexander, 2003), and the Sex Offender Risk Appraisal Guide (SORAG; Harris, Rice, Quinsey & Lang, 2015; Quinsey et al., 1998, 2006; Rice & Harris, 1997). At present, actuarial assessment of risk for sexual offenders is regarded as a core assessment methodology. There are now sufficient empirical studies in the scientific literature that provide independent cross validation of key aspects of these *actuarial* instruments. Revised versions of the instruments are undergoing validation continuously. The modifications to the instruments have generally been relatively minor, and research to date suggests that the validity of the revised instruments will mirror their original versions. According to their meta-analysis (Hanson & Morton-Bourgon, 2004; 2007; 2009), in predicting sexual recidivism among sexual offenders, the *average* predictive accuracy of all the individual risk scales was in the moderate to large range: Static-99 (*d.* = .74), Static-02 (*d.* = .71), MnSOST-R (*d.* = 80), and SORAG (*d.* = .60). Hanson et al. showed that the confidence intervals for each of these risk scales overlap; this means that their respective predictive accuracies are not significantly different from each other. More recent studies have found that the revised versions of the Static-99R (AUC = .68–.72) and Static-2002R (AUC = .67–.69) have similar predictive accuracies to the four aforementioned instruments (e.g., Helmus, Thornton, et al., 2012). Therefore, studies published to date indicate that there are a number of actuarial instruments that provide reasonable predictions of sexual recidivism, with no apparent advantage to any specific measure.

However, there are a number of specific limitations to the ARAI, and the interpretation of the results and implications of ARAIs for sexual offender recidivism relative to *lifetime* risk of such recidivism must be qualified. First, most available measures were generally developed as "screening tools" for institutional settings and rely on information about empirically identified risk factors which can be more easily found for scoring purposes by persons with access to a basic correctional or similar file about a sexual offender. Second, as a consequence of emphasizing utility, ARAIs typically do not necessarily include variables that may be important but are difficult to measure (e.g., deviant sexual preference, personality disorder, psychopathy), variables that were not selected or measured by multiple studies, or variables that are idiosyncratically associated with sexual offending. Third, ARAIs may also rely on some idiosyncratic definitions about certain risk factors; thus, a factor such as "prior sex offenses" does not simply refer to the number of previous sexual offenses (e.g., reported to authorities and self-reported or the number of incidents of sexual offending). Instead, scorers/evaluators must adhere strictly to the definitions provided in the scoring manuals to maintain the integrity of the instrument. Fourth, ARAI are derived from multivariate statistical techniques; they necessarily "collapse" or "combine" variables and reduce the number of total variables available for consideration to a smaller number of such variables [e.g., the meta-analysis identified approximately 20 statistically significant risk factors but the Static-99 (which resulted from that research) includes only 10]. Correlated empirical risk factors, where they may have different relationships in sexual offense recidivism for specific individuals but "overlap" when those individuals area "merged" and viewed as a group, are lost as potential factors in identifying risk of sexual offense recidivism for those individuals for who they do apply. Overall, it is clear that ARAI do not provide comprehensive coverage of risk factors for sexual offending. Fifth, most RAIs are based upon rearrests and reconvictions, most commonly for rap sheet sex offenses (e.g., capturing just 10–33 % of relevant sexual offense based on the findings on underreporting of sexual offense). Sixth, only those sexual offenders released and available for follow-up are reported, to the degree that particular sexual offenders may not be released from incarceration for follow-up constitutes "sample censorship," and offenders serving long or indeterminate sentences (e.g., possibly higher-risk offenders) may not have been available for follow-up. Seventh, given that available ARAIs only provide risk estimates for sexual offenders followed for 6–15 years, these figures do not represent the actual *lifetime* risk of sexual recidivism for most offenders given normative life expectancy. Although researchers have provided methods to estimate the "true" rate of sexual offender recidivism (e.g., Doren, 2010a, 2010b; Hanson & Thornton, 2003; Thornton, 2009), none of the results of the ARAI per se provide a measure of *lifetime* risk of actual sexual recidivism (e.g., detected + undetected). Thus, it is widely agreed that the estimates of absolute recidivism rates provided by ARAIs represent significant underrepresentations of actual sexual reoffending, which may or may not be detected during a follow-up.

The use of multiple actuarial measures has been endorsed by multiple individuals (e.g., Barbaree et al., 2006; Barbaree in Langton et al., 2008; Hanson, 2008) based on several considerations and must be considered the standard of practice. One early study with a small sample, Seto (2005) found that combining ARAIs did not provide a significant advantage of the single best ARAI. However, the subsequent scientific literature provides several bases for the utility of examining the results of multiple ARAIs and other RAI; some of these

results are summarized in Doren (2010a, 2010b). Scientifically, there is no "best" instrument; each of the ARAIs possesses equivalent degrees of predictive accuracy from a measurement perspective (e.g., Hanson & Morton-Bourgon, 2009). As Doren noted, the sexual offense recidivism variance accounted for by the collection of known static risk factors appears to account for a very substantial portion of that domain's complete set of static factors. In addition, since the different actuarial instruments contain unique as well as overlapping variables, they each measure recidivism using different sets of risk factors. Consequently, the relative ranking of risk by the specific actuarial instruments may be different for an individual. Issues in scoring of the different measures will make less of a difference when multiple measures are utilized; multiple actuarial instruments lead to increased reliability in identifying the relative risk of a particular offender. Finally, to the degree that a "set" of (multiple) actuarial measures converge in identifying that an offender is at higher risk, then there can be increased confidence in concluding that that sexual offender is at higher risk for sexual reoffending.

In addition, as noted, there are non-actuarial-based RAI or structured professional judgment that can contribute to a comprehensive risk assessment in the CCSVP. The PCL-R is the most researched clinical rating scale in the general area of violent prediction Salekin, Roger, and Sewell (1996), Hemphill, Hare, et al. (1998), and Hemphill, Templeman, et al. (1998) have reviewed the literature on the PCL-R via meta-analysis of individual studies and concluded that the PCL-R represents a good predictor of violence recidivism generally, inclusive of sexual recidivism. Several studies have found an increased risk of future sexual offending across relatively brief follow-up periods for persons with elevated PCL-R scores (e.g., Quinsey, Lalumiere, Rice, & Harris, 1995; Rice & Harris, 1997). A meta-analysis of risk factors by Hanson and Morton-Bourgon (2004) found that higher PCL-R scores were associated with an increased risk of sexual offense recidivism specifically; a more recent meta-analysis found an even stronger relationship between PCL-R scores and sexual reoffending, particularly when those scores were computed by well-trained raters (Hawes et al., 2012). An RAI specifically developed for providing a structured professional risk assessment for sexual offender recidivism is the Sexual Violence Risk-20 (SVR-20; Boer, Wilson, Gauthier, & Hart, 1997). This instrument provides a list of twenty variables believed to be associated with a higher risk of sexual offense recidivism, including psychopathy. The evaluator rates the relative presence of these factors for a particular offender and offers a judgment based on the total number, intensity of particular risk factors and/or an identified combination of particular factors believed to be associated with that individual's risk for sexual reoffending. Recent research has demonstrated that the SVR-20 has significant predictive accuracy. Overall, SPJ instruments show somewhat lower levels of predictive accuracy than ARAIs (de Vogel, de Ruiter, Van Beek, & Mead, 2004; Hanson & Morton-Bourgon, 2008; 2009); however, in certain instances, they have demonstrated particularly high levels of predictive accuracy (Hanson & Morton-Bourgon, 2009; Logan, 2015).

"Static" risk factors, by definition, do not change; they are "facts" of an individual's personal history. Recently, there has been increased recognition of and attention to findings that a number of risk-relevant variables may not be fully accounted for by at least some ARAI. Originally, there was the notion that so-called dynamic risk factors might exist that were hypothesized to represent characteristics of sexual offenders which might be subject to modification and thus might vary over time for particular sexual offenders. For example, the Sex Offender Needs Assessment Rating (SONAR; Hanson & Harris, 2000) and later the STABLE-2000 (Hanson & Harris, 2001) were originally developed as attempts to study and quantify a set of what were viewed as "dynamic" risk factors for sexual reoffending. However, while the SONAR demonstrated some association with recidivism, the field test of the Dynamic Supervision Project (DSP) utilizing the STABLE-2000 essentially did not find a uniform association with its sample of sexual offenders on parole and probation. However, the DSP was used to test and validate the revised STABLE-2007 (Hanson, Harris, Scott, & Helmus, 2007) on the parole/probation sample. Eher, Matthes, Schilling, Hauber-MacLean, and Rettenberger (2012) applied the STABLE-2007 to sexual offenders released from incarceration. More recently, the notion of "dynamic" risk factors has been reconceptualized as "criminogenic needs" or social or psychological factors that "push" toward sexual reoffending. Per Thornton (2010), such needs represent either long-term vulnerabilities (e.g., a life history focus) or stable but potentially modifiable risk factors. New research has demonstrated that the inclusion of measures of criminogenic needs provides statistically and clinically significant information regarding a sexual offender's risk for future sexual offender recidivism. As Doren (2010b) noted, measures of dynamic risk characteristics have demonstrated roughly equal sexual offense recidivism predictive validity relative to ARAIs; this is evidenced in the research for each measure of dynamic needs or risk. In addition, they show significant small incremental predictive utility relative to measures of static risk factors such as ARAIs. The STABLE-2007 has been demonstrated to show incremental validity (e.g., added effects on absolute risk recidivism rates) to select ARAIs (Babchishin et al., 2012; Hanson et al., 2007) for a sample of sexual offenders on parole and probation. The Structured Risk Assessment (SRA; Thornton, 2002) framework has also been shown to produce similar effects on sexual offender recidivism rates for other samples,

including a preselected for treatment sample (Harkins et al., 2009) and a preselected for risk sample (Thornton & Knight, 2007; 2014). Other instruments that also attempt to assess dynamic risk or criminogenic needs have also shown substantial incremental predictive validity relative to select ARAIs (e.g., Allan, Grace, Rutherford, & Hudson, 2007; Olver, Wong, Nicholaichuk, & Gordon, 2007). Consequently, there is increasing evidence that integrating an empirically validated assessment of criminogenic needs with information from static ARAI provides additional important information about the degree of risk for sexual offender recidivism that may characterize a particular offender at the time of evaluation. Doren has suggested that a particularly useful means of considering risk would be a "risk profile" composed of relevant dimensions related to sexual offense recidivism.[2]

In addition to criminogenic needs, other considerations may also be relevant relative to risk assessment related to CCSVP. Assuming the application of the range of ARAIs and SPJ instruments, there are also several areas to be considered. First, the joint presence of deviant sexual arousal (DSA) and psychopathy has been identified as conferring a particular risk of sexual reoffending to sexual offenders by various individual studies (e.g., Harris et al., 2003; Hildebrand, de Ruiter, & de Vogel, 2004; Rice & Harris, 1997; Serin, Mailloux, & Malcolm, 2001). Most recently a meta-analysis of 20 studies found that offenders who scored high on the PCL-R and some measure of sexual deviance were more likely to reoffend sexually than other offenders (Hawes et al., 2012). Second, the relative age of a particular offender may have an effect on the rate of sexual offender recidivism. Several studies have indicated that particularly advanced age (e.g., 60+) may represent a period of significantly decreased risk for the general sexual offender. Hanson and Harris (2001) and Barbaree, Blanchard, and Langton (2003) reported that rapists, and less so child molesters, showed relative decreases in recidivism with increased age. However, a number of investigators have demonstrated that some sexual offenders continue to offend until relatively late in life (e.g., Abel, Rouleau, & Osborn, 1993; Hanson, Steffy, & Gauthier, 1993) or that subgroups of sexual offenders persist in offending or begin offending at relatively older ages. Others have found that more high-risk sexual offenders show less of a decline in sexual offender recidivism with age (e.g., Thornton, 2006). Alternatively, Harris and Rice (2014) found that age of *onset* of violent including sexual offending was associated with a greater likelihood of recidivism (as opposed to age at release).

[2]Per Doren, he hypothesized that the seven factors include general antisociality, desire for/enjoyment of sexual offending, sexual interest in children, sexualized hostility, immaturity, intimacy-detached hostility, and high-frequency sexual behavior.

Finally, prior sexual offender treatment should be considered as a potential dynamic factor with some association to the possibility of reducing certain risk factors related to sexual offense recidivism. Hanson et al. (2002) and Losel and Schmucker (2005) conducted meta-analyses of more recent treatment studies involving sexual offenders. In both studies, persons who completed sexual offender treatment showed lower rates of sexual offense recidivism than groups of persons who did not participate in treatment (of note, the latter meta-analysis reported on the results of both psychosocial and biological treatments). However, the rates of sexual offender recidivism for persons who participated in sexual offender treatment were not substantially different from the rates of sexual offender recidivism demonstrated by untreated sexual offenders considered in the two meta-analyses of risk factors (Hanson & Bussiere, 1998; Hanson & Morton-Bourgon, 2004). In addition, no effects of sexual offender treatment were demonstrated for the very limited number of studies that were random-controlled trials, considered the "gold standard" in psychotherapy outcome research. In addition, both meta-analyses by Hanson et al. (2002) and Losel and Schmucker (2005) showed that persons who were mandated for treatment or referred for treatment based on higher levels of "need" showed no treatment effect. Rice and Harris (2003; 2012) have offered critiques of the results of these meta-analyses. In addition, the most recent Cochrane Review of Dennis et al. (2012) have found no differences in sexual offense recidivism for the limited number of methodologically rigorous studies of sexual offenders to receive psychosocial treatments. It is noteworthy that the only random assignment-controlled scientific study of sexual offenders who volunteered for sexual offender treatment and who were then randomly assigned to treatment The Sexual Offender Treatment and Evaluation Project (SOTEP) found that cognitive-behavioral relapse prevention treatment (coupled with additional and extended community aftercare) showed no effect on the sexual offense recidivism rate of either child molesters or rapists (e.g., Marques, Wiederanders, Day, Nelson, & Ommeren, 2005). In their reviews of the sexual offender treatment literature, Dennis et al. (2012), Langstrom et al. (2013), and Rice and Harris (2003; 2012) concluded that there is no scientific basis for concluding that the effectiveness for psychosocial treatments for typical has yet been demonstrated. No random assignment-controlled studies have yet been conducted on high-risk, high-need sexual offenders such as those who are identified as appropriate for civil commitment. Thus, while sexual offender treatment may have a risk-reducing effect on select sexual offenders (most likely and predominantly, low-to-moderate risk sexual offenders), it is clearly not a uniform phenomenon, and there is no scientific basis or means that exists to identify which recidivistic and/or higher-risk sexual offenders are likely to

genuinely benefit from current sexual offender treatment models and practices. Consequently, the potential effects of sexual offender treatment cannot be assumed and must necessarily be considered carefully on an individual or case-specific basis.

Nature of Persons Civilly Committed

The purpose of sexual offender civil commitment laws are to identify and detained those individuals who are at high risk to commit future sexual offenses due to a mental abnormality and/or personality disorder. As such, populations of individuals held under such laws should share similar characteristics in terms of diagnosis and risk level. A growing body of data suggests such similarities do exist.

There are over 4,000 individuals either committed or detained under sexual offender civil commitment statutes. All but one program operates a total confinement inpatient facility to which residents are initially committed. Only Texas operates a strictly outpatient program. Pennsylvania also operates a slightly different program. Individuals committed under Pennsylvania's law are all juveniles who are aging out of the juvenile justice system, but are considered likely to reoffend due to a mental abnormality or personality disorder. As such, the mean age of residents[3] in the Pennsylvania program is likely to be quite a bit lower than the other programs. Programs also differ regarding whether individuals are detained in the total confinement facility while awaiting their commitment trial. While several states do detain precommitment individuals, other states house the detainees in county jails or other facilities prior to their commitment.

Several authors have provided published descriptions of civilly committed populations in Arizona (Becker, Stinson, Tromp, & Messer, 2003), Minnesota (Janus & Walbek, 2000), California (Vess et al., 2004), Wisconsin (Elwood, Doren, & Thornton, 2008), Washington (Jackson & Richards, 2007), and Illinois (Jumper, Babula, & Casbon, 2012). In addition, Florida (Levenson, 2004) and Texas (Boccaccini, Turner, & Murrie, 2008) have provided data regarding offenders who have been either referred or committed pursuant to a sexual offender civil commitment law. Furthermore, the Sex Offender Civil Commitment Programs Network (SOCCPN) conducts annual surveys of programs and gathers additional data relevant to resident characteristics as well as characteristics of the programs themselves (Jackson, Schneider, & Travia, 2009; Jackson, Travia, & Schneider, 2008). From these sources, it is possible to offer a composite description of individuals held under these laws.

The vast majority of individuals detained and committed under sexual offender civil commitment statutes are male. Only four states reported having female residents as of 2008 (Jackson et al., 2008). Jumper and colleagues (2012) reviewed the published data relevant to civil commitment and provided demographic and diagnostic summaries. The average age in the seven samples reporting age was 45.7 ($SD = 11.4$). Of the seven samples reporting ethnicity, 64 % of the national sample was Caucasian, 23.7 % African American, 7.1 % Hispanic, 3.9 % Native American, and 5.2 % were classified as Other. The ethnic proportions are similar to those reported by Deming (2007) in his survey of civil commitment programs. In Deming's sample, 15 states reported ethnic data. In aggregate, 68.3 % of individuals were Caucasian, 24 % African American, and 6 % Hispanic. Deming (2008) noted that African American individuals are overrepresented in sexual offender civil commitment programs as they make up only about 12.8 % of the US population and that Hispanic Americans are underrepresented as they comprise 14.1 % of the US population (US Census Bureau, 2005, as cited by Deming, 2007).

Jumper et al. (2012) reported that approximately half (49.0 %) of all residents in the national sample ($n = 1{,}684$ for diagnostic information) were diagnosed with pedophilia. Other common paraphilia diagnoses included paraphilia NOS-non-consent (27.5 %), paraphilia NOS-other (16.6 %), sexual sadism (6.4 %), voyeurism (8.6 %), exhibitionism (7.8 %), frotteurism (2.6 %), and fetishism (3.1 %). Apart from paraphilias, common formerly identified Axis I disorders included substance abuse disorders (50.4 %) and mood disorders (20.9 %).

Personality disorders are also very common in this population. Nearly three-quarters (72.7 %) of the residents in Jumper et al.'s (2012) national sample were diagnosed with at least one personality disorder. Antisocial personality disorder was the most common specific disorder (43.2 %), followed by personality disorder NOS. Typically, personality disorder NOS is qualified with "with antisocial features," although, "with borderline features" is also common. Personality disorders from Clusters A and C are uncommon in this population (7.3 %). In addition, where data was available, approximately 23 % and 9 % of persons civilly committed were characterized by borderline intellectual functioning or mildly mentally retarded (now intellectual disability) (Table 2).

Psychopathy Checklist-Revised (PCL-R; Hare, 2003a, 2003b, 2003c) data were reported for 1,481 residents included in the Jumper et al. (2012) analysis. Overall, the mean PCL-R score was 24.2, which is identical to the mean PCL-R scores reported by Hare (2003a, 2003b, 2003c) in a sample of sexual offenders who had been

[3]The majority of programs refer to detained and committed individuals as "residents" (Jackson et al., 2007). For ease of communication, we will also utilize that term throughout this chapter.

Table 2 Diagnostic and psychopathy profiles of civilly committed sexual offenders[a]

	Illinois ($n=377$)	Wisconsin ($n=331$)	Texas ($n=321$)	Florida ($n=229$)	Washington ($n=190$)	Arizona ($n=120$)	Minnesota ($n=116$)	National ($n=1,363$)
Paraphilias								
Pedophilia	59 %	47 %	42 %	39 %	56 %	63 %	35 %	**49 %**
Paraphilia NOS (non-consent)	31 %	21 %	21 %		43 %			**28 %**
Paraphilia NOS (other)	20 %	16 %					6 %	**17 %**
Total paraphilia NOS	51 %	38 %		51 %		56 %		**47 %**
Sexual sadism	7 %					13 %		**6 %**
Personality disorders								
ASPD	53 %	25 %	55 %	48 %	41 %	40 %	26 %	**43 %**
NPD	5 %				6 %	3 %		**5 %**
PDNOS	40 %	14 %		28 %	42 %	42 %	15 %	**36 %**
Other PD	8 %			4 %	5 %	13 %	8 %	**7 %**
Any PD	94 %	41 %		80 %	88 %	77 %	49 %	**72 %**
PCL-R (mean)	26 (7)	24 (7)	23 (8)	26 (7)	24 (7)			**24**
PCL-R >/= 30	38 %				27.5			**30 %**
Intellectual disability/borderline IQ	35 %	43 %			17 %			**32 %**

[a]Rounded percentages taken from Jumper et al. (2012); PCL-R = mean (standard deviation)

administered the PCL-R under standard procedures (i.e., interview plus file review). Not unexpectedly, the mean score for PCL-Rs given under "file review only" conditions was considerably lower in Hare's normative sample ($M=17.5$). The majority of PCL-R data reported in the Jumper et al. study were collected clinically (rather than primarily for research) and therefore are most likely to mirror the standard administration condition. Mean scores for individuals with adult victims only ($M=26.7$) and mixed offender (those with both child and adult victims; $M=26.1$) were substantially higher than those with child victims only ($M=21.8$), a trend consistent with Hare's normative data. Similar to percentages reported by Hare (2003a, 2003b, 2003c), approximately 30 % of the national sample met or exceeded the recommended cutoff score for psychopathy of 30. As expected, a substantial difference existed between those residents with only adult victims (44 % met or exceeded cutoff score) and those with child victims (17 %) or mixed offenders (26 %).

Six programs ($n=1,363$) included in the Jumper et al. (2012) analysis reported victim information for their residents. A large majority of residents (79.2 %) had offended against at least one child or teen. This percentage is similar to 2008 SOCCPN data in which nine programs responded that 75.1 % of their residents had offended against at least one child or teen (Jackson et al., 2008). The remaining residents offended exclusively against adults. Approximately 60 % of the national sample had offended against only female victims; the remaining had offended against male victims or victims of both genders.

Treatment Approaches

As cited previously, the US Supreme Court noted in the *Hendricks* decision that "we have never held that the Constitution prevents the state from civilly detaining those for whom no treatment is available". Nonetheless, despite limited evidence that current forms of sexual offender treatment can be effective, particularly for more high-risk sexual offenders, currently, all sexual offender civil commitment programs offer treatment to their residents. However, states have a great deal of discretion in developing and implementing such programs (*Kansas v. Hendricks,* 1997; *Youngberg v. Romeo*, 1982). Despite the latitude afforded treatment programs, several legal challenges have been heard in trial and District Courts that may govern certain aspects of treatment delivery in the relevant jurisdictions. Vlahakis (2010) provides an excellent overview of legal challenges to sexual offender civil commitment treatment delivery and program operations.

The Sex Offender Civil Commitment Programs Network (SOCCPN) has been gathering data regarding treatment approaches and delivery since 2007 (Jackson, Schneider, & Travia, 2007; Jackson et al., 2008; 2009). Participation in treatment ranged widely among programs. In 2008, 10

programs reported a range of treatment participation from 10 to 100 % of committed residents. The average was 78 % treatment participation. For the 8 responding programs that also detain individuals prior to their commitment, treatment participation among detainees ranged from 0 to 100 %, but the average was 35 %.

Fifteen programs responded to questions regarding treatment groups. All 15 offered group treatment aimed at sexual offender-specific issues. In addition, all also offered drug and alcohol treatment groups, 80 % offered vocational programming, and 80 % offered educational programming. In recognition of responsivity needs, 80 % of the programs offered a Special Needs Treatment Track and 60 % offered a Psychopathy Treatment Track.

In terms of sexual offender-specific treatment in 2008, the programs reported that residents spent from 3 to 20 hours per week in treatment. Group meetings accounted for between 1 and 10 hours. Group size ranged from 4 to 12 residents, with 10 participants being the modal number. Duration of each group ranged from 30 minutes to 3 hours. The majority of groups were facilitated by two therapists, although some programs reported a single-facilitator format. Data gathered from 2009 indicated few changes to treatment delivery. The number of sexual offender-specific treatment hours per week declined slightly to 1.5–12 hours. Groups meet between 1 and 12 times per week, for a range of 60–120 minutes. The average length of a group session was 90 minutes. Eighty-nine percent of programs also offered individual treatment to at least some of their residents. Of the programs who offered individual treatment, the range of residents receiving this treatment was 1.5–100 %.

The most common types of treatment offered were sex offense process groups (93.3 % of programs offered this group) and cognitive-behavioral treatment groups (86.7 %). Other common treatments included dynamic risk factors (80 %), relapse prevention (73.3 %), self-regulation (73.3 %), organized milieu (66.7 %), motivational interviewing (60 %), and approaches derived from the Good Lives Model (60 %). Less common treatments included sexual arousal management (46.7 %), unstructured process groups (33.3 %), and Circles of Support (6.7 %). Many programs offered several types of treatment, and the categories are not necessarily mutually exclusive. For example, cognitive-behavioral treatment groups may target dynamic risk factors or relapse prevention planning.

Discharge and Conditional Release

Several avenues exist for discharge from a civil commitment program both within and across jurisdictions. Ultimately, a judicial body may issue a release or conditional release order. Residents may petition the court directly for release or they may be recommended for release by the program. In jurisdictions that detain individuals before their commitment trials, individuals may be discharged from total confinement without ever having been committed.

All jurisdictions have provisions for discharge when an individual no longer meets criteria for civil commitment due to reduction in risk and/or changes in the mental abnormality that impact future risk. In addition, 16 jurisdictions also have provisions for conditional release (i.e., less restrictive alternatives [LRA]) for individuals who continue to meet criteria for commitment, but are judged to be capable of being managed in a less restrictive setting. A unique approach was chosen by Texas, which operates an outpatient only program. Essentially, all of their residents are on conditional release from the time they are committed. Arizona also operates somewhat differently in that the majority of their committed residents are transferred to LRA status within 120 days of their commitment. The LRA has several levels, most of which are housed on the grounds of the state hospital. Only the final level of LRA occurs in the larger community. A key issue for any type of release relates to the further demonstration of the effectiveness of sexual offender treatment for high-risk sexual offenders and the ability of treatment programs and the courts to make meaningful determinations about the degree to which residents' mental abnormalities, personality disorders, difficulties in control, and risk for sexual offense recidivism have changed while living within a highly structured environment.

In 2009, 16 jurisdictions reported discharge data for the SOCCPN survey (Jackson et al., 2009). Of those, six programs had released no residents from their total confinement facility. Eight additional programs reported a range of 1–39 discharges for a total of approximately 179 discharges directly from total confinement. Twelve programs provided further data regarding the avenue for discharge of these residents. Roughly 50 individuals were discharged following "completion" of treatment, meaning either the program recommended their release or the resident was judged to have obtained "maximum treatment gains." Others were discharged against the recommendation of the program; although two programs specifically reported that they made no recommendations to the Courts regarding release. Additionally, approximately 100 individuals have died during the course of their civil commitment.

Discharges from conditional release number approximately 155, with 110 of those from the Arizona LRA program (Jackson et al., 2009). Five programs reported they have had no discharges from conditional release. Sixteen individuals have died while on conditional release status.

Release, including conditional release, from civil commitment facilities varies across jurisdictions along several

dimensions. Programs with no conditional release provisions entail the most abrupt transition from total confinement to community living. Other programs, such as Washington State, operate secure transition facilities where conditionally released residents live directly following total confinement. Secure transition facilities allow residents more freedoms than those living in total confinement, but provide more support, structure, and external controls than living in the community. Lastly, certain programs, including Kansas and Arizona, have levels of conditional release where residents are gradually given more freedom over time, ultimately culminating in community living.

Despite the existence of conditional release programs, or their structure where present, releasing individuals from sexual offender civil commitment programs present formidable challenges. States who do not operate conditional release facilities or who lack provisions for conditional release must contend with state residency restrictions, community notification, and the potential for public outcry often faced by sexual offenders moving into a community. Jackson et al. (2007) reported common impediments to community living for released residents. Commonly cited barriers included legal residency restrictions (63.6 % of reporting programs endorsed this as a barrier), restrictions on where residents can live resulting from their specific release plans (54.6 %), negative publicity and public reactions (54.6 %), lack of housing or lack of affordable housing (36.4 %), and available/affordable housing in undesirable, risky areas (63.6 %). In addition to residency barriers, individuals released from civil commitment facilities often have difficulties finding adequate employment, particularly if the jurisdiction requires a 1:1 custodial escort (Jumper, 2010).

Residents who are conditionally released to the community or conditional release facility may be subject to a host of supervision requirements. Common management approaches include GPS monitoring, escorted supervision into the community, corrections supervision in the form of probation or case management, as well as periodic polygraphs and penile plethysmographs, antiandrogen treatment, and ongoing sexual offender treatment (Jumper, 2010). Violations of conditional release often take the form of technical violations (Jackson et al., 2007; 2008). The vast majority of violations were for rule infractions, rather than for new crimes; crimes constituted less than 20 % of all reported violations. Sexual recidivism was virtually nonexistent. One program reported a charge for child pornography that had actually occurred prior to the individual's index offense. Other sexually related violations consisted of failure to register as sexual offender in the community. Residents who commit technical violations are typically returned to the secure facility until such a time that they re-earn their conditional release. In Texas, where no total confinement facility exists, residents are returned to prison following any violation of conditional release.

Issues Regarding Sexually Violent Predator Statutes

Sexual offender civil commitment laws are not without controversy. Despite constitutional support, scholars have voiced scientific and ethical objections to the statutes (Campbell, 2003, 2004; Janus, 1998; 2000; Morse, 1998, 2003; Zander, 2005). Ethical questions center around the issue of preventive detention, the morality of depriving individuals of their liberties for offenses they *may* commit at some future date. Continuing to detain individuals after they have served their time for past criminal acts is unacceptable to some, although civil commitment is used in virtually all jurisdictions for persons with mental disorders that place them at risk to self or others. Balancing the rights of individuals to be free from unnecessary detention with the public's right to be protected is an ongoing consideration. Scientific objections, on the other hand, center primarily on the state of the science of risk assessment, specifically, claims that the current knowledge of risk assessment is insufficient to opine, with a requisite degree of confidence, who is likely to reoffend.

Economic objections to CCSVP have also been raised (Goodnough & Davey, 2007). By its nature, a hospital or intensive treatment placement is much more expensive to fund than a prison, particularly one that is highly secure (e.g., similar to a prison) in its environment and management personnel but also has an appropriate staffing of trained treatment personnel. Texas' outpatient approach to CCSVP appears to be the most cost-effective at a total cost of approximately $1.2 million per year (Gookin, 2007). California's SVP program costs approximately $147 million per year, roughly $166,000 per resident per year, making it the costliest program. As Goodnough and Davey (2007) point out, in many states, these figures far exceed what the state spends per inmate in corrections. On average, states spend approximately $94,000 per year per resident, and the average yearly budget of civil commitment programs is approximately $454 million (Gookin, 2007). Skepticism over the success of treatment (Goodnough & Davey, 2007) leaves some to question the value of civil commitment over longer criminal sentences. For example, media reports have characterized civil commitment of sexual offenders as "extremely expensive, marginally useful, and legally dubious" (Concord Monitor, June 10, 2009).

Future Directions

Since 1990, 21 jurisdictions have enacted civil commitment laws specially designed to detain high-risk sexual offenders. Approximately 75 % of these programs have been enacted since the Supreme Court ruled on the constitutionally of sexual offender civil commitment statutes in 1997 (*Kansas v. Hendricks*, 1997). Many jurisdictions have turned to civil commitment to address shortcomings in the criminal statutes regarding sentences of sexual offenders, such as plea-bargaining to lesser charges and perceived inadequacy of sentence lengths for sexual offending, and also address public concerns about sexual offending and recidivism.

Looking toward the future, it would seem that evolving criminal justice practices and economic pressures will each likely influence the disposition of at least some recidivistic sexual offenders of the type currently considered as candidates for civil commitment. It seems likely that public opinion regarding more severe dispositions for sexual offenders, particularly those who are repeat offenders, may continue to create pressure for significant sanctions of some type. To this end, over the past 20 years, most states have increased the length of criminal sentences for sexual offenders as well as increased the terms of conditional release when such offenders are released from incarceration (including lifetime parole, GPS, and intensive supervision). Changes in the nature of punishment for sexual offenders, including longer criminal sentences, may eventually substantially reduce or eradicate the need for civil commitment programs for sexual offenders. As such offenders spend more time incarcerated for their offenses, the rate at which recidivistic sexual offenders are released into the community from the criminal justice system should slow dramatically. The trend toward longer criminal convictions has led some scholars to speculate that sexual offender civil commitment may merely represent a "stop-gap" measure to detain those offenders who committed their offenses prior to criminal sentencing changes. Offenders who are sentenced according to newer sentencing guidelines may not be released for long periods of time, if at all, and therefore, not subject to civil commitment (D. Shuman, personal communication, December 12, 2002). The effects of revised sentencing guidelines are not yet known, but it seems very likely that they are and will continue to reduce the number of offenders considered for civil commitment to SVP programs.

In addition, economic issues will also likely play a role in the management of sexual offenders deemed to be at particularly high risk for sexual reoffending. As noted above, with an average price of $94,000 per resident, increasing rates of committed sexual offenders and very slow rates of release will lead to substantially increased costs for jurisdictions with CCSVP. In part, as a means of controlling costs and as a means of avoiding other issues related to civil commitment, some jurisdictions such as Minnesota have implemented the same long-term intensive sexual offender treatment programs provided to sexual offenders who have been civilly committed for sexual offenders deemed high risk while still incarcerated. In this way, it is hoped that some sexual offenders may receive a sufficient dose of sexual offender treatment while in prison to provide for a more rapid transition back to the community public safety may perhaps be protected without the necessity of civil commitment following their incarceration. Some states such as Colorado and eleven others have opted to provide for some degree of lifetime supervision of select sexual offenders by specially trained probation/parole officers. However, neither of these options has yet to receive empirical validation that they provide effective means for managing high-risk sexual offenders. Nonetheless, it seems likely or simply possible that over time resources may be shifted away from CCSVP to alternative means of managing such select groups of high-risk sexual offenders. In addition or alternately, an adoption of a model similar to Canada's Dangerous Offender statute might also be considered. By making the determination of the degree of dangerousness of the offender at entry into the criminal justice system, such an approach offers a means of addressing the ethical/legal issues raised by CCSVP and as a means of controlling costs related to detaining and offering evidence-based treatment to sexual offenders determined to be at higher risk of future sexual offending.

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Sexually Violent Predator Cases: A Prosecutor's Perspective

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For decades, society has endeavored to deal with the vexing problem of sexual offending and reoffending, both in the United States and internationally. Coupled with the emergence of psychiatric and psychological inquiry and explication of criminal behavior, especially in the area of sexually deviant criminal behavior, legislatures in approximately half the states in the United States had promulgated sexual psychopath laws in a variety of forms between 1939 and 1980. Most were premised on the idea that at least a portion of the sex-offending population was mentally disordered, rather than simply criminal. These statutes sought to provide treatment in broad-based fashion to sex offenders, occasionally in mitigation of, and oftentimes entirely in place of, penal consequences (Group for the Advancement of Psychiatry, 1977). These statutes did not target a narrow population, and some included misdemeanor conduct (see, e.g., *California Welfare & Institutions* Code § 6300, et seq., repealed 1981). These statutes met with mixed societal response (especially those that were implemented in place of penal sanction), and by 1990 only 13 states had sexual psychopath laws still on the books (APA, *Dangerous Sex Offenders*, 1997).

Clearly a more focused approach was needed. Beginning in the late 1980s, state legislatures began passing "sexually violent predator" and "sexually dangerous person" statutes, beginning in Washington (1990) and Minnesota (1995). Currently, there are 20 states that have similar civil commitment schemes for mentally disordered sexual offenders in effect. These statutes have followed a typical pattern in that they ostensibly target a more select population of repeat sexual offenders, namely, those characterized by a mental condition and an elevated risk of sexual reoffending. They have also taken into account some of the differing treatment needs of this subgroup of the mental health population (see, e.g., the findings of the Washington State Legislature in enacting their SVP statute) (RCW 71.09.010, 1990 c.3, Section 1001 …the prognosis for curing sexually violent offenders is poor, the treatment needs of this population are very long term, and the treatment modalities for this population are very different…).

These statutory commitment schemes have engendered substantial controversy in both the legal and the mental health communities. They have, however, withstood repeated constitutional challenge on both state and Federal levels [*Kansas v. Hendricks* (1997) 521 U.S. 346; *Selig v. Young* (2001) 121 S. Ct. 727; *Hubbart v. Superior Court* (1999) 19 Cal.4th 1138; United State v. Comstock 131 S.Ct. 1949 (2010)] and have every appearance of remaining on the books. Additionally, significant advances in the area of risk assessment and contemporary treatment focus have combined to support this process.

Given the mixed results historically of involuntary civil commitment schemes for sexual offenders, the important public safety issues involved, and the significant deprivation of liberty that is entailed, it is incumbent on both prosecutors and independent evaluators testifying in the State's case to be competent, prepared, and objective in their handling of these cases. The purpose of this chapter is to discuss the appropriate pretrial preparation of SVP/SDP cases as well as issues related to direct and cross-examination.

It is important to bear in mind the roles of the participants. Perhaps most readily apparent is that of the prosecutor, who bears responsibility for proving the essential elements necessary for civil commitment. This typically involves presentation of testimony by independent evaluators who have been selected by the state mental health authorities to conduct evaluations of potential SVP candidates, as well as other (lay and percipient) witnesses and relevant documentary evidence.

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While each state differs slightly in its procedures, typically the independent evaluators conduct their assessment according to general forensic practices and within the framework of a state-established protocol if one exists and prepare written reports. Such reports are provided to the prosecutor for review and for consideration as to whether to file a petition for commitment.

Defense-retained experts fulfill a somewhat different role. They are hired to review the state's case (and, in particular, the independent evaluator's reports) and then to offer their own opinion as to whether the individual meets the requirements for commitment or to testify about one or more issues pertaining to the prosecutor's case. Often, the defense expert is selected with a particular area of expertise involved in the case (e.g., psychometric testing, criticisms of actuarial assessment tools, topics such as age, etc.). They often advise the defense attorney as to questions for cross-examination of the independent evaluator.

Roles of the Prosecutor and the Independent Evaluator

Integral to discussing the area of trial preparation and testimony is clarifying the respective roles of the prosecutor and the independent evaluator in a trial, where the finder of fact is either a jury or a judge.

Prosecutors are ethically bound to pursue both truth and justice; this duty is no less applicable to involuntary civil commitments than to criminal prosecutions. Conceptually, the "truth" may be a bit more intangible in civil commitment process than in criminal cases, but both categories of cases often share the goal of determining the defendant's (or respondent's) state of mind, ability for self-control, etc. From the independent evaluator's point of view, it is important to understand this basic ethical duty of prosecutors, namely, that there is a duty to share their full and honest assessment of the individual, not just those aspects that auger in favor of commitment.

Similarly, it is not the role of the independent evaluator to "win the case." The evaluator must thoroughly conduct their evaluation in the first instance, honestly and clearly report their opinion on the central issues, and remain open to potential changes in the factual basis for their opinions as well as developments in the evolving mental health field that may impact those opinions. An evaluator's opinion should be based on the existing case facts and the extant research, filtered through their expertise and training. When a defense attorney raises facts or other issues that are not supportive of an evaluator's opinion, a professional should not become defensive or argumentative. Rather, they should concede the points that are weak in the case and acknowledge they have considered such relative weaknesses but emphasize that the other aspects of the case were stronger. For an independent evaluator, strongly and persuasively conveying their opinions and conclusions is acceptable, expected, and desirable; advocating for one *side* in the litigation is not. For example, being unwilling to reconsider one's opinion when presented with information that clearly requires that one do so will make it appear that an evaluator is biased. It remains an issue of objectivity—whether the evaluator appears to consider the facts fairly and objectively, without bias or agenda. Both judges and jurors are usually fairly perceptive in drawing that line and knowing if you cross it. At trial, an independent evaluator is called to offer their opinion and defend it when it is challenged, but that is different from advocating for a particular outcome. A jury can typically differentiate between an impartial witness and one who is vested in the outcome. Consequently, an independent evaluator should be strong in their opinion—in a manner of speaking, an evaluator's testimony allows them to be an advocate *for their opinion*, and the jury or judge needs to see that you have a high degree of confidence in that opinion.

Likewise, jurors are typically very sensitive and canny when it comes to the attitude of the participants, including that of the independent evaluators. If evaluators appear arrogant, condescending, or superior, jurors often will not hesitate to discount or ignore that independent evaluator's opinion, no matter how well founded. On the other hand, when jurors perceive that the evaluator is there to offer knowledge and opinions in areas well beyond the "ken" (knowledge or experience) of the regular person, they typically appreciate and value the independence of an evaluator's perspective. In all likelihood, the jury (or judge) will be relying on your opinion to educate them about the history of a particular offender, mental disorders that characterize the offender, and the nature and results of the risk assessments. The areas of mental health expertise are not common knowledge, and an independent evaluator will need to spend some time making sure that they understand the case material and research so that they communicate this information clearly and carefully to the jury so that they can reach a verdict. Most of this information exchange with the jury or judge occurs on direct examination, but it does not stop during cross-examination. A key is for the evaluator to answer every question as if a member of the jury had asked it, avoiding being argumentative with the defense attorney. Even under cross-examination, an independent evaluator strives to remain as polite and clear as they were on direct. It is the prosecutor's job to ask the court to intervene if the prosecutor believes that the defense attorney is out of line in their questioning; it is the independent evaluator's roles to answer every question posed and with poise. The most successful attitude we have observed is that of *teacher*; evaluators who are effective as witnesses function from a perspective of seeking to help the jurors understand the subject they are addressing with a goal of equipping *them*—the jury or

judge—to make the decision *they* ultimately have to make. This brings up another related and important consideration. As any good teacher knows, one strives to teach to the level of students in the class or, in SVP/SDP cases, the jury. Unless the material is presented in a manner that they can understand, an evaluator's efforts are likely wasted. Recent studies have suggested that, in the digital age, the typical person's attention span is approximately 1–7 min (Becker-Arvin, 2003). This would strongly suggest presenting the information simply and concisely to maximize retention, something that may well require practice and rehearsal.

Independent evaluators should not use language that only a few can understand. Rather, an evaluator strives to appear knowledgeable but also understandable. "Translate" terms and concepts so that the jury understands everything that is presented. Scientific terms can be used, but then evaluators should succinctly explain what they mean. Evaluators will also need to ensure that their language is clear; for example, evaluators in SVP matters do not make predictions but instead provide assessments of the level or degree of risk an individual poses (and why). This issue can be a classic example of where a defense attorney would like to blur the lines between an SVP evaluation and what that attorney would like the jury to think. In short, it is the independent evaluator's task to make sure that their methodologies and procedures are clear to the jury, often despite a defense attorney's best efforts. Another helpful technique for evaluators is to use analogies from common experience to give them a frame of reference. A frequently used analogy is likening the assessment of risk for future sexual offending to that of the assessment of risk for heart disease. Almost everyone has had someone close to them, sometimes themselves, experience cardiac health issues. Common risk factors for heart disease (smoking, high cholesterol, high blood pressure, sedentary lifestyle, obesity, stress, family history of heart disease) are easily understood by most jurors. The transition to looking at empirically derived risk factors for sexual reoffending (history of sex offenses, single, male victims, stranger victims, prior sentencing dates, etc.) is quite natural. This type of comparison can assist the jury when the evaluator talks about "research-based factors" and "scientific data." Jurors can readily grasp the discussion about an individual who is characterized by "X" number of risk factors and the percentage of smokers developing heart disease and will understand a similar discussion of risk factors associated with a higher level of risk for sexual offenders in similar fashion.

Pretrial Preparation

Forensic mental health evaluators provide testimony in a variety of forensic settings and legal cases involving mental health conditions and the probability of future outcomes. General mental illness commitment hearings, insanity proceedings, mentally disordered offender, grave disability and conservatorship cases, probation suitability assessments, and developmental disability commitment schemes are but some that psychiatrists and psychologists address in a forensic setting. From a prosecutor's perspective, none of these types of cases consistently demands the high level of pretrial preparation that SVP/SDP cases do.

In large part based on the "preventive detention" nature of these cases and the indeterminate nature of commitment, SVP/SDP cases are typically zealously litigated by the defense. The particular information and methods upon which the evaluator bases his or her opinion and the scientific basis of the evidence presented may be intensely scrutinized. SVP/SDP cases are largely based on circumstantial evidence (e.g., indirect evidence). Consequently, it is important to understand the distinction between direct and circumstantial evidence. Direct evidence provides proof of a fact without the necessity of inference (e.g., a witness testifies that she knew it had rained on a given day because she had been outside and stood in the downpour). Circumstantial evidence is that which requires an inference to prove the fact (e.g., a person is sitting in a windowless cubicle in an office but sees that everyone who comes in from outside is shaking water off their umbrellas and coats as they enter. The individual didn't see it rain, but the most reasonable inference for them to draw is that it is raining outside). Consequently, both the nature of the inferences and the reasoned opinion of the independent evaluator are likely to be examined to determine if it supports another inference contrary to that drawn by the evaluator.

Whenever one seeks to establish the existence of a mental disorder or posit a risk of reoffense, a mental health professional is using observable or verifiable facts to support logical and reasonable inferences. For example, an individual frequently seeks out situations where he will come in contact with prepubescent children and he gives them gifts, takes them on outings, etc. These types of overt behaviors identified in existing records, combined with the person's known history of sexual offenses against children, provide a reasoned, even strong inference that the individual is abnormally interested in the children and is "grooming" them for future sexual activity. This reality makes it necessary for the evaluator to be as clear on these supporting facts as possible.

Given the nature of circumstantial evidence and the importance of careful, grounded inference, the professional interaction between the prosecutor and the independent evaluator is crucial. Whereas, in other commitment proceedings, an evaluator may be comfortable simply "touching base" with the prosecutor prior to being called to the witness stand, that is a likely recipe for disaster in SVP/SDP cases. The earlier the prosecutor and evaluator connect and discuss the case, the better the testimony will go in court. Such interactions allow

the opportunity for the prosecutor and independent evaluator to arrive at the same "wavelength" concerning the nature of the case information and the evaluator's report (including methodology and reasoning) as well as refining the approach to the testimony, discussing how to handle any potentially controversial or likely to be challenged areas in the evaluation analysis, discussing how the opposing attorney and judge usually deal with various issues, etc.). Many times these cases are handled by prosecutors with a diverse caseload, and the SVP/SDP case may well not be a priority for that prosecutor. That reality, in conjunction with the likelihood that a given prosecutor may not appreciate the increasing complexity of these cases, requires that the independent evaluator do whatever is necessary to connect meaningfully with the prosecutor well before the trial commences. If this means that the evaluator must take up "the laboring oar" in communicating with the prosecutor, then so be it. Not fair, but it will likely make the difference between a satisfying experience in court or a frustrating one.

Another reason to grow this relationship is that, from the evaluator's perspective, the prosecutor can be an invaluable source of information. Not only does the prosecutor have subpoena power to obtain documents that might otherwise be difficult or impossible for the evaluator to access, they can also provide additional information from their criminal files that may be of assistance to the evaluator. Specifically, in that the evaluator is likely to be subject of particularized questioning, the prosecutor may, upon availability and request, provide the evaluator with:

- Full access to information from both state and national criminal history indices
- Original police reports from crimes referenced in the criminal history, both sexually related crimes and non-sexually related crimes
- Court documents as to prior convictions
- Preliminary hearing transcripts
- Probation officer reports and presentence investigation reports
- Victim statements
- Psychological reports from prior cases
- Defendant's statements from prior cases (which often differ substantially from statements to the evaluator)
- Other miscellaneous errata from underlying criminal files
- Assistance in obtaining documentation from other prosecution and law enforcement agencies

In most court evaluations, such original source material may not be directly reviewed or available to the evaluator as he or she prepares for court. Experience teaches that in SVP/SDP cases, access to the original material is essential, as cross-examination is much more vigorous than in the typical mental health cases, and the evaluator's credibility to the trier of fact suffers in direct proportion to the lack of preparation done. This, in plain terms, requires that the evaluator be able to testify, often from memory as much as possible, as to the facts supporting his opinions and specifically the sources from where those facts are drawn. Defense counsel in SVP/SDP cases are oftentimes very aggressive in cross-examination, so the level of preparation must be commensurate. This typically requires the evaluator to devote extensive hours both to carefully authoring the report and in preparation for testimony.

Handling the Deposition

Evaluators are frequently deposed prior to trial. A deposition is testimony taken out of court, typically at the office of the attorney who scheduled the deposition, although it may be taken at any mutually agreed-upon location. A court stenographer is present to administer the oath, record the testimony, and transcribe it for use at the trial. The deposed evaluator has the opportunity to review and correct the transcript, although the opposing side can, at the trial, cross-examine and comment on any changes made.

Often accompanying the notice of deposition will be a deposition subpoena, detailing records that the evaluator is required to bring to the deposition. Usually required by the subpoena are all records the evaluator has reviewed in preparation of his or her report and frequently other materials (books, articles, studies, and the like) that the evaluator has specifically relied on in forming his or her opinion. Standard reference materials (e.g., DSM–V) can often be exempted from the subpoena, although it is good practice to ask the attorneys to clarify beforehand exactly what the evaluator is expected to bring to the deposition.

At the deposition, opposing counsel will be exploring the basis for the evaluator's opinions in great detail, encouraging the evaluator to discuss at length the factual basis for their opinions, as well as the theory on which they rely. The evaluator will be asked to lay out everything they are basing their opinion on, usually followed by the question "anything else?" Opposing counsel's intent is to lock the evaluator into specific theories and facts in order to minimize the potential for surprise at trial. It is good practice for an evaluator, at one or more points during the deposition, to make clear that the testimony provided at that time is based on the facts as currently known but that the evaluator recognizes that should additional facts become known, that may affect their opinion.

It is therefore crucial that the evaluator be as prepared for the deposition as for the actual trial. Familiarity with the facts on which the opinions are based, as well as ready knowledge as to the source of those facts, is essential. It is well and good to feel confident in a particular diagnosis, for

example, but if the evaluator cannot readily describe the diagnostic criteria and reference the facts on which it is based (including where those facts came from), the evaluator's testimony will be unpersuasive. The temptation will always be there to give preparation for the deposition short shrift, usually accompanied by mental mantras such as "I know my stuff," "I don't want to prepare this case twice!," "I'll just wing it and then really prepare for trial," etc. This is a formula for failure—your confidence will be shaken at the deposition and your performance at trial will suffer accordingly.

The upside is that, if the evaluator is organized and prepared for the deposition, this will essentially prepare him or her for trial and might well point up some soft spots or problem areas that can be resolved before one finds one's self in front of the jury.

Direct Examination

Essentially, direct examination is the initial portion of the testimony by a witness, independent evaluator, or otherwise. This stage of the testimony is usually a relatively straightforward and noncombative process, where you are examined by the attorney who has called you as a witness in the case. As discussed above, a successful direct examination (i.e., one that proceeds smoothly and communicates your opinions and conclusions clearly and persuasively) begins long before an evaluator actually takes the witness stand.

To convey one's opinions, and the facts that support them, evaluators will need to make note or keep a record as to where those facts are found in your source materials and have them readily available to you in court. Most trial courts allow expert witnesses to refer to written materials, as needed, in order to refresh their recollection. However, this may be a trap for the ill-prepared witness; referring to written materials too often in front of the jury undermines an evaluator's credibility and expertise—they may *accurately* conclude you are not all that familiar with the case and judge the evaluator and their opinion accordingly. Even though an evaluator will have the opportunity to refer to their source materials in court, typically that should be done as little as possible. Again, the necessity of being extremely familiar with source materials, the theory, methods, and substance of the available science makes preparation absolutely key! To obtain the necessary and desired level of preparation entails reading and rereading of the available reports, supporting documentation, and scientific literature to maintain the requisite level of familiarity with the material.

Evaluators will also be well served by preparing succinct answers to generic issues that will arise in virtually every SVP/SDP case. These include a brief definition of each of diagnoses of common sexual disorders and other frequent diagnoses in these cases; these would include definitions or descriptions of paraphilia, pedophilia, exhibitionism, voyeurism, and other paraphilias (e.g., those not specified such as hebephilia and paraphilic coercive disorder as well as personality disorders and substance abuse/dependence disorders). Other clinical terms should be explained such as psychopathy and deviant sexual arousal pattern. Finally, the evaluator should be intimately familiar with legal terms and their definitions specified in relevant SVP/SDP statutes such as predatory, predisposition, volition, volitional impairment, and the standard for "likely" in a particular jurisdiction. It may sound simplistic, but an evaluator will want to practice these sets of definitions until they come very easily. Such additional preparation, in the end, will save the evaluator and the court time as well as make a favorable impression on the jury.

Statutory Elements for SVP/SDP Cases

The current SVP/SDP laws typically have four components (variously described and broken down in the statutes): (1) a history of sexual violence or dangerous sexual behavior; (2) a requisite mental condition (e.g., mental disorder, mental abnormality, personality disorder); (3) the requisite mental condition must "cause" or "predispose" the individual to criminal sexual acts; and (4) likely to recidivate in a sexually dangerous or violent manner. A further constitutional requirement has been imposed by the US Supreme Court—that the individual have "serious difficulty controlling behavior" [Kansas v. Crane 534 U.S. 407, 413 (2002)]. There are individual differences in the statutory elements in across jurisdictions; however, the above components are core to virtually all these statutory schemes.

History of Sexual Violence

Many, but certainly not all, of the SVP/SDP statutes have what may be referred to as "predicate" or "qualifying" prior criminal history of sexual offending (arrests and/or convictions) or, in some cases, unadjudicated sexual offenses which must be proven at trial. Those that do not have such an explicit requirement nevertheless consider the facts from the person's sexual offending history in the areas of mental disorder and risk of reoffense.

Some jurisdictions allow that the testimony of the evaluator may serve as actual proof of the facts of the predicate offenses (see, e.g., *California Welfare & Institutions* Code § 6600(a)(3); *Va. Stats Anno*., § 37.2-906). Most jurisdictions, however, simply provide some sort of guidelines for the evaluation, usually referencing criminal history, institutional history, and risk assessment in general terms.

Sometimes the evaluator is asked to render an opinion as to whether a particular offense qualifies under the statute as a "predicate" offense. This question would be subject to objection as calling for a legal conclusion and beyond the scope of the evaluator's expertise. If there is no objection, and the evaluator is comfortable enough with knowledge of the legal criteria in that jurisdiction, it would seem nominally permissible to answer. An alternative approach would be to state that whether it qualifies is up to the jury but that you'd be glad to testify about the facts of the offense. In some jurisdictions, such as California, it depends upon which judge is handling the case as to whether he or she will allow you to testify to the ultimate fact (or some might say legal conclusion) that this criterion has been met. Some judges regard it as part of the stated protocol and a proper subject of testimony given the evaluator's experience. Others judicial officers may see it as invading the province of the jury and offering a legal conclusion that an evaluator is not qualified to make. Whether or not the evaluator is addressing a "predicate"/"qualifying" offense, or more generally discussing sexual offending history, however, the nature of the testimony is essentially the same. The evaluator must be able to recall and recount the facts of an individual's sexual offense history accurately and be able to locate the source material in his or her file to verify that account, as necessary. Experience suggests that in jury trials, the particulars of the individual's sexual offending history are of substantial significance. It follows that the more detailed and conversant the evaluator is in discussing these offenses, the more persuasive the testimony will be.

Mental Abnormality

The mental condition is variously defined among the jurisdictions. Statutory schemes refer to "mental abnormality," "mental disorder," "diagnosable mental disorder," "personality disorder," "paraphilia," "mental disorder or dysfunction," etc. Almost all of the statutes include language to the effect of "congenital or acquired condition that affects the emotional or volitional (and sometimes cognitive) capacity of the individual. The Federal Sexually Dangerous Person's Statute defines the mental condition collectively as a serious mental illness, abnormality, or disorder. Much has been written in the past decade about the applicability, propriety, validity, and reliability of the diagnostic process in SVP/SDP cases (Miller, Armenta, & Conroy, 2005; Prentky, Janus, & Barbaree, 2006).

It is easy to get caught up in the various diagnostic distinctions and controversies. From a legal perspective, it is important to bear in mind that the law and especially constitutional standards do not necessarily match or "mirror" any particular diagnostic criteria, manuals, or formulations.

The landmark cases in the area are *Kansas v. Hendricks* (1997) 521 U.S. 346 and *Kansas v. Crane* (2002) 534 U.S. 407. In *Hendricks*, the US Supreme Court specifically addressed the need for congruence between legal and clinical formulations:

> Contrary to Hendricks' assertion, the term 'mental illness' is devoid of any talismanic significance. Not only do 'psychiatrists disagree widely and frequently on what constitutes 'mental illness' *Ake v. Oklahoma*, 470 U.S. 68, 81, 105 S.Ct.1087, 1095, 84 L.Ed.2d 53(1985), but the Court itself used a variety of expressions to describe the mental condition of those properly subject to civil commitment. See, e.g. *Addington*, *supra*, at 425–426, 99S.Ct. at 1808–1810 (using the terms 'emotionally disturbed' and 'mentally ill'); *Jackson v. Indiana*, 406 U.S. 715, 732, 727,92 S.Ct. 1845, 1855, 1857–1858, 32 L.Ed.2d 435 (1972) (using the term 'incompetency' and 'insanity'); cf, *Foucha*, 501 U.S., at 88, 112 S.Ct., at 1789–1790 (O'CONNOR, J. concurring in part and concurring in judgment) (acknowledging State's authority to commit a person when there is 'some medical justification for doing so.')
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> Indeed, we have never required state legislatures to adopt any particular nomenclature in drafting civil commitment statutes. Rather, we have traditionally left to the legislators the task of defining terms of a medical nature that have legal significance. (*citation omitted*) As a consequence, the States have, over the years, developed numerous specialized terms to define metal health concepts. Often, those definitions do not fit precisely with the definitions employed by the medical community. (*Id*., at 359)

Of particular note for our discussion of requisite mental disorders in these proceedings are the comments found in *Hendricks*, supra, Footnote 3, at page 360:

> We recognize, of course, that psychiatric professionals are not in complete harmony in casting pedophilia, or paraphilias in general, as 'mental illnesses.' Compare Brief for American Psychiatric Association as *Amicus Curiae* 22–25. These disagreements, however, do not tie the State's hands in setting the bounds of its civil commitment laws. In fact, It is precisely where such disagreement exists that legislature have been afforded the widest latitude in drafting such statutes. Cf. Jones *v. United States*, 463 U.S. 354, 365, n.13, 103S.Ct. 3043, 3050, n. 13, 77 L.Ed.2d 694 (1983). As we have explained regarding congressional enactments, when a legislature "undertakes to act in areas fraught with medical and scientific uncertainties, legislative options must be especially broad and courts should be cautious not to rewrite legislation. *Id*., at 370, 103 S.Ct., at 3053 (internal quotation marks and citation omitted.)

In *Kansas v. Crane* 534 U.S. 407, 122 S.Ct. 867, 151 L. Ed.2d 856 (2002), the US Supreme Court reversed a decision by the Kansas Supreme Court, which had interpreted *Hendricks*, supra, as "leading to the inescapable conclusion that commitment under the Act is unconstitutional absent a finding that the defendant cannot control his behavior" (in re *Crane*, 269 Kan. 578, 586, 75 P.2d 285, 290 (2000)). However, the US Supreme Court in *Crane* reached another conclusion holding that only "serious difficultly controlling the dangerous behavior" is required constitutionally.

The US Supreme Court pointedly did not revise the legislature's broad powers to define the mental "element" utilized

in the statute. The Court held, inter alia, that these types of statutes are constitutional when:

> …(1) the confinement takes place pursuant to proper procedures and evidentiary safeguards;
>
> (2) there is a finding of dangerousness, either to one's self or to others; and
>
> (3) proof of dangerousness is coupled with the proof of some additional factor, such as mental illness or mental abnormality. (*Id*., at 409–410)

Thus, such language represents the current constitutional threshold. Where does this leave the evaluator as he or she conducts the evaluation and prepares for court testimony?

Given the broad variety of mental components and definitions that are constitutionally permissible, and the inherent independence in clinical assessment, it seems that it remains a function of factually supported assessment of the individual using the specific definition provided by the state's commitment statute. Once again, preparation, ready knowledge, and easy reference to source material are critical.

It is an evaluator's decision as to whether it is or is not necessary to reach a DSM-based diagnosis (or diagnoses) as part of addressing the statutory standard. One can readily see from the above constitutional discussion that either approach, if articulated and factually supported, will pass muster legally. One might even say that the "legal" definition of the mental component is simply some predisposition to commit sexually violent acts and serious difficulty controlling that behavior. This "predisposition" may or may not coincide with any particular psychological or medical diagnosis (see *Hendricks*, supra, 521 U.S. at 359, stating that "legal definitions" of mental illness or mental abnormality "need not mirror those advanced by the medical profession"). Each evaluator must decide how they understand and implement the mental abnormality or disorder requirement for SVP/SDP statutes and the "coupling" (see, *Crane*, supra) of a particular mental disorder or condition with the issues of dangerousness as well as the issue of "volitional impairment."

Many of the SVP statutes reference "volitional impairment." Volition is popularly defined as "an act of making a choice or decision" or "the power of choosing or determining" [Webster's Collegiate Dictionary (Tenth Ed.)]. There is no legal definition of "volition," so it can be a complicated issue to address in an evaluator's opinion and testimony.

One persuasive and integrated approach is to discuss the issue of volitional impairment in terms of "serious difficulty controlling behavior." This has the advantage of relating this construct directly to the requirement imposed constitutionally in *Crane*. Thus, conceiving the issue of control as along a continuum, both in the moment and over the course of time, one can conclude that serious difficulty controlling behavior is the sine qua non of volitional impairment. That is to say, if an evaluator has concluded that, based on all the available data, a person has "serious difficulty controlling his behavior," it must necessarily be that there is significant "volitional impairment." This position also relates to the definition of volition as "the power of choosing or determining" one's action, especially over a span of time.

Oftentimes the issue is framed as follows: "If the individual chooses, each and every time, to commit a sexual assault, isn't he clearly acting volitionally?" The answer may well be that in the short term (i.e., individual decisions) that is a tenable notion, but that after repeated instances, often attended by increasingly severe societal sanctions (i.e., conviction, probation, jail, increasingly lengthy prison sentences) in the long term, the individual *cannot enforce or maintain* a decision not to engage in the offending behavior. As was stated in *People v. Burris* (2002) 102 Cal. App.4th 1096, 1107, discussing volitional impairment: "Certainly a person who does not want to rape, feels remorse after raping, yet continues to rape anyway, 'lacks control.' But a person who *does* want to rape, feels *no* remorse after raping and continues to rape despite having been criminally punished for prior rape, *also* 'lacks control.' This is so because neither offender is likely to be deterred by the risk of criminal punishment; this both should be dealt with civilly" (*emphasis* original).

Thus, rather than getting involved in an exchange about the vagaries of the concept of volition, framing the matter in terms of "serious difficulty controlling behavior" and describing the factual basis for *that* opinion is perhaps the most persuasive approach. Essentially, this is a position that, based on a person's overall life and offending history, the person's "power to choose or determine" is impaired, even though the person may be able to choose *at points* to not offend. Certain jurisdictions have held that "serious difficulty controlling behavior" is satisfied by proof of the statutory elements, including volitional impairment. (See *People v. Williams* (2003) 31 Cal.4th 757, 774.) This would seem to lend support to such an approach. Further, the US Code of Federal Regulations operationally defines "serious difficulty in refraining from sexually violent conduct or child molestation if released" as the following considerations, although the final determination is not limited to these factors:

(a) The person's repeated contact, or attempted contact, with one or more victims of sexually violent conduct or child molestation;
(b) The person's denial of or inability to appreciate the wrongfulness, harmfulness, or likely consequences of engaging or attempting to engage in sexually violent conduct or child molestation;
(c) Established through interviewing and testing of the person or through other risk assessment tools that are relied upon by mental health professionals;

(d) Established by forensic indicators of inability to control conduct, such as:
   1. Offending while under supervision;
   2. Engaging in offense(s) when likely to get caught;
   3. Statement(s) of intent to re-offend; or
   4. Admission of inability to control behavior; or
(e) Indicating successful completion of, or failure to successfully complete, a sex offender treatment program.

Likelihood to Reoffend

Even considering the level of controversy surrounding the diagnostic and volitional issues in the SVP/SDP cases, one has to conclude that the most contentious area has been, is, and will be the area of risk assessment. This is a rapidly developing area in both law and psychology and thus requires the practitioner to be absolutely up to the minute in terms of developments in the field. It seems apparent that the defense bar in SVP/SDP cases shares new developments or concepts, both legal and scientific, within hours and days, not weeks and months. An evaluator can fully expect to be examined on these latest developments at the very next court proceeding. As such, the relationship between the independent evaluator and prosecutor must be ongoing, in order to share and consider how any changes affect the case posture and prepare for new issues of direct and cross-examination.

The area that most concerns independent evaluators in these cases, that of *cross*-examination, is discussed later in this chapter. The discussion here relates to considerations in how to effectively communicate risk assessment opinions and their basis on *direct* examination. These observations assume the evaluator is knowledgeable and current on both law and research in the SVP/SDP arena.

It Is Critically Important to Consider Your Audience Through the jury selection process, most individuals who have any significant background in psychology or statistics will have been excused by one side or the other. Typically, one-third to one-half of the persons who end up sitting on a jury will have no higher than a high school education, if that. In discussing risk assessment, it becomes necessary, therefore, to break down what is fairly nuanced and arcane material into a form they can process. This can be done by the following certain techniques:

1. *Take the time to define your terms as you go*. This relates to the point made earlier about approaching your testimony from the attitude of a *teacher*. Any term that is not in very common usage should be explained in simplified fashion. For example, the term "cross-validated" will mean nothing to virtually any of the jurors. Taking the time to explain what this is, why it is important in research, and why it makes the research results in something they can find credible is very important. The same would be true with "peer review," for instance. One might assume that most people know what "recidivism" means. Not true—at best a few will have a vague idea. Evaluators will need to take the time to define such terms generally, and also how it is used in context. This will help the jurors understand the concepts, the scientific results, and the evaluator's opinion and, at the same time, both help one connect with the jurors and enhance credibility in the jury's eyes.
2. *Use examples from common experience to illustrate difficult concepts*. Earlier, we discussed the example of using the analogy of risk factors for heart disease to illustrate risk factors for sexual reoffense. Taking that analogy a bit further, one might point out that it includes both static and dynamic risk factors. Static ones would include such things as family history of heart disease and prior cardiac events in the patient, and dynamic factors would include such things as weight, diet, smoking habit, stress, etc. Most jurors can readily identify with this type of explanation from everyday experience; the extent that evaluators communicate their opinions in readily understood fashion is the extent to which it will serve to persuade the jury of the correctness of your position.
3. *Do not claim, by attitude or otherwise, to know more than you do*. An attitude on the part of the independent evaluator that he or she "knows everything" is sure death. If the jury decides that's your attitude, they will hold you to it, and any deficiency in your testimony will be used to discount it entirely. Juries are not at all shy about doing this. When appearing as an "expert," it is an easy trap to fall into to assume that you *should* know the answer to a question posed. Defense attorneys can, and do, use this tendency to position an evaluator out on a limb where they have no way to go but down. That is to say, if an evaluator presents as knowing something they really don't, opposing counsel can often sense the change in attitude (perhaps a "whiff" of uncertainty?), and the attorney is likely to drill down until the evaluator is forced to admit that he or she does not truly know what they claimed to know, resulting in a significant hit to the evaluator's credibility. The preventive measure an evaluator should employ is to always be aware of the limits of your knowledge base, both factual and theoretical, and absolutely stay within those bounds throughout testimony. This posture also dovetails appropriately with the previously discussed position that the court case itself is not an evaluator's to "win." The impression an evaluator makes on the jury is wholly different when their attitude is one of an advocate,

as opposed to an informed and prepared professional explaining and supporting their conclusions and the basis for those conclusions.

Now, we turn to issues regarding cross-examination in SVP/SDP cases.

Handling Cross-Examination

Cross-Examination of Experts in Sexually Violent Predator Cases

Preparation by the Independent Evaluator

Black's Law Dictionary defines cross-examination as:

> The examination of a witness upon a trial or hearing, or upon taking a deposition, by the party opposed to the one who produced him, upon his evidence given in chief, to test its truth, to further develop it, or for other purposes. The examination of a witness by a party other than the direct examiner upon a matter that is within the scope of the direct examination of the witness. Generally, the scope of the examination is limited to matters covered in direct examination and matters affecting the credibility of the witness though the court may in its discretion permit inquiry into additional matters as if on direct examination.

The independent evaluator should keep in mind two critical aspects when preparing for cross-examination: the purpose is to "test the truth" of the evaluator's testimony and "raise issues that affect the credibility" of the witness. In short, the opposing attorney's goal in cross-examination is to challenge the evaluator's opinion and its basis, but often by making the evaluator look like they are wrong, to exaggerate any mistakes they may have made and to emphasize what research and professional opinion that does not support the evaluator's opinion. The best way to prepare for cross-examination is for the evaluators to do the same thing they do to prepare for direct examination: ensure that they know the facts of the case, know where in the record to access the particulars, and know what the research says about each point that one has made previously in a report, deposition, or testimony. Preparing an outline with the pertinent facts for each point is usually a good method to have the facts and references handy during your testimony. Also preparing a chronological timeline will allow an evaluator to more easily track the historical facts of the case. Since these SVP/SDP cases often involve lengthy histories of criminal and sexual offending, a timeline can easily refresh one's memory without having to refer back to a report or the available records.

As discussed earlier, the evaluator will also need to know the statute and case law in the particular state where they conduct evaluations, as each of the states have different sexual assault statutes and different evidentiary standards. Including legal definitions in the evaluation provides a quick reference for use in court testimony. The evaluator will be asked by opposing counsel many questions designed to make the evaluator appear as if he or she is unaware of the various legal standards. They may be asked to define each aspect of the statute, notably mental abnormality, personality disorders, volitional control and/or impairment, and any particular legal definitions particular to the state where you are testifying. It is important that the evaluator understand the elements of the various sexual and nonsexual crimes for which the individual has been charged or convicted. For example, if the crime is against a child, one needs to know the legal requirements of the age of the child and the offender. Or, for a crime using physical force, one would need to know the specific definition of the degree of force used. It is the prosecuting attorney's responsibility to make sure that the evaluator is educated as to those aspects of the legal definitions that a case involves, so it is again important for the evaluator to communicate early and often with him or her. Additionally, the prosecuting attorney will usually have a good sense of the direction the opposing counsel will likely be taking with the evaluator and can assist in preparation for cross-examination. Common areas for cross-examination are the age of the individual, the empirical status of sex offender or chemical dependency treatment, low actuarial scores, or a lack of a paraphilia diagnosis.

Meet with the Prosecutor Early in Your Preparation

The prosecutor should be able to answer any legal or factual questions the evaluator might have. The evaluator should be sure to identify any areas of uncertainty in law or fact and discuss it with the prosecutor prior to deposition or testimony. This includes missing factual information, identifying sources of information relied upon, and the scoring of the actuarial instruments. An evaluator will also want to discuss the law with the prosecutor handling the case, to make sure that they understand the particular state law as it applies to the case. This should include the various definitions of sexually violent offenses, the specific definitions of sexual intercourse and penetration, and the ages of consent in the jurisdiction where you are testifying. In many states, the definition of "sexual intercourse" differs, as some require vaginal/penile penetration and others do not. An evaluator will also need to know how relevant the case law is or how the state courts have interpreted the sexually violent predator statute. Ask the prosecutor for copies of the decisions in those cases that will be relevant to the particular case and, as necessary, what their implications are. The US Supreme Court cases dealing with sexual predator statutes have broad application in each jurisdiction, but each state has its own set of nuanced statutory and case law.

In most jurisdictions, the parties will have pretrial motions, called motions in limine, before the presentation of testimony begins. The court will usually rule on the

admissibility of certain pieces of evidence, including the documents and factual issues the independent evaluator relied on as the basis of the opinion. In some instances, facts that the evaluator has relied on may be deemed prejudicial or unreliable and thus excluded from the trial. Consequently, prosecutors and evaluators should both clarify with one another those areas that have been excluded by the judge and/or any topic areas that have been limited or sanitized. For example, many jurisdictions will not allow testimony about the actual results of polygraphs but will admit statements made during polygraph examinations or sexual histories collected as part of that procedure. Some courts will limit evidence of prior criminal charges, particularly if they cannot be proven by a preponderance of the evidence. While on cross-examination, the defense attorney will likely steer clear of areas that are prejudicial to his or her client (e.g., unfavorable polygraphs), there are frequently times when an evaluator's best answer is a fact that has been excluded by the court. Discuss in advance with the prosecutor the best way to handle this situation. The prosecutor may want the evaluator to signal that they are unsure if they can answer a question with particular information so it can be brought to the court's attention before an answer is provided. If this occurs, it will be up to the prosecutor to argue that the door has been opened and that the evaluator should be permitted to testify about a fact previously ruled inadmissible.

The prosecutor can also advise the evaluator as to the most likely issues that will be covered during cross-examination. The prosecutor will be most familiar with the particular defense attorney and his or her cross-examination content and style. Many attorneys will have a different approach during cross-examination than they do during a deposition. If the defense attorney is reasonable and polite during your deposition, it may not be the same manner in which your cross-examination is handled. Depositions and cross-examination have different purposes, and an attorney may affect one demeanor in order to accomplish his or her goals for the deposition but present a completely different style in open court. The prosecutor will also know what the particular pretrial motions involve (see above) and can let the evaluator know what areas of the research the defense is likely to address. For example, if the offender is over 50, you can almost certainly expect to be questioned extensively on age and recidivism data. Alcohol and/or substance abuse issues are also likely to be raised on cross-examination as what issues contributed to the individual reoffending but might have been addressed in treatment while he or she was incarcerated. An evaluator should be prepared to testify about substance abuse treatment, or lack thereof, that the individual has undergone, as well as any related facts pertinent to the issue. In many cases, an offender will assert that he has successfully completed substance abuse treatment and therefore is no longer dangerous—despite previously being "treated" while in custody and relapsing as soon as drugs and alcohol are available.

Paraphilia not otherwise specified (NOS) is a diagnosis given to offenders with deviant sexual arousal to nonconsensual sex or with deviant sexual attraction to peri- or postpubertal children. Because it is not a specified diagnosis and because of perceived issues in the available research, these categories typically receive increased attention; challenges to these diagnoses are inevitable in cross-examination.

It is also fair to expect that the portion of the cross-examination that focuses on risk assessment will be in depth and will involve attempts to show that it is a "numbers game" or an impossible prediction. Given that data suggests that recidivism rates have fallen in the last decade, defense attorneys may try to emphasize that it is impossible to calculate any one individual's risk over the necessary threshold for civil commitment. In addition, many defense attorneys incorrectly label risk assessment as risk predictions and will try to persuade the jury that no one is able to predict the future. It is important to clarify that you are not attempting to make predictions, and explain the purpose of and limitations of risk assessment. Be sure to correct the attorney if they are using the term prediction in lieu of risk assessment.

The evaluator will need to emphasize those facts in the individual's history that indicate why they believe the individual falls into the higher-risk category. The same factors that indicate serious difficulty controlling behavior are often related and therefore valuable in this effort. Many of the points the defense attorney may try to make are areas that jurors will be interested in as well. For example, the defense will emphasize the length of time the individual has been incarcerated, thus attempting to show that he has either changed or it has been too long since he has been in the community to say how he would act if released. Around these issues, an evaluator may emphasize that the type of mental disorders which characterize a particular offender tend to be chronic and do not go away just because an individual has been in confinement. Nor is the way an individual performs in a secure facility a good indication of how they will behave with no restrictions, supervision, and an available victim pool.

Most of the qualities that make the evaluator effective on direct examination apply equally for cross-examination. An evaluator should appear confident in their opinion and the basis for that opinion. Knowing the facts "backward and forward" will assist in giving the appearance of confidence. Independent evaluators must be familiar with the range and depth of relevant scientific literature, including research that has been published after you completed your evaluation. Techniques used to access and remember facts of the case during direct examination will serve the same purpose in cross-examination such as creating an outline with the statutory elements and all the facts that support your opinion

regarding that element and making a timeline. If Bates' stamping is used in the jurisdiction, use the Bates number in your outline for easy reference to the factual basis for your opinion. Preparing for cross-examination requires many additional hours of preparation in advance, to rereview both general and case-specific issues, to prepare and review outlines and timelines that will aid you in the delivery of your testimony, and to be able to respond to particular case issues and likely points to be made in cross-examination.

It is important to make every effort to ensure that there are no mistakes in the evaluator's report, either factually, legally, or in the application of the research. If an evaluator somehow overlooked a mistake and a report has been produced, bring it to the attention of the prosecutor to ensure that the error can be addressed in direct examination; also they should be prepared to address it again in cross-examination. The defense attorney's objective is to make the evaluator look like they have made an error in their opinion, and any errors in the report will be used to support this theory. The evaluator should not be defensive about a mistake but rather take ownership of it and make the point that it would not affect your opinion.

The defense attorney will try to get the independent evaluator to agree with incorrect statements of law, fact, and science. The evaluator must think and carefully consider these suggestions or intimations from the defense and clarify and counter incorrect statements. The evaluator will need to correct any misstatements, as to what your understanding of your task is—"I am not predicting whether he will or will not offend, I am simply determining whether or not he is more likely than not." or "I am merely determining whether his risk level is higher than 50 %." It is also a common tactic to simply misstate some aspect of the science—for example, giving a false recidivism rate in a particular study or making false claims about the applicability of instruments like the PCL-R (e.g., Hare, 2003). The evaluator should listen carefully to such questions and make sure there are no false inferences in your answer. This can be difficult when testimony is lengthy and the expert may be fatigued. However, it is critical for the evaluator to listen carefully and to correct even the simplest of misstatements before you answer. There is a fine line between being argumentative and corrective, especially if the defense attorney becomes aggressive. But evaluators should remember that they are professionals, despite the adversarial environment, and that explaining the correct application and interpretation of the science is critical.

In cross-examination defense attorneys may refer to books, journal articles, depositions, prior court testimony, and clinical information. It is perfectly acceptable, indeed desirable, to ask for a copy of whatever documents the defense attorney is referring to. Whether it is a journal article or a document from the discovery, the evaluator should not agree with it until one has been shown a copy and had sufficient time to review the document relative to the question being asked. Defense attorneys will try to get the evaluator to agree with things they are holding in their hands, but an evaluator is entitled to review it before responding. Consequently, the evaluator should take their time to carefully review the material of concern before answering, particularly if it is a study with which they are not familiar. If a resource is outdated or pertains to a population that is not comparable to sexual predators, this is important information for the jury to hear. It is the evaluator's role on cross-examination to explain why they did not rely on a particular study or concept or why it does or does not have a bearing on your ultimate opinion. Sometimes the documents, particularly journal articles, are lengthy to review and the evaluator may be asked to review the material at lunch or overnight and offer their opinion at a later time. During trial, in addition to their own anticipated preparations, evaluators should expect to spend additional time out of court reviewing unexpected material.

Obviously, the evaluator's experience and expertise relative to the SVP/SDP cases and the relevant assessment, scientific, and psycholegal issues is the primary reason why they were selected to be assigned to the case. Deep and comprehensive familiarity and comfort with the relevant science is essential so that an evaluator can convey their opinion clearly, articulately, and accurately. Uncertainty about any of the topics may cast a shadow on your opinion and ultimately jeopardize the case. Such areas are ones a defense attorney will try to exploit. As discussed earlier, it is essential that the evaluator fully understand all of the legal constructs that bear on SVP/SDP cases in particular jurisdictions and the relevant and extensive and evolving science. When discussing risk assessment protocols, the evaluator should take the time to explain the difference between actuarial assessments, structured professional judgment, and empirically based clinical assessments. The evaluator should explain how the different methods of risk assessment overlap and interact and the basis for choosing the method(s) you employ. In addition, one should be able to explain the difference between static and dynamic risk factors and how that body of research applies to the particular case. Two of the favorite topics of defense attorneys in risk assessment are the effects on sex-offense recidivism of both treatment participation and the age of the offender. Obviously, the research on these two areas is mixed and ongoing, so it becomes important to clarify the evolving and conflicted nature of those areas for the jury.

Overall, the general sexual recidivism rates appear lower than previously measured. The use of actuarial assessments alone may not adequately address the risk posed by mentally disordered offenders who have difficulty controlling their behavior. It is imperative that the evaluator address the specific characteristics of this individual and clearly relate why he appears likely to reoffend. For example, an individual

may have only been caught and convicted one time but admits to a lifetime of sexual offending that is not captured by any of the actuarials. Or, an older offender who scores lower on the actuarial as a result of advancing age may readily admit that he is still sexually active and attracted exclusively to children. These factors specific to the individual are critical points to be made when the defense challenges your opinion that the individual is likely to reoffend.

In summary, during cross-examination, you should:

Stay within one's area of expertise and training. The evaluator should not offer professional or medical opinions if they are not qualified and they should not offer legal opinions. An evaluator is the psychological expert offering an opinion regarding diagnosis and risk assessment.

Refer to specific factual bases for your opinions. For every diagnosis and risk assessment opinion offered in either a report or testimony, the evaluator should have multiple factual bases to support it and be able to document those bases in their testimony.

Maintain a calm and confident demeanor. The evaluator doesn't need to argue with the defense attorney and should concede the points that are appropriate to concede. However, an evaluator should not agree with factual, legal, or scientific points that are incorrect.

Communicate clearly in language and terms the jury can understand. The evaluator must be able to translate "psychological speak" into plain language. In addition, he or she should avoid appearing arrogant and "above" the average juror. It is important for the evaluator to know the difference between being knowledgeable and being a know-it-all.

Know all the facts of the particular case. The evaluator must master the facts of a case, good and bad. This is the most essential factor in delivering solid testimony. Any errors in facts will likely be exploited by a defense attorney and held against you by the jury.

Conclusion

As this discussion makes abundantly clear, trial in SVP/SDP cases requires the best from the evaluator, in terms of education, training, preparation, poise, and presentation; civil commitment proceedings of sexual offenders are much more complex and challenging than the typical mental health court proceeding entails. Hopefully, some of the comments and observations shared here will help to motivate, equip, and guide the professionals undertaking this task through this oftentimes demanding and difficult process.

Given that both public safety and fundamental liberty interests are significantly impacted and this area remains a controversial one for involuntary civil commitment, it is incumbent on both prosecutors and the independent evaluators called as their witnesses to be very well prepared relative to the facts, the science, the theories, the general issues, and the case-specific issues. It takes a substantial amount of time, effort, and willingness to focus on the necessary breadth and detail of extensive material, issues, and science to adequately prepare quality reports and adequately prepare for depositions and testimony.

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Sexually Violent Predator Law: A Defense Perspective

Leslie J. Garrison

Lost causes are the only ones worth fighting for.

Clarence Darrow

Sex offenders are the modern-day lepers. They are arguably the most despised and feared people in the country, beating out even murderers as the most hated group. But demonization of these criminals leads to even bigger problems: too much vitriol and venom often overwhelm our ability to accurately perceive the facts at hand.

Sex offenders not only scare us, but they baffle us. We wonder: How could the perpetrator do this again and again and still be human? Isn't the nature of being human marked by the ability to control one's sexual urges toward others, an ability lacking or simply disregarded in this population? And here is where the logic can leap into dangerous territory, because the next step is that one can be led to believe that an individual cannot commit a sex offense and still be human. And if we begin to believe that a perpetrator is not human, then what is he? Unfortunately, most of us come to the conclusion that sex offenders are monsters, unworthy of the allocation of any meaningful societal resources designed to recognize them as human beings.

Society has always reserved the right to punish those who refuse to follow the rules. However, we have legal rules in place to guard against the potential for abuse inherent in any criminal justice system. Our Constitution and ensuing criminal laws recognize that the deprivation of liberty requires heightened procedural protections. For example, someone charged with a crime is presumed innocent and has the right to remain silent, the right to confront witnesses who testify against him/her, and the exclusion of hearsay testimony at trial. In addition, the State's burden of proof in a criminal case is a high one: beyond a reasonable doubt.

On the other hand, most States also have civil commitment laws aimed at detaining the mentally ill or inebriate who is gravely disabled, a harm to themselves, or a harm to others. One of the most striking features of any of the current sexually violent predator laws is the degree to which the line between punishment and treatment has been blurred. No other specific category of crime warrants a stand-alone civil commitment law. And when a sex offender has completed his imposed punishment for the crime, his liberty interests are afforded few, if any, of the protections reserved for those accused of a crime.

The crux of every problem one encounters with civil commitment of sexual offenders as it currently exists is that almost all of the issues involving the current state of sexually violent predator civil commitment of sex offenders are clouded by the notion that sex offenders are less than human or that different standards should apply to them given the nature of their crime.

In the following chapter, the reader will be given a tour of the sex offender civil commitment process from the defense perspective—with an effort to encompass both the attorney and client viewpoint. We will discuss the initial evaluation to commitment and beyond, shedding light on how the demonization of the sex offender affects every step of the civil commitment process.

Client's Initial Evaluation

There are two ways a sex offender in Washington (and most other jurisdictions) can find himself in the maze of the sexually violent predator law. The first is directly from prison when his criminal sentence is about to expire. The other is after he has been released and alleged to have committed a "recent overt act." This discussion focuses primarily on civil detention directly out of prison. However, once the arrest has occurred, the process remains the same.

With special thanks to Gerald Gregory.

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When the sex offender's prison release date is a few months off, often unbeknownst to the offender, the prison bureaucracy begins the process of reviewing his file for assessment as a sexually violent predator. As part of this initial review, the State looks at the offender's criminal history; prison behavior; treatment records; court documents, including police reports and victim statements; and his proposed release plan. Once prison personnel determine that the individual warrants further evaluation for possible civil commitment, the State employs its psychologist (or, in rare cases, its psychiatrist) to evaluate whether the person meets the statutory criteria as a sexually violent predator.

Similar to other states with such statutes, Washington State (the first State to enact this law in 1990) defines a "sexually violent predator" (SVP) as any person convicted *or charged* with a crime of sexual violence who suffers from a mental abnormality or personality disorder which makes the person likely to engage in predatory acts of sexual violence if not confined in a secure facility (RCW 71.09.020 (18)). "Predatory" acts are those directed toward strangers and individuals with whom a relationship has been established or promoted for the primary purpose of victimization or persons of casual acquaintance with whom no substantial personal relationship exists. RCW 71.09.020 (10). In Washington State, and those States with the "predatory" requirement, incest offenders do not qualify for civil commitment under this statute, no matter how prolific their offending, unless at least one of their crimes fits the "predatory" definition.[1]

Prior to the expert conducting an SVP evaluation, a correctional employee typically tells the inmate that the authorities have decided to review his case for possible civil commitment and ask him whether he'll agree to meet with the evaluator. The inmate usually has very little notice or an opportunity to consult with an attorney prior to making this crucial decision.

The initial forensic evaluation itself is like no other in our judicial system, and its impact on the inmate's life cannot be overstated: it may lead the individual to serve what is tantamount to a life sentence of detention. Washington law allows probable cause to be found based on the individual's record and a single professional's opinion that the person is more likely than not to commit a predatory crime of sexual violence sometime in the future if he's not locked up. In contrast, in California, it requires two to four evaluators to establish probable cause. This opinion is admissible even if the inmate declined to participate in the forensic interview; the evaluator simply renders an opinion based solely on a records review.

In Washington and some other jurisdictions, there is no requirement that the evaluator begin the review process with the presumption that the person does not meet the commitment criteria; given the weeding-out process of potential candidates for civil commitment, it appears likely that the opposite may be true. In an initial SVP evaluation, whether a forensic interview is conducted or not, the evaluator's focus is primarily on the individual's past conduct and static risk factors. Factors that should be considered include treatment, age, increased education, and community support. It is an open question whether such preliminary evaluations are truly unbiased.

The standard practice of forensic psychologists conducting civil commitment evaluations of prison inmates unrepresented by counsel is arguably in violation of the ethical standards of the profession. The Specialty Guidelines for Forensic Psychologists' states:

> Forensic psychologists do not provide professional forensic services to a defendant or to any party in, or in contemplation of, a legal proceeding prior to that individual's representation by counsel, except for persons judicially determined, where appropriate, to be handling their representation *pro se*…(Committee on Ethical Guidelines for Forensic Psychologists)

State evaluators may wish to consider whether they "run the risk of becoming inadvertently complicitous in a [civil commitment] system that promises far more than it delivers in the protection of individual rights and at its worst represents a return to warehousing a class of individuals" (Petrila, 2008, p. 361).

There is no right to court-appointed counsel during this preliminary evaluation and screening process. Few, if any, inmates have the resources to hire an attorney. If an inmate can consult an attorney knowledgeable in this field prior to the evaluation, he will have the opportunity to understand and discuss the law. He will learn what kind of information the evaluator may find useful, such as details about his prior treatment, including his dynamic risk factors and relapse prevention plan and his specific release plan. The individual can refer the evaluator to collateral resources who offer information that may make a difference when determining whether someone meets the criteria of the law upon release.

If the evaluator finds the person does *not* meet the criteria for civil commitment, the State will do one of the two things: allow for the release of the person through the prison system or retain another expert for a second opinion. (In California, the statute always requires a second opinion.) If the second evaluator agrees that the person does not meet the criteria, then the State will not file a petition for civil commitment. However, in some prison systems, Washington State included, the fact that the person was considered for civil commitment may delay the process of release from prison.

[1] In states without the predatory qualifier, incest offenders are subject to commitment; in most states with predatory language, incest offenders can and are committed because some of their crimes fall within the predatory definition. Also research indicates that a significant portion of intrafamilial offenders also has extrafamilial victims.

If the evaluator determines that the offender meets the civil commitment criteria, the State will file an ex parte petition (a petition filed without notice to the defense) for an order of an initial finding of probable cause that the person is a sexually violent predator and a warrant for his arrest from prison. The ex parte nature of the petition is analogous to the criminal system where the State can file charges without notice to an alleged offender and send law enforcement out to arrest the accused. Once the court signs the order, the inmate is taken into custody while still in prison, handcuffed, and transported to the county jail located in the jurisdiction of his most recent conviction for a sex offense. Upon booking such inmates into the local jail, the jail personnel are alerted that a "sexually violent predator hold" is on the inmate. This may impact jail placement and treatment by jail staff, meaning that the inmate may find himself in protective custody to prevent him from being hurt by other inmates. Within hours, the detainee meets his new lawyer(s), who come to introduce themselves and begin the lengthy process of representing his interests, a process which will likely go on for many years.

Within 72 h of arrest, exclusive of weekends and holidays, the statute provides that the person receive notice of their right to appear and contest the ex parte finding of probable cause. Within 24 h after filing, the prosecuting agency must provide a complete copy of the discovery to the defense. In contrast to the months the State had to prepare for this hearing, under the statute, the defense has a maximum of 3 days to review potentially thousands of pages of records and prepare to challenge the State's expert's opinion. The respondent can waive his right to a speedy hearing to prepare; however, that will prolong his stay in a local jail and is unlikely to change the outcome at the probable cause appearance; the respondent can contest the initial probable cause finding that was made just days earlier by the same judge [RCW 71.09.040 (2)]. Recently, in an effort to cut costs, the Washington statute was amended to prohibit the parties from conducting legal discovery prior to the hearing contesting probable cause.

Once the court affirms the prior finding of probable cause (an outcome that is all but certain, given the fact that the same judge has already made that finding—see above), the respondent has the right to a trial within 45 days. Jurisdictions may vary, and the average time between arrest and trial ranges from a matter of months to over a year. In some jurisdictions, the presumption is community-based treatment. In most jurisdictions, detention in a maximum security treatment facility is the norm.

Upon arrival at the treatment facility, the resident is processed through intake, given the option to enroll in treatment pending a commitment trial, and advised that "everything you say and do will be used against you." Many residents are greeted by others with whom they served time in prison and quickly learn that hopelessness is pervasive among the residents in the institution.

An Important Decision Pretrial: Treatment or No Treatment?

One of the most important decisions the detainee faces in the detention facility is whether or not to participate in treatment. Prior to treatment at the detention facility, he must sign paperwork which informs him in no uncertain terms that everything he says and does in that facility, including every facet of his treatment participation, can be used as evidence against him in his upcoming commitment trial. It is in this double-edged context that he is offered treatment for the very conditions that the State must prove exist at the commitment trial in order to commit him—most typically antisocial personality disorder (a disorder that has been diagnosed in approximately 80 % of a given prison population); substance abuse or dependence combined with some sort of a paraphilic disorder, usually otherwise specified paraphilic disorder (OSPD); and/or pedophilic disorder.

The resident is faced with what we view as a Hobson's choice (a choice in which only one option is offered): agree to enter into treatment and have his statements and assignments open to negative interpretation by the State's expert, his treatment providers, and the jury or decline to enter into treatment and have *that* decision used against him in trial. The treatment offered in Washington State is the same in both pretrial and posttrial. And similarly, what the State learns for treatment participation can be used against the detainee in a future commitment trial or release trial.

Treatment programs vary across the county. There is a broad range of experience among treatment providers, and presently there are no approved standards or a national model for running sex offender civil commitment detention treatment programs. Consequently, each State can revamp their program independent of the statutory criteria that was used to commit the person. When a new treatment protocol is introduced, often residents are required to restart the treatment program from the beginning. This leads to the almost ubiquitous perception that the treatment providers keep "moving the goal post" and thus prevent participants from advancing in ways they had at some point been led to expect. Staff turnover remains high, and the offender must start over with a new provider. Another reason is that very few treatment participants have been released. The International Association for the Treatment of Sexual Offenders (IATSO) sets forth Standards of Care for the Treatment of Adult Sex Offenders. The ninth Principle of the Standards of Care set forth by IATSO states, "Professionals who work with sexual offenders should be prepared to work with the criminal justice system in a professional and cooperative manner." [The International Association for the Treatment of Sexual Offenders (IATSO). Standards of Care for the Treatment of Adult Sex Offenders (emphasis added). http://www.iatso.org/care/ Standards%20of%20Care.pdf.] Indeed, this

principle seems basic and fundamental to a process in which all stakeholders share the same statutorily defined goal: the resident's safe release back into the community. The lack of cooperation with the legal process can be interpreted in such a way as to suggest the uncooperative party follows a different agenda. When professionals running a treatment facility give short shrift to the legal criteria governing whether a resident should be released to a less restrictive alternative (LRA) or released unconditionally, they adopt an approach that is counterproductive and violate internationally established principles of the treatment of sexual offenders. Trial courts vary on the admissibility of someone's participation in treatment during trial. If the prosecutor can argue that the respondent has "refused treatment" while awaiting trial, he/she may elicit from the State's expert that the individual's refusal to "take advantage" of treatment is a red flag, an indicator that the respondent has no insight into his various maladies or chooses not to address the very mental abnormality and/or personality disorder that the jury is impaneled to decide even exists.

Meanwhile, the man whose fate is hanging in the balance of all this is sitting there at the counsel table listening in disbelief. *This* is how the State is going to lock him up for life. It is exactly this kind of "damned if you do, damned if you don't" routine that leads many facing SVP commitment trials to think that the deck has been stacked against them. Combine the lack of confidentiality facing the respondent making the treatment choice, and it is easy to see why treatment is not a viable option prior to trial in the majority of the cases. Harry we need to change this paragraph or omit it. I say omit it.

Most jurisdiction's statutes require that the offender is *more likely than not* to reoffend. Treatment facilities are reluctant to release someone they find may be only 30 % likely to reoffend instead of the statutorily required 51 %. In addition, in Washington State, the issue before the court for release to an LRA is whether conditions can be imposed on the individual of concern that adequately protect the community and are in the best interests of the respondent. An LRA assumes the risk for re-offense is higher than 51 % without release conditions in place and requires the court to turn its attention to community management.

The two most significant events facing a respondent whose trial is imminent are the pretrial forensic evaluation, and, in Washington State, where there is no right to silence, being deposed by the prosecutor. Typically, the former occurs first, so the prosecutor has additional information to use in the deposition.

The Forensic Evaluation

How might a detainee perceive the evaluation? The major advantage a respondent has concerning the pretrial evaluation that he didn't have in the pre-probable cause evaluation that preceded his release from prison is the opportunity to confer with counsel. (Some might say that it is the major *disadvantage*.) Unlike the prison evaluation, when the prisoner had no one to advise him beforehand about what to expect, this time, an experienced attorney will be there to fill him in on details of the process and to educate him on what the expert will likely focus on during the interview.

The conundrum surrounding this entire process is this: in Washington State, the respondent is required by law to cooperate with the evaluation, and if he refuses, he faces being found in contempt of court and detained until such time as he complies with the court order (RCW 71.09.040: Washington Administrative Code 388-880-035—Refusal to participate in pretrial evaluation.) Other jurisdictions, like in California or Minnesota, allow the respondent to refuse to participate in the pretrial direct evaluation.

In typical civil cases, the litigant is compelled to participate in a professional evaluation once they have involved themselves in the legal system: for example, the employee who brings a harassment suit against an employer or a car accident victim suing the insurance company. In those cases, the adverse party is the *defendant*, not both the plaintiff and the government. Similarly, in a criminal case, the only time the court can compel an evaluation is if the *defendant* raises an affirmative defense such as insanity.

In an SVP proceeding, the forensic interview cannot always be considered voluntary. Moreover, one shouldn't overlook the impact on the respondent's attitude and emotional response to the prospect of submitting to a direct evaluation with the forensic psychologist who *has already made a prior determination that he meets commitment criteria.* Since even the most cognitively impaired and uneducated inmate intuitively understands that one cannot prove a negative, what should the detainee expect from such an encounter? A few questions come to mind. If the psychologist has interviewed the inmate in prison, why would a second interview change anything? And if the inmate declined to participate in the interview out of a healthy and well-founded Darwinian instinct for self-preservation, what foreboding of doom might accompany his thoughts during a coerced interview? Moreover, what of the standard practice of forensic psychologists, namely, to be wary of relying on an offender's self-report? From the defense perspective, it certainly appears that little good can come out of these pretrial evaluations, no matter what the client has to say or how he says it; the expert is unlikely to change his/her opinion and instead illicit factual details to bolster his/her existing opinion.

Court Ordered Penile Plethysmographs and Polygraphs Pretrial

The use of a penile plethysmograph (PPG) to measure an individual's arousal to various sexual stimuli has been used in the treatment of many sex offenders. A patient's arousal is

measured through different stages of treatment to determine how well the interventions learned in treatment are working to counter the patient's deviant arousal. Polygraphs are routinely employed by community corrections officers to determine whether an offender has falsely reported his adherence to release conditions and by treatment providers to find out whether PPG results are valid (i.e., whether arousal interventions were used by the patient when they shouldn't have been.) In select states, including Washington, respondents can be court mandated to participate in both PPG and polygraphs as part of the pretrial evaluations.

The Pretrial Deposition

In Washington State, in spite of the fact that SVP proceedings may result in a life sentence for the detainee, he does not have the right to remain silent as he would in any other proceeding where his liberty is at stake. There is not much more to say; in SVP cases, prosecutors relish the opportunity to question the respondent under oath about anything and everything except privileged communications with his lawyer. This is almost always the first time in his history the respondent has had to answer under oath directly to the prosecutor not just about his crimes, but about everything in his life.

The detainee's experience of this process is not insignificant and is worth mentioning. He is forced to answer questions under oath posed to him by the same prosecutor who is determined to do everything he or she can do to see to it that he is detained indefinitely for behavior he *might* engage in the future. The significance of the deposition for the forensic psychologist's opinion is often minimal, except, insofar as the deposition may reveal heretofore unknown details about the detainee's life, offense history, or the respondent provides different or conflicting information during his deposition than he did during the forensic evaluation.

Trial: The Crucible

The Washington SVP statute gives the respondent, the State, and the judge the right to demand a jury trial. If both parties and the judge agree, the respondent can have a bench trial—a trial in which the judge is the sole fact finder. Such trials are a rarity; the State likes juries because the average citizens that comprise juries are highly likely to want to commit a respondent the moment they hear about the terrible crimes he's committed. Defense lawyers often prefer taking a chance with juries rather than subject the client's future to a judge whose reelection chances would diminish dramatically if he were to release a sex offender in a predator case.

Selecting a panel of truly unbiased jurors in an SVP case is extremely difficult and requires a great deal of time in voir dire (the process by which prospective jurors are questioned about their backgrounds and potential biases before being selected to sit on a jury); the goal of voir dire is to identify prospective jurors whose biases may prevent them from remaining impartial. During voir dire, a potential juror will often express horror at the prospect of a repeat sex offender being released from custody. But that same juror, when questioned by the judge or prosecutor, will just as often assure the parties that he/she can comply with the court's directive to "apply the law to the facts that the juror finds to be true and accept the law as the court gives it, regardless of what the juror personally believes the law is or what they think it ought to be" (WPIC 365.01—Washington Pattern Jury Instructions: Civil, No. 365.01). Defense lawyers typically believe that courts do not provide sufficient time to identify biased jurors, particularly in cases involving pedophiles. In rare instances, courts grant the parties enough time to pick an impartial jury. Commitment is the norm following a jury trial. Research shows that the public perception about sex offenders is that the vast majority will reoffend. An interesting study would be one in which results in SVP cases were matched with time allotted by the respective courts for voir dire. It would not be surprising to discover a correlation between the very rare cases won by the defense and the amount of time granted by the court for voir dire in those cases.

The standard of proof for continued detention in the twenty States that have enacted civil commitment laws for sex offenders varies and includes "more likely than not"; "highly likely"; "clear, cogent, and convincing"; and "beyond a reasonable doubt." During the SVP trial, the State has the burden of proof and calls its witnesses first. It is during this phase that the victims, law enforcement, treatment providers, and evaluating experts testify. Unlike in a criminal case where the defendant also faces confinement, the respondent does not have the right to remain silent, and the State can call him as a witness during their case in chief or during rebuttal. The respondent's attorney can cross-examine all of the State's witnesses, including the victims. Typically, there is rarely an issue with respect to a victim's version of the sexual assault (and thus no necessity for the victim to testify), and defense lawyers almost never question victims.

The State's expert is permitted to testify about facts that they considered in forming his/her opinion, even if the underlying facts are not themselves admissible as evidence. One would expect, given that involuntary civil commitment entails a "massive curtailment of liberty," (*In re the Detention of LaBelle,* 107 Wash.2d 196, 201, 1986)) that experts would observe the highest professional and ethical standards in their deposition and trial testimony. Unfortunately, this is not

always the case. Part of the problem lies with the courts themselves. Judges in sexually violent predator proceedings can sometimes have a "let's just get this over with" attitude and as a result "often exercise comparatively lax supervision in managing the admissibility of evidence of future dangerousness, and may characterize such evidence as more scientifically based than it is" (Petrila, 2008). This approach by the court leaves the issue of scientific rigor and integrity up to the experts. "In the absence of aggressive judicial gate keeping, mental health professionals serving as experts must police themselves" (Petrila, 2008, p. 261).

It is in this venue that the state's expert can enhance his/her credibility by acknowledging the controversy that surrounds some aspects of the SVP law, such as the fact that some experts disagree that the diagnosis of "otherwise specified paraphilic disorder (OSPD)" is appropriate for an adult rapist. Psychology and psychiatry are not fields known for empirical testing as are chemistry or physics. State experts should acknowledge the inherent difficulty predicting *anyone's* future behavior, let alone the person in the courtroom. Rarely during direct testimony does the state expert point out that the actuarial tools used in their assessment don't predict any one individual's risk, but rather the risk of a group of individuals with similar characteristics as the person on trial.

In a typical SVP trial, the respondent may present his own witnesses, including family members, community support people, treatment providers, and prison personnel, in addition to their own retained expert. Family members often are able to testify to the changes the offender has made since he committed his last crime. Prison personnel can testify to the respondent's compliance with rules, gainful employment, and pro-social activities. Prison treatment providers can testify to treatment gains and, if the offender developed a comprehensive relapse, prevention plan and his ability to implement the plan. The respondent's defense team can help the individual find community resources on release, including acceptable housing, sex offender and substance abuse treatment providers, spiritual support, vocational resources, and employment. Unfortunately, what a respondent's release plan looked like prior to the State filing the SVP petition may have become obsolete due to the significant passage of time. Many offenders during their incarceration establish pro-social ties with the community through religious or recovery groups, and these community connections can be vital for the offender's success if released to the community.

At the close of all the testimony and following deliberations, the judge reads the jury instructions to the jury and sends them off to deliberate. The verdict form requires nothing more from the jury's foreman than that he or she checks a box indicating whether the State has met its burden of proving beyond a reasonable doubt that the respondent is a sexually violent predator. If the jury finds the State has not met its burden, the offender is released to the community to begin implementing his new release plan or, in the worst-case scenario, to pick up the pieces of whatever might be left from his original release plan. If the jury finds the State met its burden, the offender is committed. Orders of commitment in most jurisdictions result in indefinite commitment and can be analogous to a life sentence. Budget cuts in many jurisdictions have resulted in an increase in those unconditionally released and released to community-based treatment (statutorily required annual reviews notwithstanding). In contrast, traditional civil commitment laws detain a person for a finite period of time. In Washington State, in SVP proceedings, with one judicial signature, the person is committed to a secure State facility for control, care, and treatment until such time as "[t]he person's condition has so changed that the person no longer meets the definition of a SVP or conditional release to a less restrictive alternative (LRA) is in the best interest of the person and conditions can be imposed that would adequately protect the community" (source, p. #) (RCW 71.09.090.) If the jury fails to reach a verdict, the court declares a mistrial, and the respondent is sent back into custody to await a retrial.

Posttrial Commitment

Life at a commitment center after trial differs very little, if at all, from pretrial detention unless the offender decides to participate in treatment.

In many facilities, the treatment becomes secondary to detainment. This is particularly true when the institution chooses to disregard the legal criteria for release, prolonging treatment unnecessarily or detaining offenders when they are infirm, have completed all of the treatment offered, or have refused formal treatment offered by the institution but sought treatment on their own. This practice severely undermines the credibility of the treatment program and thus its effectiveness among the treatment participants and its viability for *prospective* treatment participants. Treatment participation may increase if the institutions fostered an attitude of treatment with the goal of release instead of indefinite incarceration that offers treatment. This would involve continuity in treatment providers, a treatment program with discernible goals and a discharge planner actively assisting the person in creating a safe living environment outside of the institution—as is done in traditional civil commitment proceedings.

An example of why the program is considered by many inmates to be a means to keep them detained indefinitely is useful to consider. A resident who participates in treatment has an expert who finds he no longer meets the commitment criteria. The prosecutor's expert even agrees. However, the treatment team at the institution disagrees with the proposed release for reasons which appear amorphous and elusive

(e.g., he needs to be more "transparent"; he needs to "internalize" the treatment principles). Release is stalled and word travels fast within the institution. As a result of the treatment team disregarding the legal criteria set forth for release, trust breaks down, not just with that individual, but throughout the institution.

Systemic obstructions notwithstanding, successful participation in treatment will lead to community transition. Offenders who are released on an LRA, as in Washington, remain under court supervision and are required to cooperate with intensive community management. Release typically requires community chaperones, GPS monitoring, restrictions placed on movement in the community, weekly treatment appointments, and meetings with a parole officer.

Many issues confront a sexual offender on conditional release to the community. Often, prior to release, the media take notice. When the offender has a spouse or other family members willing to take on public condemnation, the release may happen sooner than it would for someone lacking such resources. Due to public pressure, few landlords are willing to rent to high-profile sex offenders, and without available housing, there is no release from a State institution. Once in the community, under strict release conditions, the public scrutiny remains intense. The offender has a very low likelihood of finding a job unless they have connections in the workforce. The treatment provider or community corrections office must agree to reduce conditions of supervision such that the person can work.

Obtaining *unconditional* release through the treatment process is rare barring old age and infirmity or decades of treatment. The State's view, if a person is doing well on release conditions, is often "if it's not broken, why fix it," i.e., if the individual does fine on release conditions, why reduce them?

Conclusion

The sexually violent predator laws are here to stay. As States increase prison sentences for convicted sex offenders at the time of sentencing, the number of people detained by these laws may decrease. It may also come to pass that State budget cuts will mandate the amount of resources governments are willing to spend on preventive detention.

The expert plays a pivotal role in every sexually violent predator proceeding. The methodology and acceptance of risk assessment of sex offenders have grown tremendously in 20 years. As the field of sex offender risk assessment grows, so should the awareness that a person's liberty interest is at stake. The rules that we create for sex offenders can and will spill over to affect the lives and liberties of others in the penal system and ultimately, to the innocent and average people who live outside the prison walls, putting everyone's rights and freedoms at risk.

Twenty years ago, the first experts to evaluate men under Washington's new SVP law were acutely aware that they were covering new ground that rendering an opinion that a person should be detained for something they *might* do was significant, and they should proceed delicately with the utmost caution. Since then, in our opinion, a new generation of professionals has emerged whose familiarity with this law may cause them to inappropriately place undue confidence in their role as an evaluator. More statistical data and research that examine what impact, if any, the sexually violent predator laws have on community safety are needed. It is also an area of the law that requires the utmost integrity from the forensic professionals who hold the key to an individual's freedom.

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Reconciling Sexual Offender Management Policy, Research, and Practice

Christopher Lobanov-Rostovsky and Andrew J. Harris

Why Do We Do What We Do?

The Disconnect Between Sex Offender Management Policy, Research, and Practice

The past two decades have witnessed a surge in legislative activity ostensibly intended to reduce the societal risk presented by known sexual offenders. Prompted in part by federal mandates, all 50 states have adopted systems calling for known sexual offenders to register with law enforcement and providing public access to much of this information. States and localities across the country have adopted stringent restrictions on where previously convicted sexual offenders may work or reside. Federal and state lawmakers have passed a range of sentencing reforms reducing judicial discretion, calling for lengthier sentences for those convicted of sexual offenses and expanding the use of lifetime electronic monitoring and supervision for an expanding group of individuals. These policies and others have been implemented in a manner that has called for an increasingly "widened net" that has often contravened existing evidence regarding the heterogeneity of the sex offender population in terms of behaviors, motivations, and risk.

Paradoxically, these policy developments have occurred amidst a robust expansion of the research enterprise related to risk assessment, treatment, and sex offender management. While significant knowledge gaps remain, researchers and practitioners in the field have developed a much better sense of how risk may be effectively assessed and mitigated among sexual offender populations. Emergent evidence-based strategies such as integrated models of supervision and treatment as well as circles of support and accountability—while under active use in some jurisdictions—have received nowhere near the level of resources and support that have been accorded to sex offender registration and notification (SORN), civil commitment, and related policy strategies, despite limited evidence attesting to the public safety efficacy of these latter approaches.

In this general context, the present chapter examines contemporary sex offender management policy and its historical, social, and political antecedents, with a particular focus on those factors that have contributed to the current state of affairs. In so doing, the chapter aims to inform more effective efforts by the research and practitioner communities to elevate the role of evidence in the design and implementation of effective public policies to reduce sexual violence in society.

The chapter includes five main sections—the first providing historical background describing the evolution of contemporary sex offender management policy, the second offering an overview of the data regarding the problem of sexual violence in American society, the third identifying and discussing the scope and key trends associated with current sex offender management policies, the fourth examining the major themes and patterns in current sex offender management policy and the challenges associated with bringing evidence into the sex offender management policy process, and the fifth providing a blueprint for action on the part of researchers and practitioners in the sex offender management field, with the goal of translating what is known about evidence-based *practice* into the realm of evidence-based *policy*.

Historical Context of Sex Offender Management Policy

> Images of the sex offender have changed dramatically and cyclically over time … In each era, the prevailing opinion was supported by what appeared at the time to be convincing objective research. One reality prevailed until it was succeeded by another (Jenkins, 1998).

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As noted by social historian Jenkins (1998), social and legal responses to sexual offending prior to the late nineteenth century were based predominantly on Puritan era moral codes. The dawn of industrialization, however, brought with it a series of economic, social, political, scientific, and cultural developments that produced dramatic shifts in the way in which criminal sexual behavior is explained and addressed.

On the economic and political front, industrialization led to the rise of urban centers of commerce, coupled with significant demographic transformation. With immigrants flocking to American cities and African Americans migrating northward, the social and demographic landscape saw dramatic changes. A wave of progressive reform, prompted largely by this changing ethnic and social landscape, swept through the intellectual and political establishment. The rise of the Progressives, many of whom viewed growing urban immigrant communities as breeding grounds for vice and immorality, led to new views of criminal behavior as "social disease." As an extension of this view, sexual crime was typically attributed to the underclass, who were viewed as lacking in basic morality and intelligence.

Within the realm of science, several ideas emerged that would shape the manner in which sexual deviance and criminal behavior is viewed, including Darwin's theory of evolution, new paradigms for explaining disease transmission, and the birth of genetics and modern psychiatry. Drawing on the emerging scientific fields of genetics and psychiatry, the social engineering efforts of the time were based in presumed linkages between poverty, amorality, low intelligence, and criminal behavior—characteristics viewed as hereditary and potentially intractable in the lower classes.

Finally, the industrial era brought about a sea change in journalistic practices, setting in motion the birth of mass media. Paramount among these developments was the emergence of *yellow journalism*, a new brand of reporting that fed upon the public's appetite for scandal and vice and which publishers quickly recognized as a viable means of increasing circulation. Coupled with the advent of the telegraph, which facilitated the interregional transmission of information, the media was able to cover sensational stories of sex and violence from across the country and abroad.

By the turn of the twentieth century, amidst this changing social order, a shifting intellectual and scientific landscape, and the growing power of the media to galvanize public opinion and fuel public fears, lawmakers were faced with a pressing challenge to come up with explanations and solutions for the problem of sex offenders. The period produced two pieces of notable legislation, each asserting expanded government roles in managing individuals deemed as sexual threats. At the state level, the Briggs Act, passed by the Commonwealth of Massachusetts in 1911 and amended in 1921, provided for the preventive detention of "defective delinquent" offenders who were deemed as at risk to escalate their offenses if not incapacitated. The law was loosely constructed on the Commonwealth's recently enacted commitment laws for the insane, requiring the examination and concurrence of two psychiatrists. Unlike that process, however, the new system mixed criminal and civil elements, involving both prosecutors and criminal court judges. Although the law ostensibly encompassed a range of criminal subtypes, those with records of sexual-related activities were most likely to be covered. While the Briggs Act (1921) encountered a range of implementation problems due to its hybrid nature, it ultimately served as a model for the subsequent proliferation of sexual psychopath statutes across the United States in the mid-twentieth century—a series of laws that will be reviewed shortly.

The second key legislative milestone of the era, the Mann Act of 1910, represented the federal government's first foray into the realm of responding to sexually deviant behaviors. As extensively chronicled by Langum (1994), the Mann Act emerged from a confluence of political forces linked to the social transformations of the time, notably growing concerns among the entrenched white male establishment over the changing status of women and the societal effects of immigration and urbanization.

Propelled by media-fueled speculation that organized criminal rings were actively engaged in forcing girls into sexual servitude—a practice termed *white slavery*—the Mann Act was based on fears that prostitution was widespread, heavily organized, and the work of the underclass, particularly immigrants. Evoking the powers granted to Congress under the commerce clause of the Constitution, the Mann Act asserted federal authority to arrest and prosecute those who transported women over state lines for "immoral purposes." The act was signed into law in 1910 by President Taft, with the newly founded Federal Bureau of Investigation (FBI) charged with enforcement. Although the FBI was unable to uncover any significant evidence of the purported white slavery rings, a series of Supreme Court rulings in 1913 and 1917 (Athanasaw v. United States, 1913; Caminetti v. United States, 1917; Hoke v. United States, 1913) supported the application of the law to individuals deemed to be a threat to common morality. Langum's analysis delves further into the specific cases in which the Mann Act was applied throughout the twentieth century, including the prosecutions of African-American boxer Jack Johnson, actor and suspected communist sympathizer Charlie Chaplin, and rock musician Chuck Berry

While the political impetus behind the Mann Act of 1910 has been linked by some historians to xenophobia due to its initial targeting of immigrant and African-American populations, significant parallels may be seen between the Mann Act and current policy responses to sexual offending. The manner in which the problem was defined and framed in

public discourse, the passage of sweeping legislation based largely on media reports that alarm the public, the political hazards of resisting legislation that seeks to uphold prevailing moral codes, and the potential gap between the assumptions made by lawmakers and the actions of those charged with implementation all reflect themes that resonate with contemporary policies, as will be highlighted below.

The Sexual Psychopath Era

The 1920s witnessed a relative diminution of interest on the issue of sexual offending, amidst law enforcement focus on prohibition and organized crime and a societal shift in sexual mores. Yet with the beginning of the depression in the 1930s, the country entered a new era in its attitudes toward sexual crime. Events such as the kidnapping and murder of the Lindbergh baby by immigrant Bruno Hauptman in 1930, followed by a reported "wave" of child abductions, the Leopold and Loeb murder of Bobby Frank, and the 1934 arrest and highly publicized trial of the notorious Albert Fish for the murder, sexual mutilation, and cannibalism of a 12-year-old girl all contributed to a growing concern over *stranger danger*, the sense that predatory psychopaths were lurking in the shadows and that public officials were doing little to stop them.

Building on the systems such as those delineated in the Briggs Act (1921) from a quarter century earlier, states, beginning with Michigan, began passing a series of statutes that became known as *sexual psychopath laws*, allowing states to commit those deemed as sexually dangerous to psychiatric facilities for *day-to-life* (i.e., indefinite) sentences, in some cases without any direct evidence of prior sexual offenses. In his seminal study of the proliferation of sexual psychopath legislation, criminologist Sutherland (1950) cited a series of conditions related to the passage of these laws. Notably, Sutherland cited the responses of the media, citizenry, and the political establishment to high-profile sexual crimes and noted the convergence of these concerns with the "solution" offered by the field of psychiatry and its attendant therapeutic ideal. In 1939, the US Supreme Court upheld the constitutionality of Minnesota's sexual psychopath statute, clearing the way for states to freely apply the laws as a means of preventive detention.

Shifting Views

From the postwar period through the mid-1960s, sexual psychopath laws proliferated, with 15 states adopting such laws by 1950 and 29 by 1960 (Group for the Advancement of Psychiatry, 1977). The expanded use of these laws, which also corresponded to a general surge in psychiatric institutional populations in the United States, produced a growing population of individuals held on day-to-life sentences and the preventive incapacitation of thousands of individuals deemed to be at risk of committing sexual offenses.

By the early 1960s, however, attitudes were poised for another shift, this time in favor of a more compassionate (and arguably more tolerant) perspective toward sexual deviance. Setting the stage for this shift were a number of general contextual developments on the intellectual, political, and cultural landscape. These included a rise in liberal thought within intellectual circles, which significantly challenged prevailing approaches toward criminal behavior; a burgeoning civil rights movement which, coupled with mounting pressures on state budgets from the exploding census in psychiatric facilities, led toward a massive push for deinstitutionalization; and significant changes in sexual norms and attitudes, particularly among the young—changes that found their further expression in the rise of the feminist and gay liberation movements by the late 1960s.

It is also during this period that the concept of rape becomes redefined, due in part to the ascendance of the feminist and victims' rights movements. No longer conceived as a strictly sexual crime, rape was reframed as an issue of male dominance and exertion of power (Brownmiller, 1975), with rape victims accorded additional protections in legal proceedings and investigations. Meanwhile, the convergence of a shifting legal landscape (e.g., *Specht v. Patternson*, 1967) and the diminished faith of the psychiatric establishment (Group for the Advancement of Psychiatry, 1977) led most sexual psychopath laws to be repealed or fall into disuse. (For a review of the factors contributing to the rise and fall of sexual psychopath statutes, see Brakel & Cavanaugh, 2000.)

Crime Control Era and the Birth of Modern Sex Offender Policy

In the mid-1970s, an influential study by Martinson (1974) challenged the philosophy of crime and punishment that had flourished through the 1960s. Martinson's conclusion that "nothing works" to reduce criminality prompted a fundamental shift in correctional philosophy, setting the stage for massive sentencing reform in the United States (Lipton, Martinson, & Wilks, 1975; Martinson, 1974). By the early 1980s, the nation had entered the *crime control era* in which legislatures gradually assumed increased power over sentencing decisions, which decreased the power of judges (via policies such as "mandatory minimums" and three strikes laws) and parole boards (via determinate sentencing and "truth in sentencing" statutes).

The emergent dominance of determinate sentencing, which essentially reduced the capacity of correctional authorities and parole boards to calibrate release decisions to

community risk, created demand for new policies that would allow for tighter controls over sex offenders following their release from prison. In this general context, Washington State's Community Protection Act of 1990 ushered in the contemporary era of sex offender policies, both through its introduction of a new type of sex offender registration and notification (SORN) statute and its resurrection of civil commitment. Regarding the former, although other states had previously adopted sex offender registration systems for the use of law enforcement, Washington's law was the first to provide for the release of registration information to the general public. As for the latter, Washington's new "sexually violent predator" civil commitment law represented a retooled return to the general approach that had characterized the earlier generation of sexual psychopath laws, sparking similar legislation in 21 states and, ultimately, the passage of a federal civil commitment statute in 2006.

Amidst a subsequent surge in state-based legislation, the US Congress stepped into the fray with the passage of the 1994 Jacob Wetterling Crimes Against Children and Sexually Violent Offenders Registration Act (Wetterling Act), which established sex offender registration laws as a nationwide imperative. A string of subsequent amendments to the Wetterling Act, including the 1996 passage of the federal Megan's Law, which mandated community notification, incrementally expanded the scope and reach of the nation's SORN systems, firmly establishing the federal government as a driving force behind state-based sex offender management policies. This legislative sequence culminated with the 2006 passage of the Adam Walsh Child Protection and Safety Act (AWA), perhaps the most sweeping piece of sex offender legislation in US history. The AWA addressed an array of issues, including immigration law reform, expanded enforcement of internet crimes against children, enhanced sentencing provisions for certain crime types, and the establishment of a new federal sex offender civil commitment statute. While each of these provisions has attracted some measure of legal and policy attention, its most prominent feature was the 2006 Sex Offender Registration and Notification Act (SORNA), which repealed the Wetterling Act provisions and substantially expanded the federal government's scope of control over the nation's registration and notification systems with the ostensible aim of establishing greater consistency.

Placing the History into Context

The statement from Jenkins (1998) presented at the beginning of the chapter demonstrates how the progression of history raises a fundamental question for consideration: When policy responses to sexual offending are discussed, is there an "absolute truth," or is everything contingent on social, political, and cultural context? One answer—certainly one that policymakers would most *like* to believe—is tied to the notion of scientific and intellectual progress. Specifically, it might be concluded that policy responses to sexual offending have improved over time as more has been learned through empirical investigation—that is, we are more enlightened today than we were in the past, leading to more sensible and rational policies. Alternatively, a more cynical perspective might hold that our attitudes and beliefs toward sex offending are driven first and foremost by idiosyncratic views of factors such as family, gender roles, and social order and that our policies are no more informed today than they were 50 or 100 years ago. In the context of this general question, we turn now to a review of the evidence surrounding sexual violence in today's society and to a consideration of how extensively this evidence is reflected in chosen policy responses to sexual offending.

The Problem of Sexual Violence: The Evidence

As Sutherland (1950) observed over a half a century ago, much contemporary sex offender policy has unfolded amidst unprecedented citizen mobilization efforts, often generated in the wake of tragic events surrounding children. Victim names such as Adam Walsh, Polly Klaas, Jacob Wetterling, Megan Kanka, and Jimmy Ryce have routinely been attached to legislative efforts to stem the tide of sexual-related violence, adding to the emotional weight and perceived correctness of the policies.

These catalyst events, which generally involve abductions and murders of white, middle-class children, undoubtedly reflect significant tragedies calling for appropriate policy responses. However, within the broader context of sexual violence, these events are generally atypical in terms of the nature of these crimes, the perpetrators, and the victims. National data suggest that approximately 115 stereotypical stranger abductions of children occur each year (Sedlak, Finkelhor, Hammer, & Schultz, 2002). In contrast, national crime statistics suggest that an estimated 203,830 rapes and sexual assaults of individuals 12 and older occur each year (Rand, 2009), while police make approximately 22,584 arrests each year for forcible rape (Uniform Crime Report (UCR), 2009). Among reported sexual offenses, data from the National Crime Victimization Survey (NCVS) suggest that African Americans and those listing two or more races have a sexual victimization rate of 1.9 per 1,000, compared to the rate for those listed as white at .6 per 1,000 and other races at .9 per 1,000 (Rand, 2009). In terms of the age of victims, it appears that adolescents are more at risk to experience sexual victimization than adults, as the 2008 NCVS describes a rate of 3.8 per 1,000 for 12- to 19-year-olds, 2.8 per 1,000 for 20- to 34-year-olds, and 1.2 per 1,000 for those older than 35 (Rand, 2009).

Victimization survey data also suggest that the "stranger danger" scenarios that tend to drive much public policy surrounding sexual offending tend to be the exception rather than the rule. According to 2009 NCVS data, 79 % of the sexual assaults against males were by friends or acquaintances, while 21 % were by intimate partners, with no sexual assaults on males reported by strangers (Rand, 2009). For females, 63 % of sexual assaults were by non-strangers, including 42 % by friends or acquaintances, 18 % by intimate partners, and 3 % by relatives, while 32 % were by strangers (5 % relationship unknown) (Rand, 2009).

It is also noteworthy that rates of sexual assault appear to have decreased over the past 20 years. Uniform Crime Report (UCR, 2009) statistics indicate a 6.4 % decrease in forcible rape from 2004 to 2008, with the 2008 figure being the lowest in 20 years. NCVS data also indicates a downward trend in sexual assault over the period from 1999 through 2008, with an overall decrease of 53 % (Rand, 2009). Finally, the rate of substantiated child sexual assault cases also decreased by 53 % from 1992 to 2006 (Finkelhor & Jones, 2008).

In sum, sexual assault in the United States is a multifaceted problem, striking males and females as well as individuals of all ages and ethnicities in multiple different circumstances. There do, however, appear to be certain characteristics of individuals and situations subject to higher rates of sexual victimization. Moreover, as we will see shortly, this empirically grounded distribution of risk within the population does not always comport with those circumstances that tend to influence the public policy process.

Applying the Evidence in a Policy Framework

If there is one message that has emerged from recent research advances, it is that, in addressing the management of sex offenders, few approaches lend themselves to simple answers. Sex offenders are an extremely diverse population with a wide range of motivations, victim preferences, and behaviors. Victims of sexual assault, and the settings in which sexual victimization occurs, similarly reflect wide variability. The current policy approaches—even those that seem like "no-brainers"—all carry implicit risks and unintended consequences.

Yet in the arena of public opinion (and in turn in our political responses to fears of sexual offending), we tend to deal in moral and practical absolutes. The popular sentiment is quite simple: Individuals who commit sexually motivated crimes should be held responsible for their behaviors and the consequences of their actions. As a result, most Americans believe that the criminal justice system should employ whatever means necessary to isolate sexual offenders from society and diminish their opportunity to recommit their offenses. Americans expect law enforcement to do anything it can to identify the perpetrators of such crimes and bring them to justice; after all, there are few things more terrorizing to a community than an unsolved murder or disappearance of a child and the associated idea that a sex-crazed murderer is at large. Americans expect the justice system to include measures such as harsh prison sentences; full disclosure to the community of who sex offenders are and where they live; stringent restrictions on employment, residence, and daily activities; and, in certain cases, indefinite (perhaps lifelong) commitment to secure mental health facilities. Finally, citizens expect results in terms of preventing sexual victimization, leading the justice system to attempt to target any individuals who might be at any risk of committing such offenses, often regardless of the broader consequences.

Certainly, few would disagree on the merits of these goals: effective investigation of sex crimes, dependable justice strategies to punish and prevent re-offense, and viable means of prevention. Yet the manner in which we pursue these goals, with the attendant assumptions about the nature of sexual offenses, its perpetrators, and its victims, must in the end comport with the evidence around what works, despite the recognition that the public may continue to support popular policies regardless of their effectiveness. As result, policymakers must consider and be willing to address public sentiment for policies such as the ones listed below as part of policy development. In the following section, we discuss a series of policy strategies that have emerged as dominant elements to contemporary sex offender management practice, evaluating each in accordance with available evidence.

Sex Offender Registration and Notification

Over the past two decades, amidst public demand for expanded social control over those who have sexually offended, SORN policies have emerged as prominent and ubiquitous elements of the nation's public safety infrastructure. Laws requiring sexual criminals and others to register with law enforcement began with California in 1947. The registry at the time was maintained strictly as a law enforcement tool and was not publicly accessible. It is unclear what impact the law had on sex offender management, but a suspect in the kidnapping of a 9-year-old girl in 1940 was reportedly identified using the registry ("Kidnap," 1940). By 1990, 12 states had established sex offender registries, while contemporary SORN policies gained particular traction in the early 1990s as several more states passed legislation calling for expanded use of registration and asserting the public's access to certain registered sex offender information.

In 1994, the US Congress entered the picture with the passage of the Wetterling Act, requiring that all states develop systems of tracking convicted sexual offenders in

the community. The Wetterling Act was originally designed as a law enforcement tool to create a database of convicted sex offenders for use when conducting an ongoing sexual offense investigation, a goal that was uniformly supported by law enforcement agencies. Over the ensuing decade, the scope of this general mandate was broadened significantly through a sequence of amendments, including Megan's Law (1996), which required states to make certain registration data publicly available. In 2006, federal involvement in SORN-related issues reached a new level with the passage of the AWA, which repealed the Wetterling provisions and replaced them with a new, and significantly more prescriptive, set of requirements.

Partially in response to federal actions, SORN systems now operate in all 50 states, the District of Columbia, and US territories, with jurisdictions reporting over 700,000 individuals contained in their registries (National Center for Missing and Exploited Children (NCMEC), 2010). While laws calling for the relative emphasis of these varying strategies have varied from state to state, the practice of SORN has emerged as a universal element of state-based sex offender management policies. Under SORN, individuals convicted of—or in some cases adjudicated delinquent for—designated sexual crimes are required to register their whereabouts with law enforcement authorities and to regularly verify their information. Further, state laws provide that registration information be made available on publicly accessible Internet sites, allowing citizens an easily accessible mechanism to check for the presence of sexual offenders in their neighborhoods.

The initial federal guidelines related to the implementation of Wetterling's and Megan's Laws granted a fair degree of latitude to the states in implementing SORN laws. For instance, states could determine procedures for assessing risk, categorizing offenders, choosing which sex offenders would be subject to the release of information, and disseminating registry information to concerned citizens.

The resulting variation among states, along with expanded federal focus on developing a national public sex offender registry, led to the 2006 passage of the AWA. In repealing the Wetterling Act's SORN provisions and replacing them with a new set of requirements, Congress set forth a series of new mandated standards for states and other jurisdictions to follow. Among its provisions, the AWA set forth an offense-based categorization system; required all registered sexual offenders to be listed on state and national registry websites; expanded the scope of sexual offenders who must register, including mandated inclusion of certain juveniles adjudicated delinquent for specified sexual offenses; set forth specific requirements for duration of registration and frequency of reporting; and required the retroactive registration of certain classes of individuals. The United States Department of Justice has issued Supplemental Guidelines for AWA that make inclusion of juveniles optional for jurisdictions, but these Guidelines have not as yet been finalized.

In total, the AWA represented a significant assertion of federal authority over state-based SORN systems, prompting a good measure of concern among states, particularly those that had invested considerably in developing systems that contravened the new federal mandates. As of mid-2010, only a limited number of states and other covered jurisdictions had achieved compliance with the AWA mandates.

Prominent among states' concerns was the contention that the federally mandated systems of classification failed to adequately distinguish between registered offenders who presented significant threats to public safety and those who presented less of a risk (California Sex Offender Management Board, 2009). Indeed, research has supported the notion that transitioning to the AWA-mandated classification system places a significant majority of registrants into the highest category of offenders, while contravening evidence suggests that the highest risk of sexual re-offense is concentrated among a much smaller group of offenders (Harris, Lobanov-Rostovsky, & Levenson, 2010).

The Research

Research to date has been somewhat inconclusive in its assessment of the public safety benefits and reduced sexual recidivism associated with expanded SORN systems. A number of states, including Iowa, New Jersey, Washington, and Wisconsin have examined the impact of implementing SORN on sex offenders within their state. The results of several studies found no significant decrease in recidivism between registered and non-registered sex offenders (Adkins, Huff, & Stageberg, 2000; Schram & Milloy, 1995; Zevitz, 2006; Zgoba, Witt, Dalessandro, & Veysey, 2008), or a potential increase in the rate of sexual recidivism for those classified at the lowest level based on the AWA as compared to those classified at higher levels (Freeman & Sandler, 2009). Consistent with this, a series of studies examining rates of sexual assault both pre- and post-SORN showed no significant reduction in the rate of sex crimes post-SORN (Sandler, Freeman, & Socia, 2008; Walker, Maddan, Vasquez, VanHouten, & Ervin-McLarty, 2005). Further, there is no research to suggest that SORN is an effective intervention for juveniles—a population that has increasingly been subjected to state-based registration requirements (Letourneau & Armstrong, 2008).

Conversely, some studies have indicated a significant decrease in sexual recidivism for sex offenders subject to SORN, although the cause of the reduction could not be fixed on the SORN policy (Barnoski, 2005; Duwe & Donnay, 2008). Along these lines, there are some indications that registration may have certain selective effects: Registration has been found to be correlated with a reduction in the frequency of sex offenses against non-stranger victims, and notification

was found to deter sex crimes for first-time sex offenders but increased recidivism for registered sex offenders based upon disincentives for law-abiding behavior provided by notification (Prescott & Rockoff, 2008).

Finally, studies have questioned the effectiveness of the sex offender registry based upon concerns for inaccuracies in the information provided. For example, a state of New York audit found that one-fourth of the records did not match driver's license information (New York State Comptroller, 2006), and a state of Vermont audit found that about three-fourths of the records had critical or significant errors (Salmon, 2010). As a result, some policymakers have called for increased consistency, oversight, and enforcement of the sex offender registry (NCMEC, 2007), while others have suggested current sex offender management policies lead to the unintended consequence of sex offenders absconding from the registry (Iowa County Attorney's Association, 2006).

Residence Restrictions

Another prominent trend in sex offender management is to pass restrictions on where sex offenders can reside. Currently, approximately 60 % of states have laws restricting sex offenders from living near such places as schools, daycare centers, parks, and bus stops (Council of State Governments (CSG), 2007). This management strategy is based on the assumption that sex offenders will seek out stranger child victims in places children frequent near the sex offender's residence. These strategies have also been used by jurisdictions to ostensibly remove sex offenders from their jurisdiction, pushing them into outlying, more rural jurisdictions where less sex offender management services may be available.

The Research

When state and local jurisdictions began passing sex offender residence restrictions in the late 1990s, there was no research to suggest that such a sex offender management strategy would effectively reduce sexual recidivism and provide for enhanced community safety. Since then, a number of studies have failed to demonstrate reduction in sexual recidivism from a residence restriction policy (Colorado Department of Public Safety, 2004; Duwe, Donnay, & Tewksbury, 2008; Zandbergen, Levenson, & Hart, 2010). Such research has typically taken the approach of retrospectively reviewing those sex offenders who have sexually recidivated in terms of whether they live near a place a child might frequent, or to compare them to those who have not sexually recidivated in terms of residence location.

One study in particular, completed by the Minnesota Department of Corrections, consisted of a file review of 224 recidivist sex offenders and found that 85 % of the sex offenses took place in a residential setting (as compared to a public place where children congregate) (Duwe et al., 2008). The study further found that 113 of the recidivist sex offenders accessed the victim through an intermediary, who was typically an adult, and 79 % knew the victim prior to the sex offense. Finally, of the 35 % ($n=79$) of recidivist sex offenders who made direct contact with a victim, 16 made such contact with a child victim within 1 mile of their residence. However, per the researchers, none were near parks, schools, or other prohibited areas where children congregate, leading to the conclusion that none of the sexual offenses would have been deterred by residence restrictions (Duwe et al., 2008).

In addition to research on the lack of public safety benefit of residence restrictions, there has been some evidence to support the notion that residence restrictions may in fact undermine public safety by leading registered sex offenders to become homeless, go "underground," and fail to register. Both California and Iowa reported increased numbers of homeless and/or absconding registrants following implementation of a residence restriction law (Levenson & D'Amora, 2007; Thompson, 2007).

Therefore, residence restrictions have not been shown to effectively reduce sexual recidivism and enhance community safety. However, even jurisdictions that recognize the negative impact of such a policy often have difficulty in repealing such a law (e.g., Iowa County Attorney's Association, 2006).

GPS Tracking

Electronic monitoring, of which Global Positioning Systems (GPS) is one type, has been used with criminal offenders, including sexual offenders, since New Mexico began using such technology in 1984. By 1990, it was estimated that 60,000 criminal offenders in 36 states were supervised under electronic monitoring (Rondinelle, 1997). In its current incarnation, GPS information on the whereabouts of sex offenders is provided for supervision officers. Six states have passed mandatory lifetime GPS laws, including California's Jessica's Law in 2005 (Nieto & Jung, 2006), and approximately three-fourths of all states use GPS with some sex offenders (Turner & Jannetta, 2007).

The Research

Prior to the passage of mandatory GPS laws, the research was mixed in terms of their effectiveness in reducing sexual recidivism. It has been suggested that use of GPS in the absence of a rehabilitative component would not lead to any expected behavior change (e.g., reducing sexual recidivism) (Aos, Phipps, Barnoski, & Lieb, 2001; Gendreau, Goggin, Cullen, & Andrews, 2000). Since that time, much of the research generated on GPS has been completed by states that have implemented such a policy.

Multiple states, including California, Florida, New Jersey, and Tennessee, have completed studies of GPS effectiveness. The results of such studies have been mixed, in that New Jersey reported a low rate of sexual and nonsexual recidivism and parole violations for those on GPS but offered no comparison group data (New Jersey State Parole Board, 2007). Florida also reported reduced felony recidivism and technical violations for those on GPS compared to those who were not, although it was conceded that 70 % of those on GPS were lower-level property and drug offenders (Office of Program Policy Analysis & Government Accountability (OPPAGA), 2005). On the other hand, California and Tennessee found no significant reductions in recidivism or violations for sexual offenders on GPS compared to those who were not (Tennessee Board of Probation and Parole, 2007; Turner & Jannetta, 2007).

In addition, several of the studies noted significant implementation issues for use of GPS, including lack of staffing resources, the need to use the technology more discriminately, signal problems, and equipment malfunctions (Tennessee Board of Probation and Parole, 2007; Turner & Jannetta, 2007).

In summary, while GPS may ultimately be shown to effectively reduce and deter recidivism for certain sexual offenders, the current research support for this policy is mixed, and it has been observed that GPS, where utilized, should be one component of an overall management strategy that includes rehabilitative services.

Civil Commitment

In the early 1990s, a series of states, beginning with Washington, passed legislation providing for the involuntary and indefinite civil commitment of a limited group of individuals designated as sexually violent predators (SVP). Following Washington's lead, a succession of states moved to adopt similar laws, with 20 states establishing civil commitment policies as of 2010 and many others considering their passage (Fitch & Hammen, 2004). Other states with currently active SVP civil commitment laws are, Kansas, Minnesota, Wisconsin, Iowa, New Jersey, California, Texas (outpatient only), Arizona, Illinois, North Dakota, Missouri, Florida, Massachusetts, South Carolina, Pennsylvania ("aging out" juveniles only), Virginia, New York, New Hampshire, and Nebraska. While the majority of these states adopted civil commitment legislation during the 1990s, interest in the laws experienced a resurgence beginning in 2006, as reflected by California's expansion of civil commitment criteria pursuant to Proposition 83, the passage of new civil commitment laws in New York and New Hampshire, and the congressional passage of a federal civil commitment statute under provisions of the AWA.

Typically applied following completion of a criminal sentence, SVP civil commitment permits the state to retain custody of individuals found by a judge or jury to present a risk of future harmful sexual conduct by virtue of a mental abnormality or personality disorder. Following commitment, states remand individuals to the custody of mental health authorities, or in some cases correctional agencies, which ostensibly provide treatment for the condition that makes the individual likely to engage in acts of sexual violence. In most states, commitments are for an indeterminate period, with mental health authorities retaining custody until the individual is determined to no longer pose a threat to society. As of mid-2007, over 4,500 individuals had been committed under state SVP statutes (Gookin, 2007).

Since their inception, civil commitment policies have engendered significant controversy. Proponents of the laws have maintained that civil commitment represents a necessary "stopgap" measure to protect society from a small but dangerous group of individuals who continue to pose a threat to society following completion of their formal criminal sanctions. Criticism of the policies has emerged primarily within two sectors: the legal establishment, where debate has focused on constitutional concerns related both to civil commitment's fundamental premises and to its application, and the mental health community, where many have cited concern over the limitations of treatment and risk assessment technology. Mental health professionals and advocates have also expressed concerns regarding the "co-opting" of the psychiatric profession to fulfill a criminal justice function, misappropriation of public mental health resources, and the effects of the laws on compounding stigmatization of individuals with serious mental illness (Mental Health America, 2006). Further, some have questioned the policies' long-range sustainability considering their significant and mounting costs (Harris, 2006; LaFond, 1998). However, it has also been noted that the willingness of states to continue to devote resources for this sex offender management strategy, which in many cases was initiated during a period of economic growth, has continued even in times of economic uncertainty (Harris, 2006).

Three US Supreme Court rulings since 1997 have validated the use of civil commitment within the states (*Kansas v. Crane*, 2002; *Kansas v. Hendricks*, 1997; *Seling v. Young*, 2001), and a fourth ruling in 2010 supported the federal government's civil commitment authority (*U.S. v. Comstock*, 2010). Given this legal validation, it appears that civil commitment remains a stable element of the nation's sex offender management landscape.

The Research

As an incapacitative strategy ostensibly focused on the most high-risk offenders, civil commitment carries inherent public safety benefits. Assuming that the policies are appropriately

targeting those individuals who are likely to present the greatest risk of re-offense, these individuals' removal from society should intuitively lead to reduced rates of sexual victimization. As an empirical matter, however, it remains difficult to quantify and validate such claims. Any assumptions regarding the individual-level public safety effects of civil commitment (i.e., the extent to which the commitment of a particular individual prevented future sexual crime) are by nature speculative and conjectural, and—particularly given civil commitment's focus on a relatively miniscule proportion of offenders—it is highly problematic to attribute any aggregate shifts in sexual crime to the policies. To date, no experimental or quasi-experimental studies have been undertaken evaluating the relative public safety effectiveness of civil commitment against alternative means of managing high-risk offenders.

On another level, an arguably more relevant series of empirically testable premises relates to the relative effectiveness of civil commitment compared to alternative and less costly means of managing high-risk sexual offenders. In this regard, it is particularly notable that the Supreme Court's validation of civil commitment is predicated on the assumption that the purpose of commitment is therapeutic rather than punitive in nature—a finding that mandates the provision of a treatment-conducive environment. Paradoxically, those subjected to civil commitment tend to be those most highly resistant to treatment, resulting in very few releases from custody and, in turn, a costly and incrementally growing population.

Lifetime Supervision/Indeterminate Sentences/Mandatory Minimum Sentences

As an alternative to civil commitment, many states have instead passed laws that require longer criminal sanctions for sex offenders, including lifetime supervision (e.g., Colorado, Minnesota, and Washington) or mandatory minimum sentences (e.g., California and Florida), and these are frequently part of Jessica's Laws. As many as half of all states have passed mandatory minimum laws that may require 25-year minimum sentences for certain first-time felony sex offenses against children (Center for Sex Offender Management (CSOM), 2008). It should be noted that sex offenders receive longer sentences than any other violent criminal offender, and they serve more time in prison (Durose & Langan, 2007).

However, based on implementing such laws, the criminal justice system has seen adjustments taking place to avoid such sentences through plea arrangements. As an example, sex offenders who take their case to trial and who may be convicted of a mandatory minimum charge receive twice as long of sentences as those who accept a plea bargain to a lesser charge (Durose & Langan, 2007). Such sentences also may place increased pressure on victims to either not report in the first place or recant once reported. Finally, such policies have significant impact for incarceration costs (CSOM, 2008).

The Research

Thus far, there is limited research to suggest that longer prison sentences reduce recidivism, and research has noted that strictly punitive measures do not lead to behavior change (Gendreau et al., 2000). What is most likely true is that removing sex offenders from the community eliminates their likelihood of offending while so incarcerated, which clearly has a community safety benefit.

Although research support for treatment effectiveness has been somewhat mixed (see, e.g., Furby, Weinrott, & Blackshaw, 1989; Marques, Wiederanders, Day, Nelson, & van Ommeren, 2005), research on offenders receiving treatment while incarcerated indicates that incarceration leads to reduced sexual recidivism and reduced outcomes (Lowden et al., 2003; McGrath, Cumming, Livingston, & Hoke, 2003). Further, research suggests that the longer a sexual offender is in prison-based treatment, and presumably incarcerated, the better the outcome (Lowden et al., 2003). Therefore, there does appear to be some research to suggest that incarceration, perhaps in conjunction with treatment, may lead to reduced sexual recidivism.

In summary, research is ongoing related to existing sex offender management policies in use today, and the results have been mixed. It appears essential that research on these policies continues and strategies that are proven effective in the reduction of sexual recidivism be emphasized.

Contemporary Policies: Major Patterns and Themes

The primary goals of sex offender management policy and legislation may be characterized as incapacitation of the offender, retribution/punishment of the offender, deterrence of future offending by the offender and non-identified offenders alike, and rehabilitation (CSOM, 2008). As noted by the preceding reviews, however, evidence surrounding currently dominant policy responses—responses such as SORN, residence restrictions, expanded GPS tracking, and civil commitment—has been quite mixed and inconclusive regarding the achievement of these goals. This, in turn, raises two primary questions: (1) why do we have the policies that we do? and (2) what are some promising alternatives? These two questions form the foundation for the remainder of this chapter.

How Does Sex Offender Management Policy Happen?

The development of sex offender management policy and legislation seems to have repeatedly followed a similar pattern throughout modern history. Observing the proliferation of sexual psychopath laws in the early 1950s, criminologist Sutherland identified the major factors associated with these policies: a high-profile case or cases possibly involving a kidnapping, sexual assault, and murder of a child, which pressures officials to act. This high-profile case or cases typically leads to a public backlash, media exposure, and desire for a policy response. Thereafter, this public reaction often leads to the formation of a committee to study the issue and make recommendations for legislative action (Sample & Kadleck, 2008; Sutherland, 1950). An example of the triggering mechanism for such a policy implementation process is the aforementioned Washington Community Protection Act of 1990, which occurred in response to several high-profile cases (Sample & Kadleck, 2008).

In addition, much of the public fear about sexual offenders may be based upon misperceptions about the problem of sexual violence. Many members of the public, as well as the media and policymakers, are not aware of the evidence regarding sexual violence and, therefore, call for action in ways based upon these misperceptions (e.g., most victims are sexually abused by known offenders, but much of the policy is geared toward stranger danger) (CSOM, 2008; Sutherland, 1950).

Why does this happen? Research has demonstrated that the public is more likely to respond to an individual victim than to cumulative victimization statistics (Small, Loewenstein, & Slovic, 2007). When presented with the case of an individual victim, the emotional response and desire to help tend to be high. However, when presented with summary statistical information about victims or even when statistical information is presented with the case of an individual victim, both the emotional response and desire to help diminish. Small et al. (2007) concluded that deliberative thought decreases the sympathetic response for identifiable victims.

So what is the problem with this style of policy formation? Small et al. (2007) concluded that, while it may be more effective to develop a policy based upon connecting with the public's emotions, it may not lead to the most efficient use of resources to focus on one individual victim rather than developing policies and using resources for all victims. The development of sex offender management policy is often advanced based on an identifiable victim and the desire by the public to somehow respond to this specific tragedy, rather than the problem of sexual violence as a whole. Again, the conclusion of Small et al. (2007) is telling: "Insight, in this situation, seems to breed callousness" (p. 151).

It is also important to note that most legislators reported obtaining their information from the media even when that information was a summary of an agency report or research study. Therefore, and in summary, it has been observed that sex offender management policy development appears to be based on policymaker perception, public perception and concern, and the media (Sample & Kadleck, 2008).

Stranger Danger and Disproportionate Influence of High-Profile Events

Despite the fact that the vast majority of victims know the sexual offender prior to the sexual offense, the predominant driving force behind sex offender management policy appears to be the extreme, stranger sex crimes, which lead to public outcry, media sensationalism, and policymaker and legislator desire for action. Based on this decision-making framework, it makes sense that most of the implemented policies are designed to prevent stranger sexual assaults. SORN, residence restrictions, and special license plates and driver's licenses, among other policies, are all geared toward protecting the public from stranger sex offenders (CSG, 2010). The federal government's current sex offender management policy, emphasizing SORN systems, certainly seems to be directed toward this type of sexual offender, as have many state and local policies. What is less clear, however, is how best to address the issue of the non-stranger sex offender and provide for public safety from a sex offender who is already known to the victim but may as yet not have been identified as such by the criminal justice system. Public education campaigns, including those as part of community notification efforts, may help, but these push up against policies aimed at potential stranger sex offenders and also exacerbate public denial that such a problem can occur within their own family.

Expanded Role of State Legislatures

Over the past two decades, sex offender management public policy and legislation have experienced unprecedented growth. There has also been the re-fostering of historical policies including sex offender registration, which was originally enacted in California in 1947, and sexual psychopath laws under the guise of civil commitment laws (Sample & Kadleck, 2008). Sex offender management public policy continues to be popular, reaching number five on the priority list facing state legislators (NCSL, 2007). Similarly, public opinion polls also demonstrate that sex offender management should be a chief legislative priority (Levenson, Brannon, Fortney, & Baker, 2007; Mears, Mancini, Gertz, & Bratton, 2008).

During 2007–2008 state legislative sessions across the United States, 1,500 bills related to sex offenders were considered, with 275 being enacted into law. It should be noted that this number is even more significant given that six states had no legislative session during the studied period of time. The most typical type of legislation observed at the state level was related to the state implementation of the federal AWA, including adding juveniles to the sex offender registry. In addition, other state laws included a prohibition on plea bargains and good time, lifetime supervision, use of GPS, residence restrictions, civil commitment, prohibition of erectile dysfunction drugs, specialized license plates and driver's licenses, and the death penalty for certain sex offenders (CSG, 2010).

Expanded Federal Role

The current sex offender management policy development style that is in favor appears to be a top-down approach (Logan, 2008). There have been significant changes in the area of sex offender management public policy over the past 15 years, particularly related to the federal government becoming increasingly involved in the management of sexual offenders. Through such legislation as the Wetterling Act, Megan's Law, and the AWA, the federal government has directed states to monitor, via registration and notification, identified high-risk sex offenders and has pushed for increasing consistency of and control over state policy. The latter evolution was based on the belief that inconsistency across jurisdictions and a patchwork of weak laws allowed sex offenders to avoid accountability (Logan, 2008).

The federal government has also become increasingly involved in areas formerly left to states, including the mandate of the AWA to civilly commit sex offenders within the federal system and federal enforcement of failure-to-register criminal violations. In this way, the federal government is taking an increasingly active role in the development and implementation of sex offender management policy.

By contrast, other countries, such as Canada, have taken a different approach to sex offender management public policy, with much of the impetus for such policy coming from the provincial level, with the Canadian government taking a more deliberative and cautious approach (Petrunik, 2003). This approach has also been observed in other countries including the United Kingdom, which thus far has resisted efforts to implement a broad-based notification law.

One-Size-Fits-All Models

Another significant challenge currently facing sex offender management policy is the proliferation of one-size-fits-all models. Sex offender SORN policy has by intention and design become increasingly prescriptive in a desire to increase consistency and continuity. As a result, SORN policy has become a more one-size-fits-all model. In addition, many of the policies being implemented (e.g., residence restrictions, GPS, and mandatory minimums) are being applied on the basis of an offense or all sex offenses, and there is little distinction in the policies based upon the type of offender (adult vs. juvenile, high risk vs. low risk, etc.). Sex offender management policies are increasingly treating sex offenders as a homogenous group despite research that suggests otherwise. Frequently the argument for such a one-size-fits-all policy is based on the concern that risk assessment cannot adequately distinguish higher- from lower-risk sex offenders. Therefore, it is better to be more inclusive in a policy to ensure that those sex offenders who are truly high risk will be managed under the policy. The problem with a one-size-fits-all policy is that research suggests that lower offender risk can be exacerbated by applying higher-intensity interventions to lower-risk offenders (Andrews & Bonta, 2003; Aos et al., 2001).

In sum, a one-size-fits-all sex offender management policy is designed to ensure consistency and continuity across jurisdictions as well as to ensure that all higher-risk sex offenders are managed under the policy. However, the problem with such a strategy is that a one-size-fits-all strategy fails to account for the heterogeneity of sexual offenders and overmanages some sexual offenders unnecessarily. Overly inclusive policies consume public resources and unnecessarily disrupt the stability of lower-risk sex offenders and thereby actually increase their risk (Levenson & D'Amora, 2007). There are also significant implications for net widening in terms of the management of sexual offenders.

Sex Offender Management Cost Considerations

It should be noted that the federal government has embarked on a sex offender management policy of increasing expansion and rigor in the requirements for sex offenders. The Wetterling Act and Megan's Law were focused on a certain types of offenders, whereas the AWA generally has similar requirements of all sex offenders in terms of registration and notification. It should be noted that studies have demonstrated a net-widening effect of the AWA, where the vast majority of sex offenders are now classified in the highest risk category rather than a more evenly distributed bell curve or majority in the lower-risk category (Harris et al., 2010). This inversion effect has led to the enhanced management requirements for a larger number of registered sex offenders at a significant unfunded mandate to state and local jurisdictions.

In terms of cost considerations, it has been estimated that 10–20 % of all prisoners currently are incarcerated for a sex offense (Velazquez, 2008). In sum, the number of sex offenders in prison has grown from 19,900 in 1986 to 43,500 in 1991 and 60,700 in 1997, an increase of 39 % from 1991 to 1997 (Finkelhor & Jones, 2004). More recently, it has been estimated that there were 110,000 sex offenders in prison in 1999, 142,000 in 2002, and 150,000 in 2004 (Daly, 2008). At an estimated prison cost in 2001 of $22,650 per inmate (Velazquez, 2008), this means the cost of incarcerating sex offenders has grown from $451 million in 1986 (using the 2001 per inmate cost) to $3.4 billion in 2004 (Velazquez, 2008).

There is also a significant administrative cost associated with the management of more than 700,000 registered sex offenders. Much of this cost is borne by local communities and law enforcement in terms of registration and address verification functions. In addition, there is considerable cost to the criminal justice system of locating and prosecuting the estimated 100,000 noncompliant registrants (NCMEC, 2007). Finally, the cost of implementing the AWA has been estimated as being $1.5 billion over 5 years (Sandler et al., 2008).

In addition, many states have implemented Global Positioning Systems (GPS) for sex offenders at an estimated cost of $10–14 per day for each offender as well as the need for increased staffing to track down noncompliant offenders. In terms of cost parameters, prior to passage, California's Jessica's Law was estimated to be applicable to 9,650 sex offenders on parole at a cost of $88.4 million per year (Nieto & Jung, 2006), while Florida's cost from 2003 to 2004 was $2.4 million for 1,706 offenders (OPPAGA, 2005).

In terms of civil commitment, the cost is significantly higher than for incarcerating a sex offender in a correctional facility, averaging $97,000 per sex offender per year. Therefore, it has been estimated that civil commitment programs cost states approximately $454.7 million annually (Gookin, 2007).

Costs are also a consideration in expanding sentencing alternatives such as mandatory minimums and indeterminate sentences, as the costs of incarceration skyrocket in a period of significant government budget shortfalls. While the federal government can pass increasingly expansive policies regardless of bottom-line cost, given that the federal government can run a deficit and has more significant fiscal implications for state and local jurisdictions, states may be subject to balanced budget requirements each fiscal year. As a result, state legislators may be faced with opposing a sex offender management policy for budgetary considerations. However, oftentimes policymakers focus more on the cost to society of failing to effectively manage sexual offenders rather than the bottom-line costs of a given policy.

Promoting Evidence-Based Policy

There are significant challenges in adequately identifying the effectiveness of a sex offender management policy due to the low base rate for sexual recidivism (making statistically significant findings between those subject to the policy and those not subject to the policy extremely difficult), the significant underreporting of sex crimes leading to uncertainty about the comprehensiveness of the research (e.g., NCVS from Rand (2009) data suggests that only 41.4 % of sexual assaults are reported to the police), and the need for long-term follow-up to truly determine effectiveness in a climate where immediacy is the expectation (Levenson & D'Amora, 2007).

For example, sexual recidivism rates are reported to be relatively low for identified sex offenders (see, e.g., Hanson, Bourgon, Helmus, & Hodgson, 2009; Hanson & Bussiere, 1998; Hanson & Morton-Bourgon, 2005; Harris & Hanson, 2004; Langan, Schmitt, & Durose, 2003). Does this mean that sex offender management policies are effective in reducing recidivism for known and identified sex offenders and for the rate of sex crimes in general? Or is it indicative of difficulties in detecting sexual offending behavior for identified sex offenders? The answer is uncertain given the difficulties with criminal justice policy research, since it is conducted in the real world, not a variable-controlled laboratory setting. It is exceedingly difficult to isolate variables and determine whether an individual variable, say a certain policy, has led to a statistically significant change in outcome. Therefore, it is difficult to state that a certain policy has significantly affected the rate of sex crimes or sexual recidivism to the exclusion of any other policy. So what do we know about promoting evidence-based policy?

Advances in Risk Assessment

The advances in risk assessment and the use of actuarial risk assessment methods such as the Static-99 have been proven effective in the discrimination of the levels of risk for sex offenders. Therefore, sex offender management policy using risk assessment to determine an individualized intervention would appear to be a promising evidence-based strategy for sex offender management. Many researchers, practitioners, and policymakers focus on the importance of risk assessment in the management of sex offenders. Despite the AWA moving away from risk assessment to an offense-based classification system, many states have implemented registration and notification schema based on risk (e.g., Minnesota and Washington). Thus, an effective sex offender management strategy, based on evidence, may be to classify sex offenders into discrete risk categories and design management strategies based upon the level of risk.

The challenge for sex offender risk assessment is that risk prediction is an inexact science. The public and policymakers have an expectation of accurate classification of sex offenders, and inevitably an offender classified as low risk will recidivate. This reality must also be addressed by practitioners and researchers via public and policymaker education to prevent backlash against risk assessment.

Evidence on Treatment Effectiveness

There is an increasing body of research to suggest specialized sex offender treatment is an evidence-based and promising practice. Historically, sex offender treatment has been subject to challenges by both practitioners and policymakers. Early studies questioned the effectiveness of sex offender treatment in reducing sex offender recidivism and enhancing community safety (Furby et al., 1989; Marques et al., 2005). More recently, there have been a number of research studies demonstrating the effectiveness of cognitive-behavioral treatment (Aos, Miller, & Drake, 2005; Losel & Schmucker, 2005) and treatment based on the risk, need, and responsivity principle (Andrews & Bonta, 2003) for sex offenders (Hanson et al., 2009). Further, treatment in conjunction with collaborative multidisciplinary supervision and polygraph monitoring has been shown to have utility in managing sex offenders (Aytes, Olsen, Zakrajsek, Murray, & Ireson, 2001; Lowden et al., 2003). At this point, it appears as if the evidence on treatment supports the use of treatment as one option in the effective management of sexual offenders.

Circles of Support and Accountability

Another promising practice for sex offender management and reintegration is the circles of support and accountability (COSA) model. Developed in Canada 15 years ago, this program combines accountability with community support by identifying volunteers who will provide assistance to a sexual offender during community reintegration. This COSA group around the sex offender provides resource assistance in terms of housing and jobs, while holding offenders accountable for their behavior. The COSA model is a promising practice, transforming community concern and the desire to do something into tangible assistance, support, and monitoring for the sex offender. This model has been replicated across Canada, in the United States, and in the United Kingdom.

Research suggests that the COSA model is an effective strategy for high-risk sexual offenders in that those who participated in an initial pilot program had a 70 % reduction in sexual recidivism as compared to a group of sexual offenders who did not participate in the COSA program (Wilson, Picheca, & Prinzo, 2005). Additionally, a follow-up independent Canadian sample had an 83 % reduction in sexual recidivism over a nearly 3-year period (Wilson, Cortoni, & McWhinnie, 2009).

Sex Offender Management Policy Boards

One possible mechanism to facilitate policy development is the use of state-level sex offender management policy boards to address policy and practice. The origin of such an approach was the development of the Texas Council on Sex Offender Treatment in 1982, and to date more than half of states have some type of sex offender management policy group (Lobanov-Rostovsky, 2007). The goal of such groups is to standardize sex offender management strategies and practices, make recommendations for key sex offender management policies, and oversee the delivery of sex offender management services. Such groups, typically made up of key stakeholders and experts in the field, may be a mechanism to develop evidence-based sex offender management policies and offset the traditional mechanisms of sex offender management policy development (extreme cases, public perception, media, and policymaker reaction).

One example of a sex offender management policy group affecting sex offender management strategies is the way in which the Kansas Sex Offender Policy Board and the Colorado Sex Offender Management Board both independently addressed the issue of residence restrictions by reviewing the evidence and doing research, respectively. Such an approach led to both states not passing residence restrictions at the state level.

While there is no current research to suggest the effectiveness of the management policy board in advancing evidence-based sex offender management policy, it does appear to be an effective mechanism to advance such policy and practice and avoid making hasty and politically expedient recommendations.

Recommendations for Promoting Evidence-Based Policy

The field of sex offender management continues to evolve. Over the past 30 years, there have been an increasing quantity and quality of studies that have identified the problem of sexual violence and methods to address the problem, and it is essential that policies be informed by this research (CSOM, 2008). Mechanisms to achieve this outcome include legislative briefings and forums, the development of sex offender management boards and policy groups, state use of research institutions like the Washington Institute for Public Policy, and collaborative teams advocating for evidence-based

policy and practice. The benefits of such efforts would be internal confidence in sex offender management policies, explanatory power to stakeholders, accountability for the policy, and appropriate use of resources (CSOM, 2008).

It has been further suggested that risk-based policies, such as longer sentences for those at higher risk with alternative sentences for those who are lower risk; use of intensive interventions such as intensive and lifetime supervision and GPS for high-risk sex offenders; a continuum of programs with different levels of intensity based on risk; and use of risk to determine the extent of registration and notification (CSOM, 2008) are an effective strategy for sex offender management policy that provides for the most intensive interventions for the most dangerous sex offenders (Levenson & D'Amora, 2007). It should be noted that the goals for sex offender management policy are now nearly a century old but continue to be dogged by questions about the effectiveness of treatment, cost parameters, questionable effectiveness of changing offender behavior, and the need for adequate risk prediction (Bowman, 1953). There does appear to be a strong argument about the need for research as an equal partner in sex offender management policy.

In summary, an ideal sex offender management policy development process would include such features as research based, informed risk-distinguishing policies, and collaboration between practice, research, and policy.

Moving Toward a New Paradigm of Sex Offender Management Public Policy

While the overarching goal is the development of evidence-based sex offender management policy, the inherent challenges may suggest that an interim step is necessary to achieve this outcome. Sex offender management policy appears to be suffering from a chicken and egg problem in that there is insufficient research on which to develop a policy and the expedited nature of policy development often fails to account for research to verify the policy's effectiveness. However, given the way in which sex offender management public policy has historically been developed, it may not be realistic to wait for the necessary research before implementing a policy.

As an alternative, it has been suggested that evidence-generating policies allow policymakers to treat policy changes as experimental and expected outcomes as hypotheses. The goal is to implement a policy to generate specific evidence about its effect, which appears to be a more honest approach by acknowledging the current lack of an unambiguous evidence base. In sex offender management public policy, as with much criminal justice, there appears to be a preference for innovation over studying, and this policy process would allow for study as innovation occurs. In order to compare a policy's effectiveness, the use of staggered implementation over time and place, sunset provisions, and gathering pre-implementation data for comparison purposes may allow for research on an expedited policy (Liberman, 2009).

In terms of the disadvantages of evidence-generating policy development, there may be a slight delay in implementation due to the need to identify and collect comparison, pre-implementation data, but the end result could be to have useful data on policy effectiveness. This is also a far more objective strategy, however, than hurriedly implementing a policy and then casting about for a comparison group (Liberman, 2009), perhaps using the one most advantageous to the policy development (a weak comparison for those in favor of the policy or a strong comparison group for those opposed).

If sex offender management public policy is going to move to an evidence-generating policy, the following considerations are needed. First, the key desired outcomes to be measured must be identified. Second, the potential unintended consequences must be identified. Third, feasible methodological approaches to overcoming unintended consequences must be identified. And finally, available data on the policy outcome must be identified. This work must be done in advance of the policy debate, not during, as by then it is too late. Evidence-generating policies can counter policies that are pushed too fast, are relatively uninformed, and are even faddish, in response to crises (Liberman, 2009).

Influencing Research, Policy, and Practice

To develop evidence-based sex offender management policy, it is essential to collect evidence about what works and provide this information to policymakers. Collaboration between researchers and practitioners can help bridge the gap between available information and informed policy. On the one hand, practitioners typically lack the skill necessary to do quality research, which is where research professionals can be of benefit. On the other hand, researchers need access to data and can benefit from collaborating with practitioners. If the two groups collaborate, sex offender management policies can be evaluated and adjusted accordingly.

In this regard, technology can play a role in helping researchers and practitioners to collect data. An advantage of top-down policies is the ability to provide uniform interventions and policies, and therefore, data will be analyzable across jurisdictions. One of the frequent complaints from practitioners is the lack of time to do research and the added business cost of doing so. If research-friendly data collection systems can be developed and shared, this will assist practitioners in collecting data for researchers to analyze. There needs to be expectations to do research as part of practice,

but there should be incentives and support from the policy system to do so.

Given the importance of research to analyze the effectiveness of sex offender management public policy, federal grant funding must include provisions for research. There should be an expectation for data collection, with all grant initiatives and specific federal grants geared toward research. All policies should be evidence-generating, and the federal government should stipulate as such in its grant funding strategies by supporting the innovative application of pilot projects.

Finally, it is important to provide policymakers, the public, and the media with an accurate picture of the problem of sexual violence (e.g., research suggests most victims know the offender prior to the offense), noting the significant underreporting of sex crimes and the issues related to evidence-generating policies. To this end, collaboration between research, policy, and practice is essential to the development of effective sex offender management policy and practice. This requires a shift from the current paradigm where those who challenge existing or proposed policies and call for evidence-based policies are viewed as anti-victim and pro-offender. Proactive advocacy for sex offender management strategies such as containment, which includes specialized treatment and supervision, circles of support and accountability, and risk assessment speak to the ability to have solutions rather than merely objecting to bad policy.

Summary

The field of sex offender management public policy, practice, and research needs to make some adjustments to effectively enhance community safety. Policies and practice need to be flexible and individualized, not a one-size-fits-all model. Implementation of evidence-based and evidence-generating policies requires a change in approach to policy development. The current principles of risk, need, and responsivity assist in conceptualizing this approach and need to be applied to policy development as well. It is possible for practitioners and researchers to make a positive contribution to sex offender management policy. Ultimately, the most effective strategy may be a series of sex offender management policies such as the ones identified earlier in this chapter (e.g., specialized sex offender treatment and supervision, actuarial risk assessment, circles of support and accountability, and the like), rather than one overarching strategy to address the myriad of sex offenders and a diverse and varied problem. As Patty Wetterling observed, "there is no silver bullet" to solve the problem of sexual violence (Human Rights Watch, 2007), and sex offender management policies need to take into account the heterogeneity of sexual offenders and develop a variety of evidence-based management strategies.

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An Evidence-Based Perspective on Sexual Offender Registration and Residential Restrictions

Jill S. Levenson

Turning Knowledge into Practice: Future Directions in Sex Offender Management Policy

Protecting children from repeat sexual offenders has been a priority in US crime policy over the past two decades. In an effort to prevent known sexual abusers from reoffending, a variety of federal, state, and local laws have been passed in the USA. Registration and Residence Restrictions are two areas that have been directed at sex offenders as part of government attempts to manage sex offenders when residing in the community. First, anyone convicted of a sexual crime is required to register with law enforcement authorities so that their whereabouts are known. Some registration information is publicly available online, allowing citizens to easily identify registered sex offenders living nearby. Second, many jurisdictions also prohibit known sex offenders from living or working near places where children are present, such as schools, parks, day care centers, and playgrounds. These community protection policies have become some of the most popular and widespread crime prevention policies in contemporary America.

This chapter will first describe what is currently known about the registered sex offender (RSO) population in the USA. Then, common public perceptions about sexual offenders will be compared with research findings. Residence restriction policy will be examined to illustrate the gaps that can exist between evidence and practice. Looking into the future, the chapter will explore how contemporary sex offender management policy might better incorporate empirical research into sound prevention strategies.

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What Do We Know About the Nation's RSO Population?

Community protection policies generally have been passed in response to highly publicized crimes against children, often involving abduction and sexually motivated homicide. In fact, such offenses are very rare; according to the Office of Juvenile Justice and Delinquency Prevention, in a given year there are only about 115 cases nationwide in which children are abducted by strangers (U.S. Department of Justice, 2002). Most child abusers are well known to their victims; according to the Department of Justice, in 93 % of sexual molestation cases, the child is abused by a relative or acquaintance. Though community notification laws are intended to increase awareness of sex offenders living close proximity so that citizens can protect themselves and their children, one study of repeat sex offenses in Minnesota revealed that only in 4 % of cases was the perpetrator a neighbor of the victim (Duwe, Donnay, & Tewksbury, 2008).

Some sexual offenders will reoffend, of course, though sexual recidivism occurs less often than commonly believed. According to the U.S. Department of Justice, 5.3 % of sex offenders released from prison were rearrested for a new sex crime within 3 years (Bureau of Justice Statistics, 2003), although most of those were under community supervision at the time. Over longer follow-up periods, the cumulative number of sexual recidivists increases (Hanson, Morton, & Harris, 2003). For instance, over 4–6 years, about 14 % of 29,000 sex offenders in an international sample were rearrested for a new sex crime (Hanson & Bussiere, 1998; Hanson & Morton-Bourgon, 2005). A 24 % recidivism rate was observed over 15 years, although rates of sexual offending were double for sexual offenders with just one prior conviction. The greatest amount of detected recidivism occurs within the first few years sex offenders are at large in the community, and the probability that an individual offender will be arrested for a subsequent sex crime decreases substantially as they spend more time in the community

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offense-free (Hanson et al., 2003; Harris, Phenix, Hanson, & Thornton, 2003).

However, arrest data underestimate true victimization rates and distort the nature of sexual offending. It appears that only about half of actual sex crimes are reported to police (Bureau of Justice Statistics, 2008). In addition, research has found that some rapists have committed undetected sex crimes against child victims (Ahlmeyer, Heil, McKee, & English, 2000), and some sex offenders have many more victims (and a variety of victim types) than those for which they have been arrested (Abel et al., 1987; Abel, Becker, Cunningham-Rathner, Mittleman, & Rouleou, 1988; Ahlmeyer et al., 2000; Heil, Ahlmeyer, & Simons, 2003). Some offenders, therefore, may pose risks not readily known by their documented arrest history. The available research suggests, however, that after two decades the majority of convicted sex offenders do not repeat their crimes.

It is often reported that "the average sex offender has over 100 victims." This statistic, which comes from a 1987 study in which immunity was granted to sex offenders to encourage them to honestly disclose their offense histories (Abel et al., 1987), may be misleading. The study found that the average (mean) number of reported victims for pedophiles who molest boys was 150; the average for pedophiles with girl victims was 20. However, the median (midpoint) number of victims was 4.4 and 1.3, respectively, and the "average" incestuous offender had fewer than two victims. The mean figures were skewed by a small number of offenders with exceedingly large numbers of victims, and the authors cautioned that the median figure is the more representative measure. In other words, it appears that a large proportion of victimizations are perpetrated by a limited number of predatory offenders.

Characteristics of the US Sex Offender Population

In December of 2010, there were a total of 728,435 registered sex offenders (RSOs) nationwide (National Center for Missing and Exploited Children, 2010). Studying the US sex offender population in an effort to paint a national portrait has proven challenging because registries are independently administered by states. Recently, however, using data downloaded directly from public registries (about two-thirds of the total RSO population), researchers were able to draw some inferences about American sex offenders (Ackerman, Harris, Levenson, & Zgoba, 2011). Registered sex offenders are overwhelmingly male (98 %) and predominantly white (66 %). It is perhaps unsurprising that few females are found on registries, as victims may be less likely to report abuse by females since it is easily disguised as caretaking or nurturing behavior (Sandler & Freeman, 2009; Vandiver & Kercher, 2004). Blacks are overrepresented on registries compared to estimates that they comprise less than 13 % of the US population (U.S. Census Bureau, 2009), which is not unexpected, since blacks and minorities are overrepresented in general criminal justice populations for a complex array of reasons (Miller, 1996). Individuals of all ages can be found on the nation's registries, but the average RSO is in his mid-40s.

Approximately 33 % of RSOs reported by NCMEC are not found on public registries (Ackerman et al., 2011). Thus, presumably, about one-third of the nation's sex offenders have been assessed by their state's sex offender management procedure to pose low risk for future offending. Among public registrants (higher risk offenders from some states and all offenders from other states), about 14 % nationally have been designated as high risk, predator, or sexually violent (Ackerman et al., 2011). At least 85 % are first-time sex offenders. Approximately 90 % of registered sex offenders have had a minor victim, and about 33 % have had victims under 10 years old. Most (87 %) of the victims (adult and minor) are female.

Notably, Ackerman et al. (2011) found that a considerable number of RSOs may not reside in the community. Approximately 12 % of RSOs listed on public Internet registries appear to be incarcerated or civilly committed, deceased, or deported. One particular anomaly is Florida, where nearly half of all registrants were listed as living out of state or institutionalized. Between 2 % and 4 % of the nation's sex offenders are transient, homeless, absconded, noncompliant, or their whereabouts are otherwise unknown (Ackerman et al., 2011). It is difficult to specifically confirm the actual number of fugitive sex offenders because states have differing methods for classifying absconders, registration violators, and others whose locations are uncertain. It has been widely reported that "at least 100,000 sex offenders are noncompliant and no one knows where they are" (National Center for Missing and Exploited Children, 2007). Yet the reality appears to be quite different. Using the data downloaded from public registries, Ackerman et al. (2011) found no evidence to support the notion that 100,000 of the nation's sex offenders are missing or unaccounted for.

Public and Professional Perception About Sex Offenders: Myths and Misinformation

Research suggests that most sex offenders assault victims known to them, that only a minority are repeat offenders preying on very young children, and that many sexual offenders pose low risk for future reoffense. Yet surveys of citizens confirm that the public continues to hold stereotypical and negative views of sexual abusers. In Washington State, 643 randomly selected phone numbers were called to solicit participation in a survey about sex crimes and notification (Lieb

& Nunlist, 2008). The majority of participants said they felt safer knowing where sex offenders lived, believed that sex offenders would behave better as a result of public disclosure, and favored community notification for both adult and juvenile offenders.

In Florida, a survey of nearly 200 citizens declared overwhelming support for notification policies (Brannon, Levenson, Fortney, & Baker, 2007; Levenson, Brannon, Fortney, & Baker, 2007). The majority (76 %) believed that all sex offenders should be publicly identified, regardless of risk. The Florida residents displayed exaggerated beliefs about recidivism rates and the threat of stranger danger and were quite skeptical about the potential of sex offenders to be rehabilitated (Fortney, Levenson, Brannon, & Baker, 2007; Levenson et al., 2007). In an online survey of 127 adults via an online message board, it was found that most believed that sex offenders will reoffend and that psychological treatment is not effective (Katz, Levenson, & Ackerman, 2008). Though most citizens favor public registries, notification can increase citizens' anxiety due to a lack of education and information about protecting oneself or one's children from sexual assault (Caputo, 2001; Zevitz & Farkas, 2000b).

Law enforcement officials have mixed reactions to public notification policies. Many favor more discretionary notification procedures whereby information is disclosed according to the risk of the offender (Finn, 1997). Yet police chiefs in Washington State believed that notification enhanced surveillance of sex offenders and, therefore, would likely deter future sex crimes (Matson & Lieb, 1996). Law enforcement agents also expressed concerns, however, in the early days of the Sex Offender Registration and Notification Act (SORNA), about the fiscal resources and manpower required to implement community notification (Zevitz & Farkas, 2000a). Redlich (2001) surveyed community members, law enforcement officials, and law students about support for notification laws as well as sentiments about sex offender's constitutional rights. Law enforcement officials showed the highest support for Sex Offender Registration and Notification (SORN) laws, and law students were least supportive. Interestingly, less knowledge about child sexual abuse was associated with greater support for notification (Redlich, 2001).

A survey of legislators from Illinois provided insight into politicians' motivation for sponsoring sex crime prevention bills (Sample & Kadleck, 2008). Sex offenders were commonly described by lawmakers as perverted, sick, compulsive, and untreatable, with 78 % believing that sex criminals will almost surely reoffend. Though many believed that community protection laws were not especially effective in preventing sex crimes, they noted that by endorsing these laws they were enacting what they perceived to be the wishes of their constituents.

The majority of mental health practitioners express cynicism about the potential deterrence effects of SORN laws and express concerns about registries creating false reassurance to the public (Malesky & Keim, 2001). Criminal justice practitioners were more likely to approve of these laws than mental health providers, but professionals working directly with offenders viewed SORN laws less favorably than those working with victims (Levenson, Fortney, & Baker, 2010). Professionals with conservative political beliefs seem to favor a broader and more inclusive approach to SORN than those identifying themselves as more liberal. There were few differences attributable to gender, parenting status, or victimization experiences. Those working primarily with victims expressed more fear and anger about sex offenders, less tolerance for their presence in communities, and more optimism about the effectiveness of notification and residence restriction laws (Levenson et al., 2010). Professionals who worked primarily with victims tended to endorse higher recidivism estimates and had less confidence in sex offender treatment than those who work primarily with offenders (Fortney, Baker, & Levenson, 2009).

Social psychology theories of prejudice and stereotyping can inform our understanding of public views about sex offenders. With other types of social prejudice, it is known that unfamiliarity and lack of knowledge about a specific group results in greater prejudice and stereotyping, whereas personal experience with a particular group reduces prejudice (Allport, 1954; Gaertner et al., 1991). Stereotypes can develop from uninformed perceptions and may serve to reduce fear and manage interactions (Sherif, Harvey, White, Hood, & Sherif, 1988). Sex offenders may seem—to those who know only what they see in the media—to be unpredictable, evil, and very dangerous. Less knowledge of sexual abuse is associated with more stereotypical attitudes about offenders (Sanghara & Wilson, 2006), while, interestingly, those with a reported history of sexual abuse viewed offenders *less* negatively than those who had never been victimized (Ferguson & Ireland, 2006).

Cognitive dissonance theory suggests that people attempt to bring their attitudes in line with their behavior when discrepancies make them uncomfortable or when realities are not congruent with their values or beliefs (Festinger & Carlsmith, 1959). Exposure to information alone, however, does not appear to diminish prejudice (Sherif et al., 1988). Interaction and personal relationships are more likely to contradict negative expectations and to facilitate more positive views, greater acceptance, and less intolerance (Wright, Aron, McLaughlin-Volpe, & Ropp, 1997). Current laws mandating public notification may inadvertently promote stereotyping and prejudice. Laws restricting where sex offenders can live and work further segregate sex offenders from mainstream society and therefore reinforce ostracism, exclusion, and fear (Levenson et al., 2010).

Residence Restrictions: An Example of Misguided Community Management Strategies

Residential restriction laws are fairly new, but provide an example by which to illustrate how public misperceptions about sexual violence can lead to the proliferation of policies that hold little promise of effectiveness. These laws restrict sex offenders from living near places where children are likely to be found. There are currently 30 state laws designating where sex offenders can live (Meloy, Miller, & Curtis, 2007). The first state law was passed in 1995 in Florida and applied only to sex offenders on probation who had sexually abused minor victims. This law created 1,000 foot buffer zones around schools, parks, playgrounds, day care centers, and other places where children congregate. By 2004, there were 15 state statutes, but within 2 years of the 2005 murder of a 9-year-old Jessica Lunsford by a convicted sex offender in Florida, the number of states with housing restrictions doubled. The most common proximity zones are 1,000–2,000 feet around a variety of protected venues such as schools, parks, playgrounds, and day care centers. Some laws also include other facilities such as arcades, amusement parks, movie theaters, youth sports facilities, school bus stops, and libraries (Meloy, Miller, & Curtis, 2008).

Too abundant to count are local housing ordinances passed by cities, towns, and counties. The first municipal sex offender ordinance in the USA was passed in Miami Beach in June 2005, modeled after regulations that prohibit adult establishments (e.g., strip clubs and adult bookstores) from operating within a certain distance from schools. Local ordinances can be found in most states, even those without statewide laws, and often exceed state laws by expanding restricted areas to 2,500 feet (almost a half mile) surrounding places frequented by children. When one city or county enacts such a law, a domino effect results, as surrounding towns and counties often pass similar ordinances in order to prevent exiled sex offenders from migrating to their communities.

Residence restrictions are based on the seemingly logical premise that by requiring child molesters to live far from places where children congregate, repeat sex crimes can be prevented. The limited extant research, however, finds no support for the hypothesis that sex offenders who live close to child-oriented settings are likely to reoffend. In fact, the empirical research indicates that where sex offenders reside is not a significant contributing factor to reoffending behavior.

Residential proximity to schools and day cares is not empirically associated with recidivism. Zandbergen, Levenson, and Hart (2010) compared the proximity of recidivists and non-recidivists to schools and day cares ($N = 330$) in Florida. Those who lived within 1,000, 1,500, or 2,500 feet of schools or day care centers did not reoffend more frequently than those who lived farther away. There was no significant correlation between sexual recidivism and the number of feet the offender lived from school. The two groups were matched on relevant risk factors (prior arrests, age, marital status, predator status), and proximity measures were still not significant predictors of recidivism (Zandbergen et al., 2010). Similarly, in Colorado, the addresses of sex offense recidivists and non-recidivists were found to be distributed randomly throughout the geographical area with no evidence that recidivists lived closer to schools and day care centers (Colorado Department of Public Safety, 2004).

In Jacksonville, Florida, researchers investigated the effects of a 2,500 foot residence restriction ordinance on sex crime rates and sex offense recidivism (Nobles, Levenson, & Youstin, 2012). Using a quasi-experimental design, pre- and post-policy measures of recidivism were compared, and no significant differences were found. As well, a trend analysis revealed no significant differences in sex crime arrest patterns over time. The results indicated that the city's residence restriction ordinance had no meaningful effect on sex crime rates or sex offender recidivism. The authors concluded that the residence restriction ordinance did not achieve its intended goal of reducing recidivism and that such laws do not appear to be an effective strategy for preventing repeat sexual violence.

The Iowa Department of Criminal and Juvenile Justice Planning studied the effect of Iowa's 2,000 foot residence restriction law, which went into effect in August of 2005 (Blood, Watson, & Stageberg, 2008). The researchers' goal was to determine the impact the law had on sex crime rates by examining the number of criminal charges for sexual assaults of minor victims in the 12 months preceding implementation of the law and within 24 months after the law went into effect. Researchers did not observe a downward trend in the number of charges over time following the passage of the law. In fact, sex crime arrests increased steadily each year, with 913 charges filed during the year prior to implementation, 928 filed the subsequent year, and 1,095 the following year. The authors concluded that Iowa's residence law "does not seem to have led to fewer charges or convictions, indicating that there probably have not been fewer child victims" (Blood et al., 2008, p. 10).

In Minnesota, a review of 13 recidivistic sex crimes found that only two cases occurred near parks and none occurred on school property. The reoffenders lived far from the parks and drove a vehicle to the crime scene, suggesting that their residential proximity to the parks did not facilitate the crimes (Minnesota Department of Corrections, 2003). A closer

analysis of 224 repeat sex offenses in Minnesota led the authors to conclude that residential restriction laws would not have prevented even one reoffense (Duwe et al., 2008). Most of the cases involving children were committed not by strangers, but by registered sex offenders who were well acquainted with their victims, such as parents, caretakers, paramours of the mother, babysitters, or friends of the family. The repeat offender was a neighbor of the victim in only about 4 % of the cases. Predatory assaults that occurred within a mile of the offender's residence typically involved adult victims, and although some of the offenders established relationships with minor victims within 2,500 feet of their homes, none of the crimes took place in or near a school, day care center, or park. Sex offenders do not appear to abuse children because they live near schools, but rather, they take advantage of opportunities to cultivate relationships with children and their families in order for sexual abuse to take place (Duwe et al., 2008).

Similarly, the majority (67 %) of New Jersey offenders met victims in private locations, while relatively few (4 %) met victims in the types of locations designated as off-limits by residential restriction laws (Colombino, Mercado, Levenson, & Jeglic, 2011). Noteworthy is that sex offenders rarely encountered their victims in public locations where children congregate, and, therefore, policies emphasizing residential proximity to schools and parks may ignore the empirical reality of sexual abuse patterns. However, Colombino et al. (2011) also demonstrated that offenders who met their index victim in a restricted or child-oriented venue were more likely to commit a repeat sex crime. In other words, those with index victims met at bus stops, parks, camps, carnivals, boardwalks, and hospitals were significantly more likely to sexually reoffend (although only eight offenders recidivated). These particular offenders appeared to engage in predatory patterns, seeking to meet children with whom they were not previously acquainted. Since residence restrictions regulate only where an offender sleeps at night, alternative policies such as child safety zones or loitering laws might be especially helpful for these offenders. Restricting their ability to visit places where vulnerable victims may be present would be a more useful strategy than restricting their residential proximity to such venues, which fails to address their ability to travel to an offense location (Colombino et al., 2011).

In summary, the research literature provides no support for the hypothesis that sexual reoffending can be prevented by prohibiting sex offenders from living within close proximity to places where children congregate. For the minority of sex offenders who demonstrate predatory patterns of seeking out minor victims in public settings, laws that forbid sex offenders to visit such locations might be more effective than laws designating where they can live.

Unintended Consequences of SORN Policies and Residence Restrictions

The reentry challenges encountered by all criminal offenders are even more pronounced for registered sex offenders. The unique stigma of SORN and the ways these laws can impede community reentry and adjustment are well documented; sex offenders report employment obstacles, housing disruption, relationship loss, threats and harassment, physical assault, and property damage (Levenson & Cotter, 2005a; Levenson, D'Amora, & Hern, 2007; Mercado, Alvarez, & Levenson, 2008; Sample & Streveler, 2003; Tewksbury, 2004, 2005; Tewksbury & Lees, 2006; Zevitz & Farkas, 2000c). Psychosocial stressors such as shame, embarrassment, depression, or hopelessness were also reported by sex offenders as common by-products of public disclosure of their status. A survey of 584 family members of registered sex offenders across the USA revealed that they, too, are profoundly impacted by these laws (Levenson & Tewksbury, 2009). Employment problems experienced by the RSO and resulting financial hardships emerged as the most pressing issue identified by family members. Family members living with an RSO also experienced threats and harassment by neighbors, and some children of RSOs suffered stigmatizing treatment by teachers and classmates.

Residential restrictions also create barriers to offender reintegration, and as the size and number of buffer zones increase, so do transience, homelessness, and reduced employment opportunities (Levenson, 2008). Many sex offenders reported that housing restriction laws forced them to relocate, that they were unable to return to their homes after incarceration, that they were not permitted to live with family members, or that they experienced a landlord refusing to rent to them or to renew a lease (Levenson, 2008; Levenson & Cotter, 2005b; Levenson & Hern, 2007; Mercado et al., 2008). Many indicated that affordable housing is less available due to limits on where they can live and that they are forced to live farther away from employment, public transportation, social services, and mental health treatment. Young adults seemed to be especially impacted by these laws; age was significantly inversely correlated with being unable to live with family and having difficulties securing affordable housing (Levenson, 2008; Levenson & Hern, 2007). Family members of RSOs also reported that residential restriction laws created housing disruption for them; larger buffer zones led to an increased chance of a housing crisis (Levenson & Tewksbury, 2009).

These self-report surveys of sex offenders have been corroborated by independent empirical research. A quickly growing body of evidence illustrates how residential restrictions profoundly diminish housing options for sex offenders. In Orlando, Florida, it was found that 99 % of all residential

dwellings are located within 2,500 feet of schools, parks, day care centers, or school bus stops (Zandbergen & Hart, 2006). The vast majority of residential territory in Nebraska and New Jersey is also located within 2,500 feet of a school (Bruell, Swatt, & Sample, 2008; Chajewski & Mercado, 2009; Zgoba, Levenson, & McKee, 2009). Affordable housing is especially impacted, since less affluent areas tend to be more densely populated, and, therefore, homes are in closer proximity to places frequented by children. Of nearly one million residential parcels studied in Miami-Dade County, Florida, only about 4 % of residential units were compliant with the overlapping state and local residence restrictions in effect, and only 1 % had a monthly housing cost of $1,250 or less (Zandbergen & Hart, 2009). In Nebraska, average home values were significantly lower within a buffer zone of 2,000 feet than outside the buffer zone (Bruell et al., 2008), and in Ohio, compliant addresses were also more likely to be located in less affordable census tracts (Red Bird, 2009).

When prisoners are released from incarceration, they commonly seek housing with relatives, but strict residence laws can eliminate such options for sex offenders. Unable to reside with family and without the financial resources to pay security deposits and rent payments, some sex offenders face homelessness. Ironically, housing instability is consistently associated with criminal recidivism and absconding. In Georgia, every time a parolee moved, the risk of re-arrest increased by 25 % (Meredith, Speir, & Johnson, 2007). Residential instability was a robust predictor of absconding in a study of California parolees (Williams, McShane, & Dolny, 2000), and in a national sample of 2,030 offenders, those who moved multiple times during probation were almost twice as likely as stable probationers to have some sort of disciplinary hearing (Schulenberg, 2007). In New Zealand, unstable housing, unemployment, and limited social support were found to predict sexual recidivism (Willis & Grace, 2008, 2009). Some prosecutors and victim advocates have publicly denounced residence restrictions, cautioning that the transience created by housing restrictions undermines the validity of sex offender registries and makes it more difficult to track and supervise sex offenders (Iowa County Attorneys Association, 2006; NAESV, 2006).

Where Do We Go from Here? Implications for Sex Offender Management

With the implementation deadline for the Adam Walsh Act having passed in July 2011, it is perhaps time to reflect on where we have been (see Lobanov-Rostovsky and Harris 2015) and where we are going. In 2006, the Adam Walsh Act was passed. Title 1 of the law is the Sex Offender Registration and Notification Act (SORNA). This act standardized registration and notification procedures across the states, created an offense-based tier classification system, and required all registered sex offenders to be listed on state and national registry websites. The new guidelines expanded the scope of sex offenders who must register and allowed juvenile sex offenders as young as 14 years old to be placed on public registries. The duration of registration was lengthened, with Tier 3 offenders having to register for life, Tier 2 registering for 25 years, and Tier 1 registering for 10 years. The act also increased penalties for sex offenders who failed to comply with registration obligations.

At the time of this writing, 16 states have passed legislation approved by the federal government to become compliant with SORNA. Many states are grappling with increased expenses associated with the unfunded mandate; expected costs include technology for updating existing registration systems, enforcement of stricter registration requirements, and prosecution of violators. Other states are contemplating whether to implement the federal requirement to publicly list all registered sex offenders, which means having to forego the more refined, risk-based classification and notification procedures developed by many states across the country. The decision to publicly register juvenile offenders is also a point of controversy, as it contradicts a century of criminal justice philosophy and practice in the USA, which has embraced the rehabilitation potential of youth and the belief that individuals should not be stigmatized into adulthood for juvenile transgressions.

It is estimated that there are currently approximately 730,000 registered sex offenders in the USA (National Center for Missing and Exploited Children, 2010). As those numbers continue to grow and more sex offenders are publicly identified within online registries, law enforcement resources are spread thin, and the ability to differentiate truly dangerous offenders is diluted. Increased resources are needed to enforce registration compliance and track violators, despite evidence suggesting that failure to register as a sex offender is not predictive of sexual reoffending (Duwe & Donnay, 2010; Levenson, Letourneau, Armstrong, & Zgoba, 2010). SORNA requires states to implement an offense-based classification system even though empirically derived risk assessment has demonstrated better utility than SORNA tiers in identifying offenders who are likely to reoffend (Freeman & Sandler, 2009). The use of empirically derived assessments based on factors known to correlate with recidivism should be used to identify those who pose the greatest threat to public safety. Public registries, if used, should be reserved for high-risk offenders. In this way, the public can be better informed, specifically about pedophilic, predatory, repetitive, or violent sex offenders likely to commit new sex crimes. At the same time, collateral consequences could be minimized for lower-risk offenders reintegrating into society and attempting to become productive, law-abiding citizens.

As more people are placed on registries for long durations (or life) with little attrition, the mean sex offender age will continue to grow older. This anticipated trend contradicts research indicating that risk declines with age for all criminals (including most sex offenders) and sex offense recidivism becomes more rare with advanced age (Hanson, 2002; Thornton, 2006). Over time, the sex offender population will include a growing proportion of aging or elderly individuals who probably pose lower risk for reoffense. Furthermore, registration durations of 25 years to life contradict empirical evidence that risk declines with increased time spent in the community offense-free (Harris et al., 2003). In fact, Harris et al. stated that "the expected offense recidivism rate should be reduced by about half if the offender has 5–10 years of offense-free behavior in the community" (p. 63). Thus, the emphasis on registration compliance over longer registration periods will likely create an inefficient distribution of resources without contributing meaningfully to community safety.

Sex offenders do not molest children because they live near schools. They abuse children when they are able to cultivate relationships with youngsters and their families and gain trust and familiarity that creates opportunities for sexual assault. Thus far, research provides no support for residential restriction policies, and, in fact, emerging evidence strongly demonstrates a negative impact on housing availability when residence restrictions are in effect. Housing instability exacerbates risk factors for recidivism, and therefore residence restrictions are likely to create more problems than they solve. Though seemingly sensible, they regulate only where sex offenders sleep at night and do nothing to prevent sex offenders from frequenting child-oriented venues during the day. For this reason, jurisdictions should consider "loitering zones" in lieu of residence restrictions, which would more effectively prevent sex offenders from hanging around in places where children congregate.

Especially in these economically sparse times, lawmakers should invest in evidence-based policies rather than those that, in fact, demonstrate negligible public safety benefit. Sexual assault is a prevalent social problem, and prevention strategies should reflect not only public opinion, but also empirical demonstrations of actual effectiveness. Resources spent on policies that fail to enhance community safety take funding away from more promising programs and services for victims. A paradigm shift toward evidence-based case management might prove more effective in achieving the important goal of preventing repeat sexual violence.

Sociologist Robert Merton (1936) shrewdly cautioned that social policies, even when well intentioned, can sometimes lead to paradoxical results, which he referred as the "law of unintended consequences." Merton observed that when a society overreacts to a perceived threat and seeks to curtail that threat by drastically altering the social order, unexpected outcomes can subsequently result. As they endeavor to achieve desired goals, advocates of social change may fail to anticipate the potential negative consequences of a law. Collective values also play a role in social movements, and popular concepts of good and evil are motivating forces that can obscure the more detrimental effects of change (Merton, 1936). For all of these reasons, the unintended consequences facilitated by sex offender policies are likely to be ignored by lawmakers and citizens hoping to deter sexual violence. Those who point out counterproductive effects, especially as they relate to the reintegration of sex offenders, are often dismissed as offender advocates who are unconcerned about the safety of children.

Some scholars have asserted that sex offender policies are designed to accomplish both instrumental and symbolic objectives (Sample, Evans, & Anderson, 2011). Understanding both is essential in the continuing dialogue about SORN laws and prevention of sexual violence, they argue. While most empirical investigations have not detected instrumental effects such as reduced reoffending (Letourneau, Levenson, Bandyopadhyay, Sinha, & Armstrong, 2010; Sandler, Freeman, & Socia, 2008; Vasquez, Maddan, & Walker, 2008; Zgoba, Witt, Dalessandro, & Veysey, 2009) or increased community protection behaviors (Anderson & Sample, 2008; Kernsmith, Comartin, Craun, & Kernsmith, 2009), SORN policies may achieve vital symbolic effects. Policy enactment can serve to inspire and reinforce social solidarity by uniting against a common "enemy" or social problem (Roots, 2004). They send a clear message that sexual victimization will not be tolerated and that politicians are willing to address public concerns (Sample et al., 2011; Sample & Kadleck, 2008). Moreover, symbolic policies can achieve instrumental effects over time, perhaps measured by a wider range of positive outcomes beyond recidivism. Sample et al. (2011) speculated that in the cost/benefit analysis, the symbolic expression of zero tolerance for sexual violence will always outweigh offender rights, fiscal considerations, and empirical testing.

But policy analysis also requires a continuous process of evaluation that measures movement toward realizing intended goals as well as minimizing or avoiding unanticipated results that might prove contrary to the best interests of the community. Levenson and D'Amora (2007) opined that ignoring such evidence is analogous to Hans Christian Andersen's story, "The Emperor's New Clothes," in which the king paraded through town nude, fooled by gypsies into wearing invisible clothes that purportedly could be seen only by an enlightened few. Similarly, in the absence of compelling evidence indicating that policies for sex offender registration and residence restrictions reduce sexual reoffending, attention should be paid to mounting evidence of cost and reintegration obstacles fostered by these laws. In fact, the unintended consequences of these laws might undermine their very purpose.

Social policies should be based on extant scientific data and are most likely to be successful in reaching their goals when they incorporate research findings into their development and implementation. A more reasoned approach to sex offender policies would utilize empirically derived risk assessment procedures to create classification systems that apply more aggressive monitoring and restrictions to those sex offenders who pose the greatest threat to public safety. In this way, laws could more appropriately identify and target high-risk offenders, resulting in a more cost-efficient allocation of resources. As well, the collateral consequences of community protection policies could be minimized, and sex offenders could be better enabled to assume a law-abiding and prosocial lifestyle. Most sex offenders will ultimately be returned to the community, and when they are, it behooves us to facilitate a reintegrative approach that relies on empirical research to inform community protection strategies.

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