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Jac J.W. Andrews

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Mental Health Assessment, Prevention, and Intervention

Promoting Child and Youth Well-Being



Springer

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Editors

Jac J. W. Andrews
Werklund School of Education
University of Calgary
Calgary, AB, Canada

José F. Domene 
Werklund School of Education
University of Calgary
Calgary, AB, Canada

Steven R. Shaw
Department of Educational and Counselling
Psychology
McGill University
Montreal, QC, Canada

Carly A. McMorris
Werklund School of Education
University of Calgary
Calgary, AB, Canada

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Preface

Purpose of this Book

This book *Mental Health Assessment, Prevention, and Intervention: Promoting Child and Youth Well-Being* presents and integrates innovative ways by which school, clinical, and counselling psychologists conceptualize and approach mental health assessment, prevention, and intervention for promoting child and youth well-being. This book also presents examples of clinical reasoning within and across the disciplines of school, clinical, and counselling psychology that will demonstrate how psychologists make decisions with respect to assessment, prevention, and intervention across contexts for successful outcomes for children and youth. Importantly, his book provides insights from authors concerning theoretical, empirical, and practical frameworks and methods regarding the mental health and well-being of children and adolescents within and across school, clinical, and counselling psychology disciplines. In addition, this book presents transformative, constructive, multicultural, innovative, theoretical, empirical, and evidenced-based approaches for children, youth, and their families concerning the identification of mental health concerns, enhanced service system integration, social justice, and advocacy.

This book provides a referential guide for undergraduate and graduate students in psychology courses within psychology departments across Canada, the United States, and abroad and serves as a reference source of information for all psychologists. This book will be a reference for the public and their interest in the well-being of children and adolescents within their families and communities. In this regard, this book addresses the rising mental health problems of children and youth before, during, and after COVID-19 and highlights the need for effective assessment, prevention, and intervention towards detecting, preventing, and providing treatment to children and youth who are facing mental health issues.

Mental health status affects individual and family functioning, educational achievement and opportunities, social-emotional development, social integration, personal life balance, and associated personal life journeys as well as professional life journeys related to career aspirations and pathways. Hence, this book is intended

to be relevant and useful to psychologists for pre-service and post-service training of psychologists, who will be faced with the reality of addressing the mental health issues of children and youth who they serve.

We recognize that successfully addressing the well-being of children and adolescents is not up to individual psychologists. Rather we assert that it is an entire community that shares this responsibility. Creating and sustaining the well-being of children and youth is influenced by one's culture (i.e., nationality, ethnicity, race, social class, religion), by parents, family, and community, by developmental and educational experiences, and by connection to self, peers, and others, as well as with the world. Hence, the well-being of children and youth requires collaboration with others to advocate for and provide ways to facilitate their mental health.

We believe that this book can be helpful in addressing the mental health of children and youth by presenting the understandings and experiences of the authors of this book with ways they have championed and to better advocate for and promote child and youth well-being. We believe that this book can be a primary text for any course within colleges and universities that is aimed at fostering students' perspectives about child and adolescent mental health and well-being and preparing them to work collaboratively with psychologists and others to address the multifaceted nature and scope of mental health service delivery.

Rationale for this Book

From our experience and perspective, the challenge for psychologists and psychologists in training is to understand and effectively address the mental health concerns of children and youth in their communities. This book is not a recipe book; rather, it is a book that presents the lived experiences of the authors who have provided personalized, evidence-based, and integrative approaches for children and youth within and across different settings and contexts that are conceptually grounded and practically effective and bring real-world experiences of clinicians and authors to readers.

The idea of this book grew out of our professional work and understandings in the field of psychology. It also grew from our research, teaching, and learning as well as from our numerous conversations with colleagues within the field of psychology at conferences as well as with students in our courses. Among other things, our thoughts and conversations led us to realize that we need to be more creative, innovative as well as accountable and more effective in the ways we assess mental health problems, treat mental health problems, and prevent mental health problems. To our knowledge, there is currently no other text available that has brought all three disciplines of professional psychology (school psychology, clinical psychology, and counselling psychology) together to address the mental health and well-being of children and adolescents. Moreover, to our knowledge, there has been no text that has been developed and produced that brought the disciplines of psychology to address any topic. Hence, we believe the text is unique to the field of psychology in presenting an integrated framework of the psychologically based work being carried

out today in the field of mental health that can serve as examples of best practices for addressing the well-being of children and youth.

In the planning and development of this book, we were committed to the view that this book be (1) current and transformative, (2) conceptual and practical, and (3) foundational and constructivist. This book aims to extend the resources available to researchers, scholars, practitioners, and university and college students related to the major professions of psychology. In this regard, another aim of the book was to bring together recognized and distinguished researchers, scholars, and practitioners of psychology and have them share their professional journey as researchers, scholars, and practitioners as a model and inspiration for others. In this regard, this book has influential thinkers and doers within and across the disciplines who view the process and product of psychological inquiry and practice. Moreover, this book highlights the similarities and differences of school, clinical, and counselling psychology relative to some of the most important areas of focus within and across these disciplines (i.e., mental health assessment, prevention, and intervention).

From our perspective, it was important for us to produce and offer a seminal book that was attentive to:

- The psychological variation of mental health needs of children and youth.
- The gender-based differences of children and youth relative to their mental health.
- The cultural and ethnic differences and needs of children and youth in their communities.
- The structural levels of influence such as power structures that can benefit some children and youth and disadvantage others.
- The social and relationship problems and assets associated with the mental health issues of children and youth.
- The solutions towards better mental health of children and youth who are ethnically, economically, and behaviorally divergent from dominant mainstream social groups.
- The general risk and protective factors, cognitive-behavioral problems, social-familial factors and resilience factors associated with the mental health of children and adolescents.
- The environmental and situational influences that shape mental health experiences.
- The promotion of diversity, equity, and inclusion as well as the advocacy for social justice relative to the mental health of children and adolescents.

From our perspective it was also important for us to produce and offer a seminal book that brought awareness and attention to:

- The importance of increasing access to mental health care for children and youth within educational and community health settings and the importance of resolving inequities in mental health care for children and youth
- The need for mental health care to be multidisciplinary and interdisciplinary
- The provision of effective assessment and evaluation practices towards better understanding and delivering the mental health care of children and youth

- The influence of discrimination, marginalization, and contextual aspects on the lives of children and youth
- The prevention and intervention approaches utilized within and across educational and community health settings

Organization of this Book

This book *Mental Health Assessment, Prevention, and Intervention: Promoting Child and Youth Well-Being* consists of five sections. The first section provides an introduction to the book that conveys an overview of the nature and scope of the book. The second section consists of five chapters from authors within the school psychology discipline and the editors of the book. The first chapter of this section is from Don Saklofske, who provides his forty-year legacy of research, scholarship, and clinical practice in the field of school psychology relative to the mental health of children and adolescents. This is followed by four chapters by authors (Doris Paez, Shannon L. Stewart, Ashley Toohey, Matthew K. Burns, McKinzie Duesenberg, Monica Romero, and Judith Wiener) who present information about their approach to the mental health of children and youth with focus on clinical reasoning, assessment, prevention, and intervention in school psychology. The last chapter of this section consolidates and integrates the information across the five chapters and presents the major themes emerging from the chapters. The third section consists of five chapters from authors in clinical psychology. The first chapter of this section is from Catherine L. Costigan, who provides lessons from her legacy relative to her research, scholarship, and practice in the field of clinical psychology relative to the mental health of children and adolescents. This chapter will be followed by four other chapters by authors (Martin Drapeau, Catherine Hébert, Gabrielle Ciquier, Constantina Stamoulos, Amori Yee Mikami, Hongyuan Qi, Caroline E. Miller, Daniel Kopala-Sibley, and Jen Theule) who present information about their approach to the mental health of children and adolescents with focus on clinical reasoning, assessment, prevention, and intervention with respect to clinical psychology. The last chapter of this section will consolidate and integrate the information across the five chapters in this section and present the major themes emerging from the chapters. The fourth section consists of five chapters from authors in counselling psychology. The first chapter of this section is from Ada Sinacore, who provides lessons from her legacy relative to her research, scholarship, and practice in the field of counselling psychology relative to the mental health of children and adolescents. Four other chapters by authors (Krista Socholotiuk, Rhea L. Owens, William Hanson, Hansen Zhou, Diana L. Armstrong, and Noëlle T. Liwski) present information relative to their approach to the mental health of children and adolescents with focus on clinical reasoning, assessment, prevention, and intervention with respect to counselling psychology. The last chapter of this section will consolidate and integrate the information across the five chapters in this section and present

the major themes emerging from the chapters. The fifth section will conclude the book by way of a concluding chapter that blends, compares, and integrates the emerging themes in and across all of the chapters of the book.

Unique Features of the Book

This book *Mental Health Assessment, Prevention, and Intervention: Promoting Child and Youth Well-Being* has a number of features that distinguish it from other books in the marketplace. This book is the first book to bring together three disciplines of professional psychology addressing the mental health and well-being of children and youth as well as present the guiding framework and conceptual base of each author along with their approaches to clinical reasoning, assessment, prevention, and intervention. In this regard, the reader will be presented with:

- Author legacies (i.e., shared professional journeys as researchers, scholars, and practitioners as a model and inspiration for others) with respect to professional practice in areas of mental health service delivery relative to children and adolescents within and across school, clinical, and counselling psychology.
- Authors' insights regarding their guiding framework and approach to clinical reasoning with respect to mental health of children and adolescents within and across school, clinical, and counselling psychology.
- Authors' perspectives and approaches relative to assessment of children and adolescents within and across school, clinical, and counselling psychology.
- Authors' perspectives and approaches relative to mental health prevention and intervention for children and youth within and across school, clinical, and counselling psychology.

The book is both conceptual and practical. This book blends scholarship and research with practical applications for psychologists in training and in-service psychologists on the topics of mental health assessment, prevention, and intervention for child and youth well-being. In this regard, key features are embedded within and across the chapters throughout the book:

1. **Abstracts** at the beginning of section chapters provide an overview of the major content in the chapters.
2. **Keywords** are provided at the beginning of section chapters.
3. **Figure and Tables** are provided in the section chapters to illustrate and consolidate major aspects within the chapter.
4. **Case Studies** are provided in most chapters that provide examples of how ideas from the chapters are realized within the context of lived professional experiences.
5. **Legacy chapters** at the beginning of the sections on school, clinical, and counselling psychology for readers to gain personal and professional understandings of authors' journeys of research, scholarship, and practice addressing the mental

health of children and youth within the fields of school, clinical, and counselling psychology through the experiences of distinguished people in those fields. In this regard, these authors will present:

- Their beginnings as a researcher and scholar with respect to their area.
- Their professional journey relative to your research and scholarship.
- Their research and scholarship highlights: significant learnings/developments.
- Theoretical and empirical insights from their work.
- Their practical applications from their research and scholarship.
- Insights about clinical reasoning, assessment, intervention, and mental health.
- Their current perspectives and implications about their research and scholarship.
- Their future research and scholarship: plans and directions.

Calgary, AB, Canada
Montreal, QC, Canada
Calgary, AB, Canada
Calgary, AB, Canada

Jac J. W. Andrews
Steven R. Shaw
José F. Domene
Carly A. McMorris

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We also want to provide a special thanks to all the reviewers of this book when it was proposed to Springer. Importantly, the development and production of this book would not have been possible without the support and efforts of many people at Springer. Particular appreciation is extended to Judy Jones, Springer Senior Editor, who recognized the significance and marketability of our book and who guided us through the early stages of the external review process for the book and the eventual book adoption and production process. We would also like to thank Moshe Zeidner and Don Saklofske who serve as book editors of the Springer series on Human Exceptionality and we are honored that this book will join the collection of published works covering many key areas of group and individual differences across the spectrum of human behavior. We thank Moshe and Don for their guidance throughout the procedural stages of the book and for their editorial help in finalizing the book.

Jac J. W. Andrews
Steven R. Shaw
José F. Domene
Carly A. McMorris

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Contributors

Alexandra J. Alayan Colorado State University, Fort Collins, CO, USA

Jac J. W. Andrews Werklund School of Education, University of Calgary, Calgary, AB, Canada

Diana L. Armstrong Alberta Health Services and University of Alberta, Edmonton, AB, Canada

Matthew K. Burns University of Missouri, Columbia, MO, USA

Gabrielle Ciquier McGill University, Montreal, QC, Canada

Catherine L. Costigan University of Victoria, Victoria, BC, Canada

Bryan J. Dik Colorado State University, Fort Collins, CO, USA

José F. Domene University of Calgary, Calgary, AB, Canada

Martin Drapeau McGill University, Montreal, QC, Canada

McKinzie D. Duesenberg University of Missouri, Columbia, MO, USA

William E. Hanson Concordia University of Edmonton, Edmonton, AB, Canada

Catherine Hébert McGill University, Montreal, QC, Canada

Daniel C. Kopala-Sibley Department of Psychiatry, University of Calgary, Calgary, AB, Canada

Mathison Centre for Mental Health Research & Education, Calgary, AB, Canada

Alberta Children's Hospital Research Institute, Calgary, AB, Canada

Hotchkiss Brain Institute, Calgary, AB, Canada

University of Calgary, Alberta, Canada

Noëlle T. Liwski Blue Sky Psychology Group, University of Alberta, and Concordia University of Edmonton, Edmonton, AB, Canada

Dylan R. Marsh Colorado State University, Fort Collins, CO, USA

Carly A. McMorris Werklund School of Education, University of Calgary, Calgary, AB, Canada

Alberta Children's Hospital Research Institute, Calgary, AB, Canada

Amori Yee Mikami University of British Columbia, Vancouver, BC, Canada

Caroline E. Miller University of British Columbia, Vancouver, BC, Canada

Rhea L. Owens University of Minnesota Duluth, Duluth, MN, USA

Doris Páez Regional Medical Center, Orangeburg, SC, USA

Hongyuan Qi University of British Columbia, Vancouver, BC, Canada

Monica E. Romero University of Missouri, Columbia, MO, USA

Donald H. Saklofske Department of Psychology, University of Western Ontario, London, ON, Canada

Steven R. Shaw McGill University, Montreal, QC, Canada

Ada L. Sinacore McGill University, Montreal, QC, Canada

Krista D. Socholotiuk Simon Fraser University, Burnaby, BC, Canada

Constantina Stamoulos McGill University, Montreal, QC, Canada

Shannon L. Stewart University of Western Ontario, London, ON, Canada

Jen Theule Department of Psychology, University of Manitoba, Winnipeg, MB, Canada

Ashley Toohey University of Western Ontario, London, ON, Canada

Judith Wiener Department of Applied Psychology and Human Development, School and Clinical Child Psychology, OISE/University of Toronto, Toronto, ON, Canada

Hansen Zhou University of Alberta, Edmonton, AB, Canada

Chapter 1

Introduction: Mental Health Assessment, Prevention, and Intervention—Promoting Child and Youth Well-Being



Jac J. W. Andrews

“From our shared thinking relative to applied psychological research, theory, and practice and our shared psychological clinical experience, we can be both validated and enriched relative to our developing wisdom and excellence with respect to our services to children and youth.”

Andrews, 2017

Abstract This chapter provides the nature, scope, and organization of the book. The focus of the book is concerning mental health assessment, prevention, and intervention relative to child and youth well-being. The information presented in each chapter of the book is organized in relation to major areas of consideration and addressed by the authors of the chapters which are overviewed within this chapter: guiding frameworks and theoretical orientations that guide their approach to psychological service delivery; clinical reasoning approaches; approaches to mental health assessment; and mental health prevention and intervention.

Introduction

The disciplines of school, clinical, and counseling psychology are independent of and similar to one another. Generally, within and across these disciplines, scholars and practitioners act in ways to better understand and promote the mental health and well-being of children and youth as well as emerging adults. They are primarily guided by their knowledge base, training models (e.g., science-practitioner, professional practice, practitioner–scholar, clinical scientist, pragmatic), theoretical

J. J. W. Andrews (✉)

Werklund School of Education, University of Calgary, Calgary, AB, Canada

e-mail: jandrews@ucalgary.ca

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orientation, clinical experience, and their critical thinking as well as by their principles, values, beliefs, and attitudes.

The mental health of children and youth include their intellectual, emotional, and social well-being. Their mental health affects how they think, feel, and act. Hence, it helps to determine how they cope with stress, relate to others, and make choices in their life. Mental health is important at every stage of life, from childhood and adolescence through adulthood. Mental health is the degree to which one has psychological well-being (e.g., positive self-regard, ability to cope with normal stresses in one's life, being able to adapt to change, and having fulfilled and satisfactory relationships with others). Mental illness is the degree to which one does not have psychological well-being due to conditions that affect their thinking, feeling, and behavior. Mental illness in children and youth include behavioral disorders (e.g., attention-deficit-hyperactivity disorder, conduct disorder, schizophrenia, substance use disorder), mood disorders (e.g., depression, anxiety, stress), neurodevelopmental disorders (e.g., autism spectrum disorder, intellectual disability, learning disability), and health-related disorders (e.g., eating disorder). Assessment approaches include interviews, behavioral observations, cognitive, academic, social-emotional, and behavioral questionnaires. Theoretical and conceptual orientations regarding mental health and illness include behavioral, psychodynamic, cognitive, cognitive-behavioral, humanistic, neurobiological, ecological, and developmental. Preventions and interventions include academic interventions, social-emotional interventions, behavioral interventions, and therapeutic interventions (e.g., cognitive-behavioral therapy, and family therapy).

The focus of this book is to present how school, clinical, and counseling psychologist understand and address the mental health needs of children and adolescents. In this regard, the authors of the book were asked to provide the guiding framework for their work in the field of child and mental health (e.g., their conceptual and theoretical orientation), present their clinical reasoning approach when addressing issues facing the children and youth with whom they have experience (e.g., empirical, theoretical, and clinical accountability), and describe and exemplify (by way of a case study) their approach to mental health assessment, prevention, and intervention (see Fig. 1.1).

Students preparing to become psychologists as well as practicing psychologists and clinicians, in the mental health-related disciplines of school, clinical, and counseling psychology do not always have the opportunity to be acquainted with or be aware of the professional journeys of distinguished people in their fields. Moreover, although students in training and professionals in the field of psychology are typically aware of the clinical, theoretical, and empirical foundations of the work they do, they are not often made aware of or fully understand the similarities and differences between them and their peers who practice differentially and similarly as school, clinical, and counseling psychologists. In their training and professional practice, they acquire and develop their experience assessing the psychological problems of children, youth, and have the opportunity to consult and collaborate with various service providers in their respective disciplines. However, they do not always have the opportunity to have distinguished mentors to help them consider



Fig. 1.1 Guiding framework for promoting child and youth well-being

and contextualize their professional journey nor the opportunity to appreciate the journeys, teachings, and evolution of thinking and practice from in-service psychology colleagues in related but different psychological disciplines. This book offers the opportunity for students in preparation to be psychologists as well as professionals in the field to gain more insight and awareness of the legacy of distinguished psychologists and become more aware and understanding of the similarities and differences in practicing psychologists within and across the disciplines of school, clinical, and counseling psychology to address the well-being of children and adolescents. This book will not only present distinguished legacies but also present insights relative to the implementation of clinical reasoning and skills associated with the assessment and treatment of mental health issues within children and adolescents. Hence, this book is viewed as a complement and supplement to the informational resources available to students, professionals, and others for developing their expertise, thinking, insight, awareness, and understanding of the school, clinical, and counseling psychology.

Few publications describe the clinical reasoning of psychologists (e.g., Andrews, 2017). In this regard, we are unaware of another publication that presents and compares the clinical reasoning of psychologists within and across the fields of school, clinical, and counseling psychology. Hence, this book presents information and insights with respect to the processes and procedures associated with clinical reasoning relative to mental health assessment, prevention, and intervention that can provide guidance to students and professionals.

There are books within the disciplines of school, clinical, and counseling psychology that present excellent information about their history, specialties and settings, theoretical and research foundations and contributions, and applications. For example, the APA Handbook of Clinical Psychology (Norcross et al., 2016) provides a comprehensive overview of the history of clinical psychology, specialties and settings, theoretical and research approaches, assessment, treatment and prevention, psychological disorders, health and relational disorders, health promotion, educational paths, psychologists' development, ethics and standards, professional organizations, and future directions of clinical psychology. The APA Handbook of Counselling Psychology (Douglas et al., 2016), for example, highlights the field of counseling psychology, exploring theories and philosophical underpinnings, practice approaches and contexts, and professional issues. It has been updated to reflect current issues and debates and to map onto the training standards and offers the definitive companion for counseling psychologists' journeys through counseling psychology training and into the workplace. In addition, there are handbooks in school psychology (e.g., Gutkin & Reynolds, 2009) that address the scientific foundations of school psychology, and psychological and educational assessment and intervention with a focus on children and systems. However, there are no books that provide a within and across psychology focus and integration of approaches for mental health assessment, prevention, and intervention as well as provide the conceptual and theoretical orientations for these approaches within and across the three disciplines of psychology. Hence, this book provides within and across all sections of the book, authors' guiding frameworks (conceptual and theoretical orientations), clinical reasoning approaches and models, approaches to mental health assessment, and approaches for prevention and intervention regarding mental health and well-being of children and adolescents.

Guiding Framework

At the beginning of their chapter, authors of the school, clinical, and counseling psychology sections provide their guiding framework and theoretical orientation that guides their approach to psychological service delivery, particularly concerning their assessment and prevention and intervention processes and procedures concerning mental health and mental illness of children and youth. As indicated in the illustration below (see Fig. 1.2), guiding frameworks are typically an interaction of knowledge base, training, experience, and thinking in relation to their beliefs, values, attitudes, and feelings that lead to their actions.

One of the primary aims of this book was to have authors in and across the disciplines of school, clinical, and counseling psychology present their guiding framework concerning how they integrate and balance their knowledge, experience, training, and thinking with their beliefs, values, attitudes, and feelings relative to their scholarly and applied work. The result of this exercise will show within

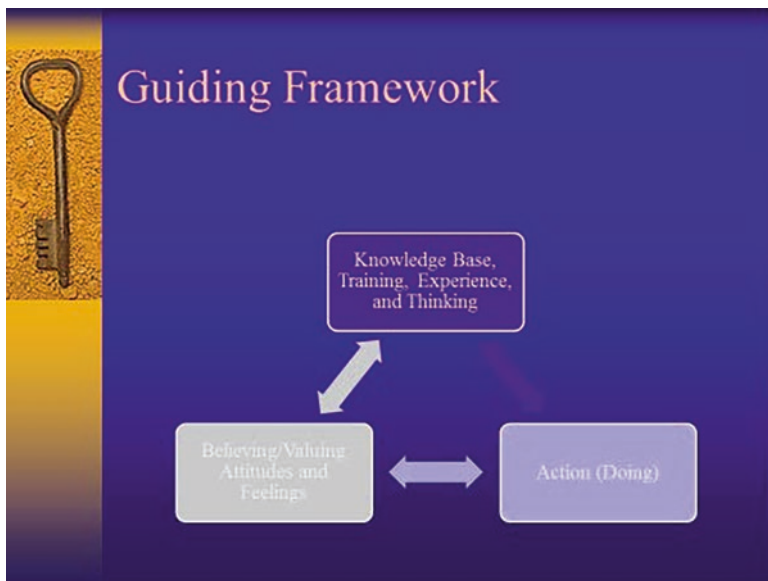


Fig. 1.2 Guiding framework and theoretical orientation for psychological service delivery

discipline similarities and differences as well across discipline similarities and differences that can expand readers' insights relative to their orientations, scholarship, and practices.

Clinical Reasoning Approach

Another aim of this book is to have the authors present their clinical reasoning processes and procedures. Clinical reasoning involves the integration of several processes. The process is far from uniform within and across disciplines of psychology, as many factors influence clinical decision-making during every stage toward better understanding the child or youth (assessment stage), providing guidance for better developmental outcomes (prevention), and treatment for mental health issues (intervention). For professional accountability and assurance, all psychologists should be able to describe the rationale and basis for their assessment, prevention, and intervention decisions within a well-defined theoretically and empirically based clinical reasoning framework, which is dependent upon training, clinical experience, and foundational knowledge of human behavior and development. All of this information is in the context of theory and empirical evidence, techniques and procedures, and personal principles, values, attitudes, and beliefs in association with professional models of professional practice.

Clinical reasoning involves critical thinking (reflection, precision, relevance, depth, accuracy, and significance) as well as an appraisal of factors related to person

status and change. In this regard, the authors of this text provide readers with their clinical reasoning approach (processes, procedures, situational contexts, and decisions) that guides clinical judgment.

Approach to Mental Health Assessment

One of the first judgments a psychologist makes in the assessment process concerns the nature of the problem and the reason for the assessment. In other words, the first task in the assessment process is to clearly understand the reasons a child or adolescent is referred for assessment. Once the problem is identified and the reason for assessment is determined, psychologists decide the processes and procedures are necessary to address the problem. Typically, the psychologist gathers historical information about the developmental, familial, medical, educational background of the child or adolescent and current information about the child or adolescent from interviews with significant people in the child's life, observations of the child or adolescent in their environment, and formal and informal assessment procedures. Once the information from these sources is gathered, the psychologist compares and contrasts the information as well as analyzes and synthesizes the information in a way that best defines and describes the nature and scope of the problem.

Psychologists compare as well as analyze and synthesize information from sources by using theoretical frameworks that they have learned from the theoretical and empirical literature and from their professional experiences with children and youth. For example, if there is a referral question regarding whether a child has an intellectual, social, emotional, or behavioral problem, it is often the case that psychologists will be guided by their different theoretical and science-practitioner views about intellectual–social–emotional–behavior issues. For example, a psychologist might be guided by a *developmental–systems framework* and make judgments about the child or adolescent from their understanding of the role of developmental factors, the importance of context, and the influence of multiple and interacting events in shaping the child's development including the interaction strengths in relation to their challenges. Concomitantly, a psychologist may use a categorical framework (for example, the use of DSM V) and use an empirically based dimensional framework (derived from multivariate statistical techniques) in their assessment and decisions about the type of problems the child or youth is exhibiting (e.g., internalizing or externalizing problems) and the degree to which the problems are normally distributed across children or youth of similar age and gender. More specifically, if a child or youth was referred for assessment because of concerns with respect to occurrences of aggression toward others, domain-specific theories, and empirical frameworks might influence the psychologist's plan for assessment, intervention, and further prevention. For example, the psychologist may view a child or youth's behavior in terms of a behavioral framework and consider the frequency, duration, and intensity of the behaviors; consider the behavioral acts in relation to the child's or youth's interpersonal problem-solving skills and

deficits; and view behavioral acts from a transactional framework and consider the behavior as a result of parenting style, nurturance, and attachment. In terms of other mental health issues, a psychologist may consider non-well-being arising from cultural issues and apply a protection and vulnerability framework and focus on the importance of self-identity, the centrality of culture and self-reflection, and the impact of risk and protective factors. Alternatively, applying a developmental psychopathology framework, a psychologist might consider a child or youth's mental health issues to result from person-environment interactions, their interpersonal domains, and consider the dynamic interaction of state and trait theories of personality as a function of temperament and mood. In other circumstances, a psychologist may consider a child or youth's mental health issues as being due to a mismatch between their skills and environmental demands. In another case, a psychologist may view a child or youth's mental health issues as stemming from general to specific life stresses framework and focus on increasing engagement, responsibility-taking, self-understanding, and compliance from a humanistic perspective. A psychologist may view a child or youth's mental health problem as the result of information processing difficulties such as how they encode and interpret information and how the child or youth might be over-favoring attentional and perceptual biases. In any event, psychologists use general as well as specific frameworks, guidelines, and orientations to guide their assessment and judgment of the psychological status of children and youth. These frameworks will vary based on the nature and scope of the problem and the results from the assessment process and procedures. Therefore, one of the aims of the chapters across the sections of the book was to overview and discuss some of the general and specific assessment approaches that psychologists implement based on their guiding frameworks and clinical reasoning.

Prevention and Intervention

Prevention and intervention are complex. However, unlike assessment, they are more often a collaborative and consultative process. In this regard, psychologists should know and recommend evidence-based interventions for children and youth. Importantly, they should be able to tailor preventions and interventions are integrated to meet the assessed needs of the child or youth. Hence, this requires both an understanding of the environment and systems that interactively influence intervention development, implementation, and evaluation. Like assessment, the nature, scope, and use of preventions and interventions develop from a practitioner's training and experience as well from his or her clinical reasoning abilities.

Decisions concerning prevention and intervention from psychologists require clinical awareness, insight, and a judgment. For example, as psychologists engage in the assessment process, information will be gathered about the strengths and weaknesses of individual children and youth that alert the psychologist to possible connections relative to preventions and interventions. The psychologist must also be

able to formulate recommendations for preventions and interventions that are aligned with the profile of the individual or group. This process requires careful reflection by the psychologist regarding their own orientation and skills and simultaneous consideration of how other team members, parents, children, youth, and the family, school, community climate are connected to the decisions made.

The psychologist typically reflects upon their guiding framework when considering possible prevention and intervention approaches. For example, one consideration is the ecological model from which the psychologist might consider, develop, and implement psychological and educational intervention services. The primary idea underlying this model is that human behavior is a function of the interaction between the characteristics of individuals and the environments in which they live. Hence, the focus of prevention and intervention should be person–environment interactions. In this regard, the psychologist needs to consider the internal functioning of the individual along with the environmental context. By considering prevention and intervention possibilities within an ecological framework, the psychologist may employ a greater array of intervention options that focus on not only individual change but also environmental change and may have greater potential in maximizing the impact of the prevention or intervention.

Conclusion

The authors of the chapters in this book highlight the complexity of addressing the mental health of children and youth. The mental health of children and youth involves among many other things, the consideration of adaptive and maladaptive behaviors, antecedents and consequences of behavior, cultural context and gender identity, resistance and resilience, flexibility and adaptability, function and dysfunction, strengths and weaknesses, fluctuation of attitudes and feelings, communication ability, intellectual ability, coping ability, social ability, risk factors and protective factors, ecological contexts, and social inequities. In this regard, the authors of the chapters provide suggestions and guidance for dealing with these complexities that include critically important considerations about the process and interaction of assessment and treatment such as developing trust; providing meaningful collaboration and engagement; targeting specific areas and skills rather than broad domains; empowering children and adolescents by way of facilitating insight and increasing their knowledge; being accepting, sensitive, supportive, and empathic; recognizing increasing moments of success; appreciating and being attentive to personal identities; being guided by humility, openness, compassion, and respect; promoting dignity; facilitating fulfillment; reducing negative outcomes and enhancing positive outcomes; and fostering a sense of hope and optimism.

References

- Andrews, J. (2017). Clinical reasoning in school psychology: From assessment to intervention. Guest Editor. *Canadian Journal of School Psychology*, 32(1).
- Douglas, B., Woolfe, R., Strawbridge, S., Kasket, E., & Galbraith, V. (2016). *The handbook of counselling psychology* (4th ed.). Sage Publications.
- Gutkin, T., & Reynolds, C. R. (2009). *The handbook of school psychology* (4th ed.). Wiley.
- Norcross, J. C., Vandenbos, G. R., & Freedheim, D. K. (2016). *APA handbook of clinical psychology*. American Psychological Association.

Part I
School Psychology: Mental Health
Assessment, Prevention and Intervention:
Promoting Child and Youth Well-Being

Chapter 2

Integrating Theory, Research, and Practice in School Psychology: A Legacy Chapter



Donald H. Saklofske

Abstract School psychology has a relatively long history with many psychologists of the past and more recent times contributing to the extensive knowledge and practices of today. At the kind request of the editors of this most important book, I share some of my thoughts and experiences reflecting my varied professional journey and most importantly, future projections and hopes for school and applied psychology. Specific examples from my research, teaching, and practice are drawn from descriptions of intelligence, emotional intelligence, and resilience. But while much of the focus is on assessment-based themes, it is this cornerstone that gives us the very foundations that hold such potential for ensuring today’s children and adolescents thrive, flourish, and grow to contribute to a “better world.”

Introduction

It is with considerable humility and some trepidation that I write a chapter for this book that presents an excellent and prescriptive collection of papers by authors who really know what they are talking about, have lived the experiences they describe, and are grounded in the science of psychology and evidence-based and ethical practices that are further viewed through the lens of critical thinking and in-depth analyses and synthesis. The knowledge, contributions, and experiences in practice, research, and knowledge transmission presented by the authors and most effectively guided by the editors not only summarize the road we have each traveled in our respective areas of expertise but point to some promising new paths and directions as we continue to explore the unknowns and apply the knowns. I congratulate Dr. Jac Andrews and co-editors, Dr.’s Steve Shaw, Jose Domene, and Carly A. McMorris, for initiating this project and seeing the book through to completion so it can now be in the hands of undergraduate and graduate students in school, clinical, and

D. H. Saklofske (✉)

Department of Psychology, University of Western Ontario, London, ON, Canada
e-mail: dsaklofs@uwo.ca

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counseling psychology programs, practicing psychologists and allied practitioners, and mental health researchers. Let me add that Dr. Moshe Zeidner and I who serve as book editors of the Springer Series on Human Exceptionality are honored that this book will join the collection of published works covering many key areas of group and individual differences across the spectrum of human behavior.

My Beginnings as a Researcher and Scholar

I appreciate the general guidelines for this chapter suggested by the editors and will try to follow them as they relate to what I have come to know, observe but not always fully understand, and even speculate on about human behavior both from the contributions of psychological science and in my varied personal and professional life experiences. What does make the writing of this chapter challenging for me (but hopefully not too pedantic or oblique for the reader) is that my career path has been so varied, eclectic, and fascinating (at least to me). Also, I am used to writing either journal articles, books, or reports ranging from clinical case studies to program evaluations and accreditation reviews. Over a long career, I have varied in my identity as a psychologist as will become clear as I briefly describe my 9–10 years as a university student, and by 2023, 50 years of post-PhD work, commitment, and dedication to the science and practice of psychology and all those we serve with our knowledge. Building capacity and psychological strength in children and youth have always been a significant and often central focus of my research and practice work. As I will be noting in this chapter, for me the school is an epicenter for empowering and promoting the well-being, mental health, and opportunities for children through to emerging adults as they will determine our future. I have always subscribed to the fundamental tenets of psychology that include understanding, predicting, and facilitating the changing of behavior in positive directions and in ways that are to the benefit of the individual and the world we live in. Thus, my interests and opportunities have been varied and at least in part reflect my early years as a graduate student and the influence of faculty I had the privilege of learning from, several of whom stand out to this day as mentors along with others over my earlier and later career who had the patience to provide the guidance, knowledge, and support I needed to get to the point of even writing this chapter.

Added to the above was the early realization that we know so much about human behavior and yet so little! I always found it particularly challenging to both consider the factors along which persons vary as well as those unique characteristics shared by only a few. It is this interplay or discrepancy between the knowns and the unknowns that creates a kind of cognitive and emotional dissonance that motivates one to look for or create the means, whether in the research lab or working in clinical practice, to fulfill our mandate of understanding, predicting, and facilitating and assisting positive change.

Thus as one merges theory and research into practice that is grounded in the ethical premise of doing good, more than ever do we come to appreciate that as

psychologists across its many professional iterations including the three represented in this book (school, clinical, and counseling psychology) as well as in our collaborations with colleagues from allied professions such as social work, medicine, that we are constantly seeing how we are alike ‘all others, some others and no others’. It is the relationship between nomothetic and idiographic approaches and correlational and experimental research that provides the universal underpinnings for describing the trilogy of human personality, intelligence, and motivation and further casting this within the framework of individual differences. As well, viewing the person in a more multivariate or gestalt lens shows that we are comprised of numerous parts that interact to describe the person. Professor Hans Eysenck stated that extraversion is one of three major personality dimensions that we differ on just as we do on another major human factor, intelligence. But he further added that there is quite a difference between a more versus less intelligent extravert as there is a difference between a bright extrovert in contrast to an equally intelligent introvert! Cast within this description is the ‘world’ of the person that extends beyond brain-behavior connections. Decades of research and everyday observation points to those external factors whether based in a loving home or war-torn concentration camp or an environment rich with learning opportunities versus a sparse world fraught with danger, famine, and isolation.

Thus, my research and practice have reflected the psychological, biological, and social influences that interact upon us as human beings cast further within both nomothetic and idiographic perspectives. When we do not understand a word, we can consult a dictionary that summarizes the common and agreed-upon meaning and then use that word to convey some message. But psychology as a science with its theories and volumes of published research is constantly searching for explanations and answers to address the unknowns! This is where a dynamic mix of building on the knowns to then move forward seeking answers to those unknowns, being guided by theory while applying sound research methods and especially critical thinking along with maintaining the cognitive flexibility needed for hypothesis testing is required until such time as there is a compelling answer to whatever the question is. And that in a nutshell describes my almost 50 years as a psychology researcher, practitioner, teacher... covering many areas of study but always with the purpose of being an advocate and activist for mental health and well-being.

My Journey Relative to My Research and Scholarship

I am certainly a product of many significant influences during my years of university education at the University of Calgary and almost 50 years in university appointments as a practitioner, teacher, trainer of psychologists, and as a researcher at the University of Otago (New Zealand), Universities of Calgary, Saskatchewan, and Western Ontario as well as visiting professorships at Swinburne University (Australia), University of Florence (Italy), and Beijing Normal University (China). My career or more so, my life’s work has taken many paths and turns ranging from

basic and applied research to clinical practice, program development to advocacy, training, and teaching to community and international-based initiatives. Time has also been devoted to serving professional associations in Canada at the provincial (Psychological Association of Alberta, Psychological Society Saskatchewan, Saskatchewan Educational Psychology Association), national (Canadian Psychological Association, Canadian Association of School Psychologists), and international levels (International Society for the Study of Individual Differences). Of course, the most profound influences of family, friends, graduate students, and colleagues from my earlier years to the present day have also shaped all of who I am throughout my life and to this very day. My gratitude to you all is beyond words. I have been afforded the richest of opportunities to experience so much of the world through all the above, and this has further impacted the directions I have taken in my work over the years.

I was fortunate in so many ways to have the love and support of very special people in my life along with some key experiences that have given both the foundations and the impetus for my life's work. My beautiful mother and father, my brother and sister and extended family and my children, Jon and Alison have given me reason and purpose for trying to be a better person and for wanting a better world for them and all. And my wife Vicki, who has dedicated her life to as a psychologist and administrator to all reflected in positive psychology. I am also so grateful to those school teachers who made me feel like I mattered and actually had something to offer, university professors who encouraged me and filled the toolbox I needed for the work to follow graduation, and the many colleagues and students, especially graduate students at the U of C, U of S and UWO who both presented challenges, stimulated my thinking, and collaborated on finding solutions. In some ways, I feel fortunate being a product of the 1960s and 1970s (the music was great and the 'love, peace, brother/sisterhood' perspective resonates with me to this day), and the fit for me was reflected in the applied psychology program at the University of Calgary. Although grounded by research (e.g., the biological basis of human behavior, brain-behavior relationships, individual differences, culture and family factors, testing the tenets of theory) that was eclectic in every sense, my graduate programs included a mix of clinical, school, and community psychology. Thus, I was exposed to a range of theoretical and foundational perspectives (e.g., psychodynamic and radical behaviorism; developmental and social-cultural influences to the neurological basis of individual differences), assessment methods (e.g., standardized testing, interviews, and observation), and psychological tests and measures (intelligence, achievement, neuropsychology) to intervention (e.g., applied behavior analyses, psychodynamic and cognitive interventions, Rogerian counseling, and biofeedback) and prevention methods (early intervention, family systems, community and strength-based approaches). More than ever my respect and appreciation continue to grow for those who contributed to these formative years of preparing me for the work and world of psychology as was to become a part of to this day. I recall being asked by the Psychological Association to speak at the 40th-anniversary conference about my earlier experiences in psychology reflecting on the decade of the 1970s. As I looked at the audience at this well-attended event, I saw there the faces of many

who were key in my being there at the podium; university professors, clinical supervisors, research collaborators, and fellow graduate students of the day; I thank you all.

I must confess however that at the time as an undergraduate student, I was not quite sure if psychology as a discipline and its many potentials and applications was what I aspired to. But I decided to register as a psychology major at the University of Calgary. My early interest was medicine, but I was not disciplined as a student in those early years. And my one lifelong passion then and still is, lies with music and the arts, but my talent fell far short of my parents, brother, sister, and most anyone else who made the music and art I love. So I stayed with psychology which was interesting. It was a senior class in abnormal psychology taught by Dr. David Gibson that really resonated with me. Even then I was not absolutely sure what I wanted to be when I grew up! Graduate school came about by chance, the details I will not go into but thanks to Dr. Rollie Lambert for whatever it was you spotted in me. Let's just say that I entered a relatively new program that was labeled "clinical, school and community psychology" and after I finally immersed myself in this dynamic world of psychological science and practice, I found not only a home for my curiosity and interests (music and personality) but a training ground that would allow me to pursue the scientific study of human behavior which I always found fascinating (e.g., psychopathology, intelligence, personality) and even more so an area that supported engaging in positive change for individuals as well as larger society (e.g., psychoeducational assessment, early intervention, and mental health promotion).

I completed a master's degree under the supervision of Dr. Barry Frost who created both the program and the Psychoeducational Clinic at the University of Calgary and then continued in this program to the completion of my PhD under his clinical supervision of and the research supervision of Dr. P.E. Vernon. A wide variety of classes on assessment, psychoeducational intervention, psychotherapy, consultation as well as research design, methods, and statistics, was further enhanced with clinical practicums and real-world opportunities in residential and outpatient treatment centers, mental health clinics, schools, and hospitals dedicated to serving children, youth, and adults presenting with learning problems, severe cognitive limitations, and diagnosed psychiatric disorders. The opportunities for clinical practice and professional growth were unlimited. I saw my first 'clinical' cases in very supported practicums and then many more cases of increasing complexity: severe intellectual disability, anorexia, dyslexia, learning disabilities, autism, ADHD, children rescued from cults, anxiety and withdrawal resulting from abusive home environments, adolescents with acting out, anger management issues, substance abuse, and suicidal ideation and attempts. My realization then was that psychology could make a major contribution through evidence-based interventions, early identification and prevention actions, building capacity in individuals, and supporting mental health initiatives, and advocacy. And what we didn't know or could offer then became the quest of our research.

Concurrently during my years as a graduate student, I was engaged in extensive research programs on aggression for my master's thesis and aesthetics and psychobiology for my PhD dissertation but also studies on, for example, biofeedback,

psychophysiological and EEG correlates of emotion, systematic desensitization, hypnotherapy, and school achievement aptitude–treatment interactions. My initial doctoral dissertation supervisor was Dr. David Evans who moved to the University of Western Ontario (where I am currently a faculty member) and then with such good fortune, I was supervised by Dr. Philip Vernon, who was world famous for his work on intelligence, the Allport, Vernon, Lindzey study of values, and other significant contributions to the study of personality and cross-cultural psychology. I was mentored by Dr. Dan McKerracher, who I so admired and who gave me my first university appointment at the University of Otago. Over the years I have had the good fortune of being supported and encouraged by so many brilliant and exceptional persons, colleagues, and collaborators around the world including Professors Hans and Sybil Eysenck (UK) (my first book was co-edited with Sybil; Saklofske & Eysenck, 1988), Dr. Larry Weiss and Aurelio Prifitera (USA), Dr. Greg Yan (China), Professor Annamaria Di Fabio (Italy), Dr. Moshe Zeidner (Israel), Dr. Greg Boyle (Au.), and Dr. Sandra Prince-Embury (USA). This list is too long to name all but includes so many special colleagues who became collaborators and friends through associations with the Canadian Psychological Association, International Society for the Study of Individual Differences, universities, clinical settings, and world travels.

My professional career post-graduation has been a blend of research, teaching, and practice as well as commitment to the profession and has been most certainly encouraged and developed through my academic appointments mentioned above. These appointments provided the foundations and opportunities for my ongoing research and practice work and instilled in me the perspective to view everything I tackled and in engaged in from a 360° perspective that included all branches of psychology but also other disciplines from medicine to education, and the world itself.

Respecting the editor's outline for this chapter, I will stop with my background and follow the prescribed guidelines. But rather than try to cover the waterfront, given the diversity and wide variations in my professional career, mainly as a university faculty member, I will instead provide when possible, a more elaborate example to capture the requested theme. For anyone interested, my curriculum vitae is available for viewing at <https://psychology.uwo.ca/pdfs/cvs/Saklofske.pdf>.

My Research and Scholarship Highlights and Significant Learnings: Theoretical and Empirical Insights from My Work

During my career, I have always integrated theory and research with practice. Theory and research guide practice and applications from assessment to intervention as well as prevention. As importantly, the practice raises the questions that require further study via research investigations, whether lab or field-based, theoretical or applied. It is this 'trilogy' that in turn provides us with the W-5 framework for all we do as psychologists; who, what, where, when, and why, and then of course, "how." Theory guides practice and practice lets us know if our theories are

more or less useful, and research fills in the gaps by providing the empirical evidence needed to assess, intervene, prevent, and evaluate the efficacy and effectiveness of our clinical actions. Essentially, all branches of applied psychology must be grounded in what we are familiar with, the scientist-practitioner model. This is what sets psychology apart from pseudoscience and non-evidenced based practices that might have as their foundations, personal beliefs, mythology, or even conspiracy theories! So while it is still not uncommon to hear comments such as “I believe in the psychodynamic versus behaviorist views of human behavior”, “I always use the Binet over the Wechsler scales”, “intelligence and personality assessments with kids are meaningless” or “labels from tests or diagnosis such ADHD, LD, and so on are not at all helpful in planning interventions”, there is nothing to be gained if this is the limit of our thinking, and in turn, our practices as psychologists.

I can understand the frustration that comes from the child or adolescent, their parents, and teachers who seek our professional help, that, despite our knowledge and skill-base, we cannot always do and accomplish what is expected of us as psychologists. And yes, there are times we have to pursue a clinical hunch or act on incomplete information because we just don’t have the models or tools to give us the evidence-based answers that would completely ensure the desired outcomes. So many times during my more clinically active years as a practicing psychologist in schools, hospital and mental health clinics, and private practice, I encountered the incompleteness of our psychological knowledge. Although well-schooled in the administration, scoring, and interpretation of intelligence test data, such results were not universally fully informative in all instances and cases. Sometimes along with other information, the intelligence test data would support or even suggest a diagnosis (e.g., LD and above-average intelligence) or consideration for a more focused kind of intervention (Aptitude \times treatment interaction). But there were many instances when even intelligence tests, which are still the single best predictor of school achievement in children, did not tell me why this child was experiencing such major learning issues. There are other factors that are core to understanding, for example, why bright children fail or why two kids both with average ability vary in school achievement. While not all may agree, an inspection of patterns of strength and weakness on a multi-faceted intelligence test can be quite diagnostic and potentially prescriptive. For example, a young child was referred to me at a university school and child clinic who was at that time classified as borderline ability and in a special education program for low functioning children. She had a previous WISC FSIQ test score in the 70–75 range. Her scaled scores on subtests such as Vocabulary were in the 4–5 range. But on the WISC Integrated, her score on the multiple-choice version was 7 and on the picture vocabulary subtest, it was 9. These increased scores were mostly observed on other of the integrated subtests. So much for the MR diagnosis.

Such cases as this recalled a paper by Neisser et al. (1996) titled *Intelligence: knowns and unknowns*. Again, while a powerful predictor of school success and many other areas of importance, there is much we didn’t know about intelligence. One should never forget that individual differences play a major role despite the value of the nomothetic network we use to draw and infer meaning. Recall that 100

kids all with FSIQ's of 100 on a test as extremely reliable as the WISC-V may obtain that score via various combinations of scores. Note that the average of $13 + 7 = 20/2 = 10$ just as the average of $10 + 10 = 20/2 = 10$. Now imagine the equivalent score patterns reflected when comparing say VCI vs. VSI of two children both with average FSIQ scores. Would you expect these two children, without knowing much more, to perform similarly and at an average level across all school learning situations?

The opportunity for being able to blend and draw from theory, research, and practice gives us the kind of eclectic view where each informs but also challenges the other. And this is where I must acknowledge how fortunate I have been to have worked mainly in universities where I could engage in the kind of research to address some of the questions raised by Neisser et al. about the unknowns in intelligence. But another major opportunity came my way when I was invited by the Psychological Corporation (TPC), now Pearson Assessment (PA), to serve on several advisory panels with world-leading intelligence experts on the development of the Wechsler tests for children and adults.

Some 25 years ago as the Wechsler intelligence tests were undergoing major theoretical and both research-driven and clinically focused changes, TPC organized advisory panels comprised of leading experts in the study and assessment of intelligence. Invited members, representing relevant branches of psychology such as neuropsychology, clinical and school psychology, developmental psychology, and psychometrics, were requested to consult and collaborate with the most capable test development specialists at TPC and advise on all aspects of the proposed revised tests. While my work to that time had not focused particularly on test development, I was engaged in research on intelligence and clinical practice where I always wanted more from these tests. Although I agreed with the premise that "tests don't make decisions, psychologist do," I appreciated the power of the statistical and actuarial capacity of tests and was most certainly aware of the ongoing statistical versus clinical decision-making debates as well as another measurement guidepost captured by the premise that the answer to how and what we measure rests with the definition of the construct under examination. Serving on these panels and advising on revisions to the WISC and WAIS measures required engaging in discussion and debate on questions focusing on the theoretical model (*g* versus multiple factors), developmental changes, the kinds of subtests that would best assess intelligence as defined by the model, the research evidence supporting clinical decisions gleaned in part from intelligence tests, advances in psychometrics beyond classical test theory, and some even more challenging issues related to the assessment and expression of intelligence across the range of human exceptionalities as well as within and between groups defined by culture, language, and other key demographic factors. Let's just say that these experiences, which I am still engaged in to this day, serving on the WAIS-V advisory panel, were akin to a 'cognitive high' for me. In the process, I met and worked with the best minds engaged in all areas of intelligence research and assessment that contributed to the publication of these new tests, and participated in many conference and workshop presentations in Canada, the United States, and other countries, including China. A series of books on the Wechsler tests

were also published in collaboration with Dr. Aurelio Prifitera (Prifitera et al., 1998, 2005, 2008) and Dr. Larry Weiss (Weiss et al., 2006, 2010, 2016, 2019) as well as with Dr. David Tulsy et al. (2003) and Dr. Jim Georgas et al. (2003) that included chapters by members of the Wechsler advisory panels, The Psychological Corporation and later Pearson Assessment. These books, along with journal articles were intended to go beyond the test technical manuals and further describe the theoretical foundations of the newer models, research support for the tests, and evidence-based interpretations and applications that would inform practitioners in their role of diagnosing and prescribing programs that would support various levels of intervention and prevention planning.

In the next section, I will continue drawing from these experiences to briefly describe some applications that have been presented at conferences/workshops, in my university teaching, and in books, chapters and articles published to date.

My Insights and Practical Applications From My Research and Scholarship

Before introducing one other area of my research and its applications, I will share a couple of research programs that arose from the above discussion. The question I always ask those attending conferences and workshops where I have presented is, “what is/are the take away point(s)?” “What do you now know or will think about following this presentation?” And to my students, I would often start with “remember that the task at the end of a class or seminar is to reflect on what you have been presented with”. So I shall do the same here.

As a student, I often noticed that the intelligence test manuals often contained hand-written substitute or replacement items for use in the Canadian context. For example, instead of naming presidents of the United States, the question asked for PMs of Canada, or instead of how far from Paris to New York, the item was changed to Paris to Montreal (or Toronto). Sometimes they seemed a bit silly. And then the question of norms would come up and clinical reports might suggest that the US norms are not be a good metric for estimating a child’s intelligence, in the Canadian context. But none of these issues had been empirically tested with the exception of a preliminary study by Barb Holmes and Buff Oldridge (one of the early leaders and practitioners of school psychology). I later became involved in several activities of direct relevance to these issues.

The question of how well the Wechsler intelligence scales, or for that matter, any test, travel outside of the United States where they were developed and standardized to create norms tables for score interpretation, had been increasingly raised in Canada by the school and clinical psychologists. When the WAIS-III was published, I was asked to conduct a national standardization study in Canada, a most daunting but intriguing challenge. Data were collected to reflect the Canadian context (e.g., age, region, sex, education level) and there were differences with Canadian adults

scoring higher on most all subtests but in particular an almost one-third standard deviation higher score on the perceptual reasoning factor than suggested by US norms. The solution was to publish Canadian norms in a Canadian technical manual.

This finding then led to a later collaboration with Jim Georgas, Larry Weiss, and Fons von de Vijver (Georgas et al., 2003). We obtained the WAIS-III standardization data from more than a dozen countries around the world (albeit mainly developed countries in North America and Europe). In our book in which these data were extensively analyzed, we reported several findings: the test model travels well (three factors invariably come to the fore, and sometimes a fourth depending on the loadings of the arithmetic subtest), countries vary to some extent in subtest raw scores necessitating new norms, and that the levels of education and affluence of these countries were more than moderately correlated with WAIS-III scores, although again, all were developed countries. These results raised even more questions and I would like to come back to this later when discussing more thoroughly the practical applications of this area of my research programs.

A considerable focus of my research and practice interests starting about 20 years ago revolved around the introduction and fast growing interest in what was labelled emotional intelligence (EI). The blend of my early research on the interface between intelligence and personality (Saklofske & Zeidner, 1995) and its links within the broader context of mental health and psychological wellness (while still engaging in research on the dark side including the Dark Tetrad and various psychological disorders) eventually came to fit in part, with the developments in emotional intelligence, starting with writings of Mayer, Salovey, and Bar-On that further tied in with Seligman's famous paper on positive psychology. This seemed to open the pathway between theory, research, and clinical application. But let me share some of my insights and how I came to see EI as a foundation for the next two decades of activity and how some things just happen by chance or serendipitously. About 20 years ago, a young undergraduate student approached me to supervise his honor's thesis. His name was Paul Minski. Unable to find a supervisor, he finally came to me and said he needed a supervisor so he could do a study on EI. At that time, I had paid little attention to this work in large part because it had become so popularized that for me it seemed to be more linked with pop-psychology, astrology and other pseudosciences (see our recent paper on astrology; Kelly, Dean & Saklofske, 2020). I declined his request, but Paul was beyond persistent and I finally said that we should design a rigorous study that will yield evidence whether EI was definable, measurable, and had a theory that would allow testing; if nothing else, surely the data would provide a resounding confirmation of everything that would test these important hypotheses. To make a long story short, we developed a study, data were collected and analyzed and supported the various EI tenets and predictions. Arguing that replication was the cornerstone of science, we needed to repeat and expand the study, which we did, and once again the results supported the significance of EI in relation to theoretical hypotheses, and especially mental health and well-being variables. Paul received his degree, and I shall ever be indebted to him because he pushed me to examine EI in the context of psychological science. The study data were further analyzed by Elizabeth Austin at the University of Edinburg, was

published, and to date, it is my (our) most cited paper Saklofske et al. (2003). Following that study, I began to collaborate further with Elizabeth Austin but also Con Stough (Swinburne University, Australia) and Jim Parker (Trent University) and other colleagues with our first book on EI based on a conference held in Australia (Stough, Saklofske, & Hansen 2006) and a second book on the assessment of EI (Stough et al., 2009). Since then, several articles and several books (e.g., Keefer et al., 2018) have been published, the latter reference focusing on the relevance of EI to supporting social-emotional well-being and mental health of children and more broadly to the whole of the education system.

Although there were many critics of EI including that from several collaborators and colleagues (e.g., Dr. Moshe Zeidner, Dr. Gerry Matthews) who questioned the construct from a theoretical and mental health perspective, our research and many other studies continued to build on the earlier EI formulations. But one key missing element for me was whether EI that had been shown to have so many positive correlations with other personal well-being factors, could then both be learned and increased in individuals and further support EI as at least one of the key factors in enhancing other key behaviors. Following from the research of Con Stough and his team in Australia where EI training programs were being implemented for teachers as well as children and youth in school and showing some positive results, we did some preliminary study in Canada showing some evidence that a brief training program did in fact result in changes on various measures that related to psychological well-being.

At the University of Western Ontario, this work in my lab was further developed by Ashley Vesely, a doctoral student in the clinical psychology program. Following a pilot study during my appointment at the University of Calgary, an EI program for teachers that was developed at Swinburne University was adapted and modified into a 5-week program for teachers in training. It was premised on the view that EI principles should be both taught and systemic in the school curriculum but equally important was that the teachers who had the knowledge, skills, and commitment to building this into the school environment could themselves benefit from developing greater EI. The promising results were published (Vesely et al., 2014, 2018) and were in line with work reported in Australia and also supported by the studies by Jim Parker and others.

Our research has added to a substantial body of studies showing that EI has relevance and application to the personal, social, and emotional well-being of children and adults. For example, in the Vesely study, a 5-week EI program was demonstrated to have efficacy, efficiency, and effectiveness on a range of factors related to self-efficacy, stress, and coping with teachers. But parallel with any vaccine or inoculation, booster shots are required and more importantly, the positive impact on mental health suggests that EI should be systemically and directly built into the educational system and thus larger culture. Such findings have profound implications for developing the capacity to manage stress and one's emotions, to more effectively understand and interact with others, and to take control in managing one's everyday life. To begin this at a young age with children in school, to extend it to the home and the "social-emotional" climate created by parents, to expand this

to youth and adults where such learning and its positive applications further support and promote mental health, and then into societal structures such as schools where the whole environment can be positively enhanced is certainly a key purpose and objective of psychology from both a preventive and strength-based mandate. Applications to teacher efficacy, efficiency, effectiveness, mental health, stress reduction/prevention tied in with research on stress, stressful environments, and seeing this from an ability and personality perspective led to an even greater focus on this area in both our research and numerous presentations and workshops with teachers, school psychologists, and school systems in Canada and other countries, and of course journal articles, book chapters, and three books. Certainly, EI is not some kind of psychological panacea or cure-all, but whether EI morphs into other conceptualizations related to promoting and supporting mental health and wellness, it has shown some pathways and has even given us some applications that meet the psychology purposes of understanding, predicting and facilitating positive change.

My Insights About Clinical Reasoning, Assessment, Prevention, Intervention, and Mental Health

My years as a psychologist and university professor have taken many different pathways and provided me the rich opportunity to both diversify and consolidate my thinking and work. I could never separate theory, research, and practice because each has been a driving and informing force to my pursuits as a researcher, scholar, and practitioner. A good theory, which is neither right nor wrong, was the heuristic basis for my research which was also driven by the W5's of questioning (who, what where, when, and why). Moreover, every clinical experience was a reason to be informed by the best research, and where there was a lack of answers, to engage in further research which could be both directed or linked to various descriptions and explanations found in the theoretical writings about; for example, the structure of intelligence or personality, or causes and intervention programs for children with ADHD or autism. Furthermore, I was fascinated with the human experience and behavior but was also more often confused by it. The letters between Einstein and Freud on the question of "why war?" foreshadowing WWII absolutely peaked my interest in aggression (and maybe what has resurrected my interest in the Dark Tetrad), and this was followed by Bandura's famous studies and later theory and writings on moral agency, disengagement, and dehumanization and invariably this would connect back to questions of violence between persons and countries, within families, and bullying. This again fueled my commitment to psychological research and practice and motivated me to try to contribute to making a positive difference whether through supporting an individual child who was rejected by peers, contributing to developing positive psychology programs for schools, offering workshops on building resilience, or serving on local or international committees dedicated to the application of psychology for positive purposes.

In some ways and in retrospect, I think I must have felt a bit like Oliver Sacks who was so often confronted by clinical cases that just did not have a simple explanation. So often as I worked with more and varied children and adults presenting with such wide-ranging issues, I would realize that we often did not have a straightforward answer or solution to making or supporting positive changes in their lives. And when consulting the research or theories in search of solutions, more questions would arise, and the theories so comprehensively presented would be but of heuristic value but not provide the answers needed to determine why and how to provide the kinds of “treatments” that would assist an individual with their particular needs.

So I found myself in a perpetual cycle of drawing from theory and research and applying it to the practices of psychology but then conducting further research to add to this knowledge base, and when the opportunity presented, to pass along what I had learned to students and colleagues in university classes or public and conference lectures. And when I felt I really had something to say, whether it was to raise critical questions or to share some views, I would write journals articles and books.

In accordance with the focus of this section of my chapter, I will first make a few comments about my ranges of experiences with psychological assessment and in particular the use of psychological tests that have implications and applications for the kinds of action plans (i.e., prevention, intervention) that will support a child’s mental health and well-being. I will also provide a real example that among many impacted my approach to the continued use of tests but also grounded in the real world of clinical applications (e.g., prevention, intervention, mental health) and decision-making.

The history of psychological tests and testing is well known by all psychologists. Moving from the brass instruments era to the development and widespread use of tests such as the original Binet Scales and the early Wechsler tests, it seemed that testing had become a defining feature of psychology and particularly so in psychological practices in schools, clinics, and hospitals but also the military and industry. As a graduate student and in my early years of psychology practice that included working in schools, hospitals, and private practice, a major part of my work was to administer, score and interpret a wide range of psychological tests that included the broad categories of cognitive and intelligence, personality, conative, neuropsychology, and psychoeducational assessment. These tests ranged from the Wechsler and Binet scales, the MMPI and Rorschach, the Halstead-Reitan battery, Wide Range Achievement Tests, and a host of measures tapping personality, anxiety, motivation, self-concept, and so on. At the time I was progressing through graduate school, and in my early employment years as a psychologist, I often recall raising questions related to the W5’s of IQ testing (why, when, who, where, what). I can recall writing reports that even then I wondered what was really informing about the child or adolescent that would guide others in their respective roles with that child and that could inform the child themselves in their self-understanding and taking charge of their lives.

During practicums and then part-time work during the latter part of my PhD program followed by being a full-time school psychologist, I began to see the value

of psychological tests including intelligence tests if and when needed, both to answer questions but also to raise questions (e.g., hypothesis generation). I also came to realize that current tests and the constructs they measured were somewhat limited regarding just what the needs were that brought a referral to our attention and how much more our more broad-based training and the knowledge from psychological research had to offer. Intelligence was more than the scores on a Binet, school achievement was more than scores on a WRAT or WIAT, cognitive abilities were more than what we could glean from subtests on a Luria-Nebraska or Bender Gestalt, but included a child's development, home factors, social skills, feelings and emotion and anxieties and fears, interpersonal relationships, attitudes toward school, perceptions of self, learning strategies, motivations and then, the family, community lived in, economic conditions, and the list goes on.

In my early years as a graduate student and then practicing psychologist, I had encounters with children whose developmental problems today would be attributed to ADHD, learning disabilities, autism spectrum disorder, wide-ranging ability levels from moderate to severe intellectual disabilities to children who would be 3+ standard deviations above the mean on a WISC, eating disorders, anxiety, depression along with children and youth from other countries, varying social conditions and environments, abusive homes, broken/single/foster families and in one extreme condition, a cult. In addition, I encountered children and youth children who had severe medical conditions, kids who hated how they looked, felt like a failure, were bullied or who bullied others, felt they didn't matter, and more. The important dynamic underlying my graduate program was how eclectic it was and how it forced me to blend psychological knowledge with critical thinking and a 'commitment to others'. The psychology and educational psychology faculty at the University of Calgary, mainly from the United Kingdom, Canada, and United States brought a blend of quite different psychological models from radical behaviorism to psychodynamic perspectives emphasizing external factors such as home and culture to brain-behavior and neuropsychological descriptions. The community psychology undertones of the program convinced me of the role not only of other professionals from teachers and social workers to medical doctors and lawyers but all those who had a role in the world of the child. So it was after a year as a full-time practicing school psychologist, and shorter periods working in hospital settings as well as private practice, that I chose to take a university appointment in New Zealand where I could research the variety of issues that we did not have a good understanding or answers, share with aspiring psychologists and allied professionals what we had learned from others or our own research, and continue to engage in direct clinical work such as the Dunedin Multidisciplinary Child Development Study and the re-opening of the University Education Clinic.

So, let me give just one example here of my work and experience accumulated over the years to connect the dots to make a positive difference to individuals and the larger society and what I have learned from all of this. I will draw from some of my work on intelligence and the assessment of intelligence.

To start with some background, the study of intelligence has always been a large part of my journey through the various doors of psychology. As a graduate student,

I spent countless hours learning how to administer, score, and draw meaning about a child or adult from tests such as the Binet and Wechsler scales. This was further embedded in the theories of intelligence from Spearman and Thurstone to the Das-Luria-Naglieri PASS model, Sternberg's Triarchic model, and Neo-Piagetian dynamic assessment models together with the mass of accumulated and ongoing research on causes of intelligence, its relationship to other major aspects of human functioning, and its place in a description of ADHD, LD, schizophrenia, and other issues. Thus, assessing and describing intelligence is most relevant to understanding a child referred for underachievement, reading difficulties, or attention problems. This requires one to fully understand tests and the testing protocol as well as the psychometric underpinnings of the various measures we use as psychologists when engaged in assessment for purposes of diagnosis or program planning. I have administered hundreds of such tests during my time as a school and clinical psychologist and have taught psychological assessment classes, often with a strong focus on intelligence assessment to hundreds of graduate students over the years and several thousand psychologists at workshops across Canada and other countries.

This is but one small incidence in my applied work but like all, it had an impact on me and gave me even further reason to continue my research on intelligence and its assessment and to connect my observations with current theories of intelligence. Some years back, we formed a team of psychologists as well as speech and language and special education personnel to provide psychological and educational assessment and programs to First Nations schools and communities in Northern Saskatchewan. The team comprised of members of the Educational Psychology and Special Education programs at the University of Saskatchewan, including Dr. Vicki Schwan, Pauline Greenough, and Bob Brownbridge and usually several graduate students, traveled to the spread out communities as well as to the most remote areas (e.g., accessible by plane or driving across frozen lakes) where we were tasked with conducting psychoeducational assessments and developing programs for these First Nations students as well as consulting with teachers and parents and providing workshops to further facilitate our work.

On one occasion, I was flown to one remote small community that had a school of only several rooms. After landing on a frozen lake, I was taken some distance to the school and after introductions with the teacher, met with a young lad who had been referred for suspected low ability and the question of what would comprise the best program for him. He was rather shy and quiet when we met. I was told that he could speak English but also that his Native language was most often spoken at home. I decided to try some of the subtests on the current Wechsler intelligence test of that time along with some other measures (e.g., Matrices, PPVT). Of interest was his nonresponse to many of the verbal subtest items including questions such as "in what direction does the sun set" and his below-average scores on Binet-type tasks involving working memory related to following directions. The mazes subtest was administered and after a false start, and again showing him what was required, he achieved an average score. After about ½ an hour, the very young and acting principal came to the room and said I must leave immediately, a storm was coming in and the pilot would be leaving

very shortly to avoid being grounded in the remote area. I said goodbye to the child who left the room, grabbed my test kits, and went out the front door noting that the teachers and other children had already mostly departed. The temperature had dropped significantly, it was starting to snow quite heavily limiting vision and I then realized I had no idea where the frozen lake or plane was as there was forest all around us. How could I get to the plane in time to not be left behind and what if I went the wrong way in what was clearly a dangerous weather condition? As I stood there, the little boy who had left the school just after I walked out, saw me and I called out to him (with a touch of concern in my voice) and asked, “where is the lake ...where is the path to the lake to find the plane?” I quickly ran to him and repeated my question. He pointed to one of the openings in the trees, took a couple of steps in that direction, and said something like, “Go there... or that way.” I started to run to the spot he pointed to and told him to also quickly run home. He gave a small wave and walked away. It took me several minutes for me to reach the lake just in time as the pilot was turning the plane for take-off. Fortunately, the pilot saw me as I ran to the plane and we took off safely. As I reflected on this, and the child’s responses to the test questions, I was the one who didn’t know the directions to the lake and the boy he did not provide an answer to questions such as “in what direction does the sunset?” But he knew the direction to the lake and the path to take. I will leave you with this scenario and some points to think about such as just ‘what is intelligence’, how effective and accurate are our measures, was this test valid for children in all contexts and where culture, language and experience interact with how we define and assess intelligence, and how much emphasis would you give to his incorrect answer on the sun-direction question where estimating his ability level?

There is no question that the model of the current Wechsler scales, the CHC theory underlying the WJ tests, the Das-Luria model reflected in the CAS, or even the K-ABC have been extensively studied and certainly, the tests are powerful diagnostic tools and predictors relative to a wide range of human behaviors. But despite their backup standardization studies (i.e., the reliability of the WISC-V FSIQ is in the very high.9 range), and the extensive norming studies and tables and validation studies with both typical children and those presenting with exceptionalities, there is still room for critical thinking by the psychologist and the inclusion of both clinical modeling and prediction in what could most easily be directed only by “statistical and actuarial decision making. We know that the best psychological tests such as intelligence tests are as accurate and useful in their own way as the best medical tests (Meyer et al., 2001) and as Meehl (1954) argued, there is greater validity to statistical versus clinical prediction. But we also know that while intelligence has a strong hereditary basis, environmental factors, experience, opportunity, right down to nutrition and health are also key factors impacting the development and expression of intelligence. A fixed mindset can have an impact on predictions and thus diagnosis and program intervention. Remember that 100 kids all with FSIQ’s of 100 will still show considerable variability on something as relatable as school achievement and thus an

examination of patterns of strength and weakness, but also motivation to learn, support from the home, test anxiety and other factors can all have an impact on the individual. This is further reflected in my later description of the important studies by Weiss et al. that examine the effects of the environment on intelligence as we examine group differences.

Current Perspectives and Implications From My Research and Practice

It struck me relatively early in my career that we had lots of theory, and many studies describing human behavior, its causes, and correlates. The best psychology journals and the high quality books are just that, rich in content reflecting cutting edge advances showcasing the best that psychological science has to offer to clinical practices such as school psychology. At the same time, today's psychological literature is overrun with questionable social media posts and blogs as well as journals of unverified quality that seem to appear almost weekly and present endless 'studies' that vary in quality from absolutely worthless to absurd. Fortunately, my training and experience forcibly remind me to this day of the need for sound research that will yield evidence-based practices in all we know and do from assessment and intervention to wide-scale prevention and the methods and means for promoting mental health. Yet, the research literature often cannot describe just what to do that would work all of the time. I often struggled over the years of my career with the sometimes separation of Idiographic and nomothetic approaches to understanding human behavior just as I tried to find common ground between clinical versus statistical decision-making.

A foundational basis to my later research programs added to the search for those factors, both internal (e.g., brain-behavior correlates, genetics) and external (e.g., family factors, school climate, sociometric status) that would counteract or prevent psychological and physical ill-health and instead promote health and wellness. In some ways, hints of my earlier encounters with the writings from other areas within psychology (e.g., counseling, social psychology, cross-cultural psychology) and other disciplines (e.g., medicine, sociology, law), and humanistic and existential writers such as Fromm (freedom and belonging), Erikson (trust vs. mistrust to integrity vs. despair), Maslow (growth needs; self-actualization), and Rogers (core conditions of empathy, warmth, genuineness) kept creeping into my thinking as a researcher and practitioner. This was further linked with my interests and research more broadly on personality and specifically on stress, coping, mood, and resiliency. It has struck me from my earliest days in clinical practice in schools and various mental health settings that there was considerable variability in individuals relative to their self-management and reactions to what they perceived as challenging or even threatening to them. For school children and youth, threats to the self could be observed as test anxiety, fear of failure, isolation or feeling threatened by

others. For high school youth, it could be feelings of rejection, unpopularity, to leaving family and friends for university. Underlying these suggested variations across persons suggested differences in feelings of vulnerability and capacity or strength, and decisions and behavior resulting in giving up or overcoming. As graduate students, we would work with children who seemed fragile, uncertain, limited in their capacity to manage everyday stresses and strains, which in turn impacted their school achievement, interpersonal relationships, and left them feeling helpless, insecure, isolated, afraid. Others were happy, confident, secure, well-liked, leaders. Some came from difficult home situations or communities with restricted opportunities, others from secure and supportive family environments with social support networks that offered an even greater sense of feeling wanted, needed, of value; and that they mattered. Although trying to identify those factors that could negatively impact a child, concurrently was the identification of protective patterns and structures that conferred strength versus weakness whether in the child's cognitive profile or scores on an anxiety measure.

Furthermore, this variability within and between groups of individuals was observed in many of our research studies over almost 50 years, whether examining key individual differences factors such as personality and intelligence, or evaluating treatment studies such as the relationship of exercise on mood, or the effects of methylphenidate on the intelligence test performance of children with ADHD. The test manuals and research studies we used reported mean or average scores as well as standard deviations for large groups on normally distributed traits and human factors. It was these test score variations that allowed the psychologist to describe an individual's position on say an intelligence test relative to others and from there, draw from published research and the clinical knowledge gleaned from experienced practitioners to further determine what these scores, whether below, at, or above the average, meant in terms of other key factors, such as school achievement or interpersonal attractiveness or for a child with ADHD. Again, it was here that I came to appreciate more than ever the importance of research and evidence-based studies of intervention and prevention programs. But also there were too many instances where the fit of our clinical assessments did not unequivocally equate with an exact diagnosis, prescribed intervention or prevention program, or that the program that had success with some (e.g., CBT treatment of anxiety and depression) did not have the intended or desired effects in a particular case.

Based on the above experiences and observation, two conclusions came to the fore for me: the one described above where 100 kids all with IQ-s of 100 will still show wide variability in school achievement, interpersonal behaviors, capacity to manage stress, or musical skills. The other conclusion is that even our most psychometrically sound and best tests of some major factor like intelligence which is complex, important, and has more established correlates with other psychological factors as any other in the psychological tool kit, does not by itself explain more than a portion of the variance we are trying to describe or predict. Why do smart kids fail and drop out of university? Why is extraversion an important component of leadership but certainly far from sufficient to select leaders only on the basis of this factor? In the mid-1990s, an Israeli colleague, Moshe Zeidner, and I revisited the

question of the relationship and interaction between personality and intelligence with leading researchers. We recalled that in basic statistical analyses such as ANOVA, interactions trumped main effects but as the interactions became more numerous, the interpretability became less clear. The same occurred as we moved from laboratory studies to the practices of the school, clinical, counseling, industrial-organizational, and neuropsychology. With advances in data analyses, we now conduct large-scale studies using structural equation modeling, looking at how relationships between various factors are mediated or moderated by yet other factors. And together with more sophisticated research methods and the collaborative, multidisciplinary research projects both within the lab and the real world, the advances and contributions from psychology have been geometric in their impact on positive psychology over the past 20 years.

Besides the implications and applications of emotional intelligence discussed earlier, I will end here by briefly sharing two more areas of interest that have what I believe to be so very important in promoting psychological health, well-being, and flourishing children.

One area of study that drew my interest was resilience and resiliency. This emanated from earlier research on stress that included, for example, Harlow's studies of social isolation and maternal separation in monkeys, Seligman's research on learned helplessness with dogs, Selye's seminal model of the General Adaptation Syndrome describing the stages of alarm, resistance, exhaustion, and Lazarus and Folkman's model of stress and coping (harm, threat, challenge). These studies saw stress as the imbalance between what a person could manage, address or cope with and challenges ranging from mild to extreme that came from either within (e.g., fear for failure) or outside (e.g., threatened by a bully, war). Over time, I was drawn to the work on resilience and resiliency and descriptions of the resilient person. What factors determine a person's capacity to bounce back when confronted with some kind of adversity? What are the factors that would support, can be learned, or even predispose a person to manage their emotions or change their thoughts and behaviors to overcome the fear of failing an exam versus simply giving up or avoiding the situation? Thus, expanding my view of EI, resiliency, which includes coping, is closely linked with how we handle and deal with stress. As we well know, there are often several theoretical frameworks for defining key individual differences factors, what they are and how they impact behavior under typical and atypical conditions. Remember that a theory is neither right nor wrong, it is a collection of observations and empirical findings that describe some phenomenon (or factor like intelligence) and can be used to form hypotheses. The research on resilience has been increasing and the various findings have resulted in an increasing number of measures, in contrast, to say scales that assess depression as defined by the current DSM nosology where the number and degree of symptoms are clearly described. One such resiliency model was developed by Sandra Prince-Embury and I had the very good fortune of coming to know Sandra and collaborating with her on two books (Prince-Embury & Saklofske, 2013, 2014) and the extension of her resiliency scale to include young adults. Without going into detail of the theoretical underpinnings of the resilience model, very briefly it is described by three broad factors and

their facets Relatedness (optimism, self-efficacy, and adaptability), mastery (sense of trust, perceived access to support, comfort with others and tolerance), and emotional reactivity (sensitivity, recovery, impairment). Besides developing the upward extension of Sandra's resiliency scale for children, we have reported that resiliency is essentially a foundation for mental health across the age span. Interested readers are referred to our books and the published work of other key researchers and practitioners (e.g., Mastern, 2001; Masten et al., 2021; Ungar, 2018) to see the significance of resiliency in a description of individual differences.

A final example comes again from our intelligence research. Dr. Larry Weiss who has contributed so much to the development of the Wechsler intelligence scales, among many other areas, examined the standardization data of recent versions to further try to understand within and between-group differences. Recalling from our earlier work that education and affluence were key factors related to country differences in Wechsler tests scores, the reporting of group variations in intelligence in the United States raised similar questions about the underlying bases of these differences. Although intelligence score differences between African/Black, White, Hispanic/Latino Americans were observed in children-adolescents and adults, the question was why? Some theories, including those with an evolutionary basis, suggest that race was the underlying basis but a more careful examination of demographic factors that included poverty, nutrition, education, physical and mental health, income, SES, and so on could account for a large portion of these group differences, in some cases erasing them altogether (Weiss & Saklofske, 2020). The implications and applications are obvious. We have seen the implementation of several programs in the United States that included Headstart, Project Follow Through, No Child Left Behind, and the SEL (Social, Emotional Learning) curriculums which have shown varying results, but with growing support that when they address the issues identified in our and other published chapters and articles, the effects are indeed promising. How absolutely encouraging! I would again refer you to chapters in our Wechsler-focused books for an examination of these promising findings.

Future Research and Practice Applications

At this point, I feel like the stage actor who doesn't know when enough is enough and the director (in this case the editors) are signaling to cut. So now I shall 'really be brief'.

I have enjoyed a long and rewarding career in its many iterations from clinical practice to research because of the support, encouragement from, consultations, and collaborations with so many co-authors, colleagues, faculty, students, friends, and family. I thank you all. If, in some small way, whether through teaching in its many forms, research, clinical practice, or serving professional associations, I have contributed anything, the journey has then been both professionally and personally rewarding and worthwhile. I wish I had more to offer, but we have benefited so much from the great minds and humanists of the past and present and now the hope

and promise for a better future lie with those to come, our children, students, young researchers, and school, clinical, and counseling psychologists. To them, I pass this challenge that to date has not been fully addressed.

Stephen Hawking, a mathematics professor at Cambridge University and famous for his work in theoretical physics, posted this question on *Yahoo Answers* “Ask the Planet” campaign (July 2006):

In a world that is in chaos politically, socially, and environmentally, how can the human race sustain another 100 years?

References

- Georgas, J., Weiss, L. G., Van de Vijver, F. J., & Saklofske, D. H. (Eds.). (2003). *Culture and children's intelligence: Cross-cultural analysis of the WISC-III*. Elsevier.
- Kelly, I., Dean G. & Saklofske, D.H. (2020). Astrology for the physicist. *Physics in Canada*, 76(1), 28–34.
- Keefer, K., Parker, J., & Saklofske, D. H. (2018). *Emotional intelligence in education: Integrating research with practice*. Springer.
- Leschied, A. W., Saklofske, D. H., & Flett, G. L. (2018). *Handbook of school-based mental health promotion: An evidence-informed framework of interpretation*. Springer.
- Masten, A. S. (2001). Ordinary magic: Resilience processes in development. *American Psychologist*, 56(3), 227.
- Masten, A. S., Lucke, C. M., Nelson, K. M., & Stallworthy, I. C. (2021). Resilience in development and psychopathology: Multisystem perspectives. *Annual Review of Clinical Psychology*, 17, 521–549.
- Meehl, P. E. (1954). *Clinical versus statistical prediction: A theoretical analysis and a review of the evidence*. University of Minnesota.
- Meyer, G. J., Finn, S. E., Eyde, L. D., Kay, G. G., Moreland, K. L., Dies, R. R., ... & Reed, G. M. (2001). Psychological testing and psychological assessment: A review of evidence and issues. *American Psychologist*, 56(2), 128.
- Neisser, U., Boodoo, G., Bouchard, T. J., Jr., Boykin, A. W., Brody, N., Ceci, S. J., Halpern, D. F., et al. (1996). Intelligence: Knowns and unknowns. *American Psychologist*, 51(2), 77.
- Prifitera, A., & Saklofske, D. H. (Eds.). (1998). *WISC-III clinical use and interpretation: Scientist-practitioner perspectives*. Academic.
- Prifitera, A., Saklofske, D. H., & Weiss, L. G. (Eds.). (2005). *WISC-IV clinical use and interpretation: Scientist-practitioner perspectives*. Elsevier.
- Prifitera, A., Saklofske, D. H., & Weiss, L. G. (Eds.). (2008). *WISC-IV clinical interpretation and intervention*. Academic.
- Prince-Embury, S., & Saklofske, D. H. (Eds.). (2014). *Resilience interventions for youth in diverse populations*. Springer.
- Prince-Embury, S., & Saklofske, D. H. (Eds.). (2013). *Resiliency in children, youth and adults: Translating research into practice*. Springer.
- Saklofske, D. H., Austin, E. J., & Minski, P. S. (2003). Factor structure and validity of a trait emotional intelligence measure. *Personality and Individual Differences*, 34(4), 707–721.
- Saklofske, D. H., & Eysenck, S. B. G. (Eds.). (1988). *Individual differences in children and adolescents: International perspectives*. Hodder and Stoughton.
- Saklofske, D. H., & Zeidner, M. (Eds.). (1995). *International handbook of personality and intelligence*. Plenum.

- Stough, C., Saklofske, D.H. & Hansen, J. (2006). *Emotional intelligence: International symposium, 2005*. Croydon (Au.):Tertiary Press.
- Stough, C., Saklofske, D. H., & Parker, J. D. (2009). *Assessing emotional intelligence*. Springer.
- Tulsky, D., Saklofske, D. H., Chelune, G. J., Heaton, R. K., Ivnik, R. J., Bornstein, R., Prifitera, A., & Ledbetter, M. F. (Eds.). (2003). *Clinical interpretation of the WAIS-III and WMS-III*. Academic.
- Ungar, M. (2018). Systemic resilience. *Ecology and Society*, 23(4).
- Vesely, A., Saklofske, D. H., & Nordstokke, D. (2014). Ei training and pre-service teacher well-being. *Personality and Individual Differences*, 65, 81–85.
- Vesely, A.K. & Saklofske, D.H. (2018) Emotional intelligence and the next generation of teachers. In K. Keefer, J.D.A. Parker, & D.H. Saklofske, (Eds.), *Emotional intelligence in education: Integrating research into practice* (pp. 377–402). New York: Springer.
- Weiss, L. G., Saklofske, D. H., Prifitera, A., & Holdnack, J. (2006). *WISC-IV advanced clinical interpretation*. Elsevier.
- Weiss, L. G., Saklofske, D. H., Coalson, D., & Raiford, S. E. (Eds.). (2010). *WAIS-IV clinical use and interpretation*. Academic.
- Weiss, L. G., Saklofske, D. H., Holdnack, J. A., & Prifitera, A. (2016). *WISC-V assessment and interpretation*. Elsevier/Academic.
- Weiss, L. G., Saklofske, D. H., Holdnack, J., & Prifitera, A. (2019). *WISC-V assessment and interpretation* (2nd ed.). Elsevier/Academic.
- Weiss, L. G., & Saklofske, D. H. (2020). Mediators of IQ test score differences across racial and ethnic groups: The case for environmental and social justice. *Personality and Individual Differences*, 161, 109962.

Chapter 3

Mental Health, Culture, and School Misfits: An Approach for Creating Solutions for Children Who Do Not Fit into a Majority Society



Doris Páez

Abstract A clinical and practical approach is presented to guide the creation of solutions to the contemporary mental health, culture, and schooling needs of children that are culturally, linguistically, economically, or behaviorally divergent from any dominant societal group (e.g., mainstream, majority, majority-minority, growing minority, marginalized, normative groups). These children's needs must be viewed from a micro and macro-ecological systems lens that attends to these children's sameness more than differences and the equations of all the variables in their lives, as well as to community and school mismatches. The impact of diverse children's fit with instructional settings, intervention strategies, or important adults (e.g., teachers, therapists, medical personnel, guardians, parents, family members, and coaches) on their mental health and academic achievement are explored. Case studies, highlighting culturally attentive modifications to typical psychological prevention, evaluation, and intervention strategies for unique groups of children, including those who are multiple language learners, racially and ethnically diverse, have severe mental health issues, and have diverse gender identities will be interactively reviewed. Suggestions are offered to serve as information and inspiration for how psychologists can evolve their current practices so that they can simultaneously serve as diagnosis detectives, intervention consultants, teachers, and advocates, all in the pursuit of children's well-being and socially just treatment.

In this chapter, I present a process for working with children and adolescents who come from places, have life experiences, are being placed in, or find themselves in settings that make them misfits. That is, someone who does not seem to belong to a group or is not accepted by a group because of being different in some way (Macmillan Dictionary Definition). Misfit children include children and adolescents

D. Páez (✉)

South Carolina Department of Mental Health, Columbia, SC, USA

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who are culturally, linguistically, or behaviorally divergent from the mainstream or normative group. Examples of contemporary misfit children include youth that are English-language learners, racially and ethnically diverse, and diverse in gender identity and expression. It can also be said, that sometimes, it is not the child or adolescent that is the misfit, but rather it is the setting, intervention strategy, or the important people (e.g., teachers, therapists, medical personnel, guardians, parents, family members, coaches, etc.) in their lives who are not bad per se, but are not the right or best fit for a child, at a specific moment in time. Thus, the use of the prefix “mis-” in describing fit is used in this chapter.

In the year I was born, an animated TV special called “Rudolph The Red-Nosed Reindeer” aired on US television (Rankin & Bass, 1964). In this classic tale, the story of Rudolph, a reindeer who is born with a glowing red nose goes on a journey after being banned from participating for being different in an event reminiscent of the Olympic Games for reindeers. The journey takes Rudolph to the Island of Misfit Toys, an island populated by abandoned toys with idiosyncrasies. Toys such as a train with square wheels on its caboose, a plane that walks instead of flies, a water pistol that squirts jelly instead of water, a bird that swims instead of flies, and a cowboy who rides an ostrich instead of a horse. Together with those toys, Rudolph goes on to help Santa Clause save Christmas.

Twenty-two years later, armed with a Master’s and Education Specialist degrees in school psychology, I found myself interviewing for my first job as a school psychologist in a public school in Florida, USA. I spent a great deal of time during that interview explaining how English was my second language, was fully bilingual in Spanish and English, and specifically trained to conduct psychoeducational evaluations in both languages. I left the interview certain I would be given a school-based assignment that would use those experiences. In some ways, I was given the job I expected, but in so many other ways I was not. Instead, I was placed at two inner-city elementary schools that served primarily African American children and a large number of recent Haitian immigrant children. The latter group of students did not speak English or Spanish but spoke a creole language that was at that time primarily a spoken language and had experienced the trauma of crossing an ocean to reach a US shore. In addition, upon arriving at one of those schools, at the age of 22, I found myself sitting across from an educator who responded to my cheerful introduction as her school psychologist with, “I have been a teacher longer than you have been alive, what do you think you can do for me or the children here?” Thus, began my journey as a psychologist and the foundation for my clinical reasoning framework in service of those misfits. Armed with that experience, I returned to college and earned a doctorate in school psychology, and went on to the next 33 years of my journey. I now count with experiences working with infants to young adults, all constellations of family types, all possible psychiatric diagnoses and special education service categories, and a variety of settings where psychological services are offered.

Over the years, I had the privilege of teaching and supervising many graduate students from psychology, education, and medical professional schools. As the course, practicum or internship progressed, I found myself describing to students

my process from assessment to intervention for the misfit children. My process is one of detective work where reasoning process layers are added to the typical best practices of psychological assessment (e.g., use of reliable and valid instruments, direct observations, interviews, and comprehensive background gathering) and evidence-based intervention strategies and products that were taught in graduate school. The type of questioning and reasoning strategies presented in this chapter can lead psychologists to find useful insights and teach key findings in a manner that will lead to more contributions to a child's well-being than representing a system that does not fit all children.

Guiding Framework/Theoretical Approach for Mental Health Assessment, Prevention, and Intervention

The clinical reasoning process presented in this chapter has five guiding principles: (1) psychologists work for children and the important adults in those children's lives who are parts of or are touched by systems and institutions; they do not work for systems or institutions, (2) whatever psychologists do, they should be useful and add value, (3) if psychologists do it well, what they do is messy and complicated, (4) psychologists must keep current with the science and work on the art of the profession, and (5) psychologists should view themselves as both detectives and problem solvers.

Principle #1. Psychologists work for children. This is easy to forget at times given that there are potentially multiple and different targets, consumers, and employers seeking the products of psychological assessments and interventions. Understanding and identifying these groups is critical in guiding a psychologist through the clinical reasoning process. The process is sometimes hampered by worrying about the employer. The potential employers are not necessarily who pays us. In the case of misfit children, the psychologist must let go of that concern. To do so psychologists should view the clinical reasoning process through a system's approach lens. This lens should be calibrated such that it will serve the interest of and be useful to everyone in the child's system, including the: (1) child/adolescent, (2) family/parents/guardians, (3) educators, and (4) other relevant professionals (e.g., medical personnel, allied health professionals, caseworkers/managers, other mental health professionals). As part of the systems approach, psychologists first view the referral questions from each of those groups' perspectives and consider how they will interpret the responses given to those questions.

Principle #2: Be useful and add value. My father was a successful entrepreneur and businessman. I witnessed first-hand the difficulties of running small businesses. At the beginning of my psychologist career, I recall confidently stating to him that because I was going to work with and for children, I would not need business or political skills. He informed me that everything in life requires those skills. Because psychologists are paid by their time and not necessarily by the quality of their

products, are given exact templates to follow, or are tied to a specific technological platform to display their products, they fail to see the opportunity to be an innovator and a source of new ideas. To some degree, psychologists become passive consumers, product producers, and participants in practices that will not truly affect a child's well-being. It is incumbent upon psychologists to provide a level of practice that is significantly higher, more sophisticated, and much more valuable than any psychological services offered before they became involved in a case and to provide these in a way that helps other professionals in doing their job better (e.g., pediatricians, special education teachers, administrators, and mental health counselors) (Causadias et al., 2018; Nieto & Villaregio, 2020; Rahill, 2018). There are also several ways that psychologists add value to their products and services (e.g., reports, feedback conferences, consultations, and counseling): (1) increase delivery speed, (2) improve packaging and design, (3) simplify the method of use or increase the convenience of use, (4) improve customer service, (5) assess and address consequences of the interventions proactively, and (6) engage in public relations as new colleagues become a part of a child's team or a psychologist's team. For example, do not avoid difficult phone calls, provide feedback within a few days of service, do not avoid difficult statements, acknowledge the degree of difficulty in the lifestyle changes you are proposing for the lives of children and the important adults, make reports user friendly, and bring written conversation points to meetings.

Principle #3: To do it well means the work is messy and complicated. Although psychologists are trained on different psychiatric diagnoses and special education categories, they are less trained in the process of differential diagnosis. Moreover, the path from presenting problems to diagnosis to treatment is not as straightforward as it may appear. That path requires being comfortable with the messy and complex aspects of psychology, which is the overlap among diagnoses, the environmental and social context, and the connection among the presenting problems. For example, Smith (2018) describes the diagnostic difficulties associated with addressing repetitive behaviors of individuals with autism spectrum disorder (ASD). He indicated that these behaviors are often minimized as being obsessive or compulsive features of ASD, which reflects a misunderstanding of the connection between obsessive-compulsive disorders (OCD) and ASD. Additionally, both disorders have specific diagnostic criteria that lead to different treatments. Repetitive behaviors may also be the result of another neurodevelopmental disability (e.g., intellectual disability). The behaviors may reflect the impact of ASD and have nothing to do with OCD for some individuals, while for others the behaviors may result from OCD and have nothing to do with ASD. Finally, for some individuals, ASD and OCD may co-occur, and some instances of repetitive behavior may be due to one disorder while other instances of behaviors are caused by the other disorder. It is also possible that some behaviors may be impacted by the interaction of these disorders, such as the anxiety-producing features of becoming overwhelmed.

Principle #4: Keep up with the science and work on the art of the profession. Psychologists should address the messy and complicated so that they offer a higher level of sophistication, wisdom, and understanding about a child or psychological services. Such an offering requires homework, additional research, or advanced

training. It has been recommended that psychologists, who are a part of school-based or school-affiliated mental health movements and services, increase their training to be specialists in one or more areas (Splett et al., 2013). If it is not obtained in graduate work, then psychologists must view each case with a misfit child not as reaching the scary cliff end of their expertise but as an opportunity to grow. Misfit children such as those with severe mental health issues or severe emotional disturbances (e.g., psychosis, personality disorders, post-traumatic stress disorder) require that psychologists increase the scientist part of the scientist-practitioner equation. Studying the literature and seeking out mentorship cannot stop when degrees are earned or internships are completed. Each time a psychologist has a more complex case, it should be viewed not as troublesome but as an opportunity to research and attempt new approaches. Any case of a misfit child or any environmental condition impacting a community should be viewed as a call to get another continuing education unit in that area (e.g., acute or post-traumatic stress disorder following natural disasters, race-based traumatic stress). Psychologists' clinical reasoning can also be enhanced by making the time to visit inpatient hospitals, intensive outpatient units, community health centers, and specialized mental health practices in your communities. The more work the psychologist puts into the science the more the art of the profession will emerge.

Principle #5: It is detective work. Psychologists will enjoy the work most if they view it as investigative or detective work that is required to solve the most challenging problems. Like detectives, psychologists must be able to analyze the complex problems of the misfit child and be able to generate strategies to improve the fit. Critical thinking is important to reach logical conclusions based on the evidence. Detectives must use these skills to remove personal prejudice and opinions and objectively investigate cases. In addition, detectives must make sound decisions when interviewing children and important adults and pursue the leads or insights those conversations produce. Psychologists must go beyond the generalities provided by many of the objective measures and records reviewed and attend to details. To the degree possible, ensure that nothing is missed in the investigation. Psychologists must also become adept at finding information in medical, social work, and school records that are relevant to the case. For example, because a child from a bilingual home is doing well in their English-language conversational skills and meeting basic grade requirements, psychologists should not gloss over that information and carefully consider the impact of other languages and other cultures on the child. Psychologists working with unique child populations, therefore, should seek to understand the personal culture of children. One possible way to do this is to use a framework such as the Personal Culture Framework by Fletcher-Carter and Páez (1997). This framework, which was originally designed to address the needs of rural deaf children from diverse cultural and linguistic backgrounds, highlights how to find the context or aspects of culture that may be the causal reason or contributor to why a child is a misfit. In that framework, it was recommended that special educators and support personnel explore beyond the superficial language and cultural variables of children and explore variables related to the following: (1) values and behaviors, (2) sense of group membership, (3) experiences of minority status, and

(4) transforming life events. These variables would be studied not only for the child, but also across the contexts of the family, neighborhood, community, and school. These variables can be explored by using cultural brokers or individuals who can provide information on the variables such as parents, other family members, community members, and minority-group school personnel. Intervention strategies would then address those variables that are not shared across contexts.

Perspectives and Approaches Relative to Mental Health Assessment

Like any process, the clinical process described in this chapter is rooted in *whys*, *whats*, and *hows*. In his Golden Circle model, Simon Sinek (2009) states that businesses and leaders must first have clarity on their “*why*” and then align the *hows* and *whats* to that *why*. The *whys* in that model involve what your cause is or what you believe. The *whats* are the results or outcomes of your *hows* or your processes. Furthermore, Sinek suggests that your *whats* and *hows* can change over time depending on technological advances, customer, and market needs. This model can serve psychologists well in their clinical reasoning process as they work through the thinking, objective decision-making, and subjective judgments required to take a case from assessment to intervention.

First, psychologists must have clarity as to their *whys*. When you are a graduate student or novice psychologist, the answer to the *why* do we do what do question comes easily. It is usually some derivative of “to help children and families.” As we progress to mid- and late-career, the answer can become a little less clear and we tend to describe the *whats* and *hows*. The *why* of psychological assessments and services is to teach and inspire action that will promote the well-being of children. The *what* of the process is to answer questions. Specifically, in the evaluation realm, the job of the psychologist is to provide answers and insights into why there is a misfit for the child in their mental health, academic, or community status. The process of improving or finding the right fit flows from those answers and insights. The *hows* are the products and services that deliver that outcome. In psychology, these include assessment strategies, reports, evaluation feedback sessions, consultation, intervention modeling sessions, and counseling. These will be elaborated in the next sections.

Teaching should be the way in the clinical reasoning process. To some degree, all psychologists, but particularly those addressing the well-being of misfit children, must see their role as one of teaching. Here teaching addresses psychologists’ opportunity and responsibility to:

- Cause important adults to know something such as gaining insights to the psychological assessment and evaluation and clinical reasoning process.
- Know and understand the interpretation of test results or clarity of recommendations.

- Assist others in becoming comfortable with a diagnosis, such as that involved in explaining gender dysphoria in youth to important adults.
- Cause to know the disagreeable consequences of some action, such as when a parent refuses to set limits on a child with addictions.
- Guide the additional assessment and investigation of the target child when the clinical reasoning process did not lead to a conclusive answer.
- Impart the knowledge of the relevant disciplines that are not common, such as language acquisition for ELLs, the role of adaptation in family systems theory in the case of children with Reactive Attachment Disorders, and implications from neurology about brain injuries.
- Instruct by precept, example, or experience in the consultation process.
- Make known and assist with acceptance as in the case of explaining the implications of schizophrenia.
- Conduct instruction regularly as in cognitive behavioral therapy.

Evaluations are sought because there are questions to be answered. Thus, clarity on the questions that guide psychological evaluations and assessment strategies should be carefully crafted such that they can evolve into helpful evaluation feedback sessions and psychological reports. The questions vary depending on the source of the questions (e.g., directly or indirectly involved person, layperson, or professional). The questions can be: (1) general or specific, (2) about a child or an intervention/treatment strategy, (3) spontaneously generated or based on the requirements for completing an institution's forms, (4) abstract or concrete, or (5) one question versus many questions.

Ultimately, the questions are about improving a child's well-being. There is no consensus around a single definition of well-being, but it is generally described as having higher life satisfaction and good feelings. Well-being involves having positive emotions and moods (e.g., contentment, happiness) versus negative emotions (e.g., depression, anxiety) and fulfillment (CDC, 2019). Several types of well-being have been identified in the literature, including: (1) physical, (2) economic, (3) social, (4) development and activity, (5) emotional, (6) psychological, (7) life satisfaction, (8) domain-specific satisfaction (e.g., school and home life), and (9) engaging activities and work. Which should we consider for misfit children? We should consider and address all of these in our strategies for gathering background information, selection of assessment strategies, interpretation of assessment data, and feedback of results. If psychologists do not capture how children and adolescents experience their lives from their own perspectives (i.e., well-being report), then there is little opportunity to assess the benefits of preventative and direct services.

Well-being should also be considered not just in terms of the present moment but as much as possible, the someday, or the future (CDC, n.d). Faced with caseloads and backlogs, it would be easy for psychologists to view their work as being part of just a present moment and to neglect the potential for them someday. Our answer to the questions (e.g., results descriptions, interpretations, opinions) and services will be linked to the misfit child or situation in the present, but we must be cognizant that it will also be linked to other future efforts and outcomes.

Regardless of who we work for, the answers to the following referral reasons must be sought for misfit children: (1) differential diagnoses, distinguishing between two or more closely related diagnoses, (2) comorbid presentations, describing the interaction between two co-occurring conditions, (3) rule outs, confirmation, or disconfirmation of particular disorders, (4) narrative description, traditional, descriptive, and personalized reporting, (5) program entrance and accommodations (e.g., learning disabilities, gifted, Educational Testing Services Accommodations, child study team assessment, and college special education), (6) developmental and intellectual disabilities (e.g., Autism Spectrum Disorders, Intellectual Disability), (7) legal and vocational (e.g., custody, competency and guardianship decisions, health insurance continuing adult dependency, vocational screening), and (8) mental health and psychological disorders (e.g., behavioral disorders, personality disorders, inattention, mood disorders, anxiety disorders). From the referral, reason flows the referral questions.

Because effective teaching requires trust, psychologists must also be cognizant of the role trust plays in their work. I contend that trust leads to greater engagement, increased validity of results and a higher likelihood that recommendations will be followed. One useful way to conceptualize trust is not as an either-or (i.e., you have or do not have trust) but rather consider that there are different types of trust. Researchers and practitioners in business, leadership, and counseling have consistently described the pillars or core elements of trust as being: competence, consistency, and character (Rothernberg et al., 2013). In addition to these three C's, clarity, contribution, commitment, compassion, and care are also noted as trust types. Earning trust does not mean that others must or will agree with us but rather that we will have earned their trust in our efforts. Moreover, psychologists must also demonstrate that they considered how trust works or does not work in the life of a misfit child and the important adults.

We can start earning trust by explaining to the child, as developmentally appropriate as possible, and to the important adults our roles, responsibilities, and limitations. The second step in building trust comes from how we start our conversations with ourselves about a case, with the target child, and with the important adults. First, in talking to ourselves, we must reiterate what the referral questions are, generate any additional questions that stem from the referral questions, and plan an approach for answering the questions. When talking with children, we must tell them what the goal of the evaluation is and we must share what level of confidentiality they are afforded. The latter is also shared with adults. The following are the three conversation starters I have used the most when talking with important adults, (1) our children are the best of us and worst of us. Which are we dealing with? (2) it is usually not just one thing; there is an equation to each person's life and I need your help to understand the equation for this child and your equation as it relates to this child, and (3) we are all like most people, like some people and like no one at all, help me understand those aspects of this child.

The next step in trust is how we conduct ourselves. The last step is how we handle the truths we have uncovered during our process or case detective work. Among my many passions is dancing. However, as much as I love to dance

physically, I have found we should not dance when it comes to the truths. Psychologists should teach or counsel in a way that provides guidance to the child, if developmentally appropriate, and to the important adults in that child's life. Provide preventative or direct interventions that are specifically designed, strategic, and practical.

In 1966, Maslow stated, *"I suppose it is tempting, if the only tool you have is a hammer, to treat everything as if it were a nail."* The demands of the psychologist's job make it such that it is tempting to see all children as a nail and all evaluations as a hammer. However, when you are working with misfit children, you are challenged to be creative, expand the knowledge base and learn new tools, or integrate existing knowledge in new ways.

There is power in learning to use many different assessment tools and strategies. Moreover, evaluations of misfit children, at times, require us to call upon knowledge gleaned from other disciplines such as (1) forensic psychology, (2) community psychology, (3) counseling psychology/counselor education, (4) neuropsychology/neurology, (5) psychiatry, (6) rehabilitation psychology, and (7) pediatrics and pediatric subspecialties (e.g., adolescent medicine, developmental pediatrics).

Case Studies

The choice of assessment strategies flows from the questions about the child and the consumers of our results. Then you put your detective skills in motion for interpretation. Most psychologists and systems have generic reasons for referral, the reason for evaluations, or presenting problems sections that may or may not be written to be more personal for each child. However, the six examples of the referral questions presented below represent simple modifications of the traditional psychological evaluation questions that offered as alternatives that can not only meet legal requirements but also assist with clinical reasoning, guide assessment strategies, improve the organization of assessment results, include contemporary social justice issues, lead to more effective evaluation feedback sessions, enhance our service delivery models, and increase the probability of impactful direct services (e.g., modifications, accommodations, and counseling) for misfit children. The questions are:

1. What diagnoses were considered and what is the diagnostic basis for the behaviors noted?
2. What are the contributing factors (e.g., timing, learned behaviors, life experiences) to the child's well-being (i.e., psychological and school life)?
3. What role do trust, stress, motivation, and need for control play in the child's life?
4. Are the behaviors noted a function of or exacerbated by cultural and/or linguistic differences?
5. Is the child amenable to behavioral change? What would behavior change require?

6. What specific domain (e.g., behavior, academic subject area) or environment (e.g., school, home, work, vocational, extra-curricular, peer group) interventions are recommended?

In the next section, case excerpts for each of these referral questions are presented to illustrate the assessment strategy and linkages to prevention and intervention.

Referral Question #1: What Diagnoses Were Considered and What Is the Diagnostic Basis for the Behaviors Noted?

Case Excerpt

An eleven-year-old Hispanic male resides with his legal guardians and are his non-Hispanic biological mother's relatives. He demonstrated increasing behavioral difficulties including lying, stealing, and hurting his younger brother. He has a history of significant neglect and suspected physical abuse, as well as multiple changes in his home life, variability in his adjustment to various home situations, which made it imperative that a differential diagnosis evaluation be obtained to rule out conduct disorders, mood disorders, thought disorders, ADHD combined, and reactive attachment disorder. His guardians, pediatrician, teachers, and counselor need a differential diagnosis to provide appropriate instructional, therapeutic, and medical interventions.

Reasoning Strategy

This type of differential diagnosis requires that his cognitive ability, processing skills, academic skills, and social-emotional status be evaluated. The following key results were considered for a differential diagnosis:

- Overall cognitive ability = average
- Verbal cognitive ability = above average
- Strong vocabulary that can lead adults to believe he can do more or understands more than he does.
- Nonverbal reasoning = average
- Spatial skills = borderline-low average
- Immediate and delayed recall is average, but weaker if he must attend to more complex features.
- Recognition is average.
- Attention and Concentration = average
- Attention and concentration problems appear to have an emotional and mood regulation basis.
- Visual and motor skills = average.

- Reading comprehension = above average
- Spelling and written language = average
- Internal emotional tug-o-war
- “Non-stop” inner speech
- Continuous verbal associations to verbal input and to visual input
- Significant historical information:
 - Defiance
 - Not responding to consequence
 - Strong need for approval
 - Strong need for control
 - Aware of right and wrong
 - Trauma
 - Abuse/neglect history
 - Older of the two siblings placed with guardians.
 - Lying
 - Some intentional hitting of younger brother.

Answer

More than 26 diagnoses and combinations of diagnoses were considered including, Attention Deficit Hyperactive Disorder, Reactive Attachment Disorder (progression), cognitive/information processing issues, Mood disorders (e.g., major depression vs. persistent depression (dysthymia) vs cyclothymia; Dysregulation), anxiety disorders, and personality disorders. Taken together, the behaviors are most consistent with the diagnosis of Cyclothymic Disorder (F34.0). Based on this referral answer, interventions were focused on educating the caregivers on the chronic nature of the disorder and it was impressed upon them that without consistent psychotherapy and school-based monitoring, there could be potential short- and long-term consequences such as a life-long battle with low self-esteem, interpersonal relationship difficulties, substance use and abuse, academic declines, and an increased risk of suicide attempt. Family therapy with his guardians was recommended to help guide the management of his supervision and connections within the home as well as guide the relationship with family members. With regard to the lying and hurting of his brother, it is recommended that family members use a “walk me through it” approach where he would be asked to describe what happened before, during, and after you took something or hurt someone. It was also stated that he would not likely respond to typical behavior modification/consequences and is in need of strategies that support his perception of shared control (e.g., he has some and the adult has some) such as “time-ins” (sit with the adult nearby as opposed to time out) and “you decide the punishment” strategies. He would also not likely benefit from traditional talk therapy unless he trusted the therapist fully. Any therapist working with him was told they would need to work to gain and keep that trust by being consistent and keeping sessions active. To this end, Dialectical Behavior

Therapy (a form of Cognitive Behavioral Therapy) was the therapy strategy of choice recommended provided to ensure that he would see the therapist to be an ally. Goals for therapy were also shared, including learning how to: identify and share feelings of fear, stress management including management of extreme emotions, fear, and anxiety, with relaxation techniques and self-soothing activities, talk/think through the messages that he received post the abuse and neglect and how this impacts current emotions and behaviors, teach emotional regulation to continue to build his trust in guardians and other family members, improve communication skills, increase prosocial skills, and building self-esteem.

Referral Question #2: What Are the Contributing Factors (e.g., Timing, Learned Behaviors, and Life Experiences) to the Child’s Well-Being (e.g., Psychological and School Life)?

Case Excerpt

A 9-year-old, the only child of older parents, white, male child was referred for a psychoeducational evaluation for the following reasons: (1) reading level below expectancy for current third-grade placement, (2) the school asked the parents to seek an external evaluation and the pediatrician, referred him, (3) considerable difficulty adjusting to various academic demands, (4) mild anxiety symptoms, and (5) difficulties at times managing his reactions when he feels his abilities are being questioned or he is being disciplined.

Reasoning Strategy

- Conduct the background history investigation using a timeline that starts at the current year and working backward to birth addresses all aspects of a child’s life experiences, including significant factors in the medical, school, family, and peer relationships. To quickly convey the relevant timeline points in a presentation to the guardian and school-based and other colleagues, a table was generated with the following headings; Age, Medical (for key medical information), School (providing the year and key descriptors of school performance or school setting issues), home/family life, and peer/socialization observations (see Table 1).
- Explore the personal culture of the child and the child’s environmental contexts.
- Identify cognitive and academic strengths and challenges.
- Assess attention and concentration directly by using objective measures such as the Conners Continuous Performance Test, 3rd Edition (CPT-3) or the Attention and Concentration scale of the Wide Range Assessment of Memory and Learning, Second Edition (WRAML2).

Table 1 Relevant Factors Timeline

Age	Medical	School	Home/family	Peers/socialization
9	No physical or psychological trauma Tonsils removed Generally healthy Wears glasses Tubes placed in his ears	3rd grade Described by his mother and teachers as wanting to “play the role of quiet child” and student	Spends considerable time with maternal grandparents	Plays little league baseball
8		Second grade Teachers began to note concerns about reading and spelling delays		Some teasing from a specific peer, but addressed
7		1st grade		
6		Did well during Kindergarten and first grade Kindergarten		Played well with other children, but did okay by himself as well
5		Preschool		
4		Preschool		
3	• All developmental milestones were met within normal limits	Daycare		
2		Daycare		
1		Daycare	Resides with both biological parents who married, college educated and employed outside the home	
0	• Product of a normal pregnancy and birth • Mother describes that she and her husband were “older” parents • Jaundice at birth and received 48 h of light therapy		Only child	

Answer

The following are the contributing factors to the child’s well-being (e.g., psychological and school life):

- **Gaps growing.** Because new skills need to be based upon already mastered concepts. It has been difficult when most of the class has already mastered a concept and is moving on, while he has needed more time. This led to gaps in knowledge and basic skills. The more gaps in a content area, the more challenging it has been for him to learn new concepts.

- **Setting demands.** The demands of the second grade and now third grade in the structure of a private school are considerably harder for him than many of his peers and this led to an increase in avoidant-type behaviors. Difficult with penmanship and written language also made day-to-day school work more challenging and contributed to avoidance.
- **Academic impendence requirements.** Because he had excellent support from his parents and teachers to aide, he was able to master some basic reading and mathematical skills. However, as he progressed through primary grades and now at the intermediate level, the increasing demands on his independent writing skills have led to falling further behind.
- **Learned avoidance.** He is aware of his weaknesses and is struggling and self-confidence at times can be an issue. The child's difficulties led to some anxiety, low self-image, and he looks for ways to be allowed to give up. At this time, the child continues to view himself and school positively, but this should be carefully monitored as he progresses through school. There is a tendency for children with his profile to feel less capable than peers and get to the point he may dislike school. School can be draining because he may spend all day doing something that is difficult.
- **Emphasize strengths to increase moments of success.** He would benefit from participating in school and extracurricular activities in which he can be successful. There should be an emphasis on his strengths as well. For this child, his strength is the knowledge base that he has and his ability to pick up on context cues when he is reading.

Referral Question #3: What Role Do Trust, Stress, Motivation, and Need for Control Play in the Child's Life?

Case Excerpt

Fourteen-year-old, African American, female, sexually abused by a maternal grandfather who was a religious leader, not completing school assignments, history of non-suicidal self-injury (i.e., cutting), and self-identification as transgender.

Reasoning Strategy

- Include questions during the diagnostic interviews of the child and important adults regarding trust, stress motivation, and need for control.
- Potential interview questions for children include:
 - Do you have any teachers who understand you? Or look for information embedded in self-report data such as the responses addressing attitude toward school, teachers, and parents of behavior rating form such as the Behavior Assessment for Children, Third Edition.

- What have you heard about racism?
 - What have you noticed happening to you when you hear about racism?
 - Do you notice that you are overreacting or having certain expressions in your body, thoughts, and feelings?
 - What is stress?
 - How do you manage stress?
 - What is your favorite thing about school? What is your least favorite thing about school?
- Administer a measure of exposure and perceived impact of traumatic events such as the Childhood Traumatic Events Scale and Recent Traumatic Events Scale (citation).

Answer

Trust, stress, motivation, and the need for control play a significant role in her behaviors. To a large degree, her anxiety and self-harm stem from her need to feel in control. She is experiencing the stress of living in a highly religious home and is still exposed to the home where she was abused. She is also experiencing considerable racial stress and has difficulty mediating that stress. She has difficulty trusting adults and is seeking ways to fit in with her peers. She is not motivated by academic accolades but rather the level of interest peers show in her dress and personal style. Assisting her and her guardians with education about transgender issues and post-traumatic disorder behaviors were recommended and used. Therapy also focused on effective communication that maintains child-adult boundaries was also recommended.

Referral Question #4: Are the Behaviors Noted a Function of or Exacerbated by Cultural and Linguistic Differences?

Case Excerpt

A ten-year-old, deaf, recent immigrant from rural Mexico who had never attended school and had been enrolled in a special education program for deaf children in a rural school in the Southwest region of the US. The child, two younger siblings, and parents resided with a sponsor family. The child had been extremely hesitant to engage in any activities, including eating in the sponsors' home or school cafeteria.

Reasoning Strategy

- Explored the personal culture.
- Attempted, but did not score formal measures of cognitive or academic abilities.

- Used developmental teach-test-teach strategy to obtain a baseline estimate of cognitive abilities.
- Obtained background information and behavior-specific via interviews with the important adults including members of the immediate and sponsor family.
- Contrived a play situation and observed interactions with his siblings.

Answer

Being deaf was established medically. The child's behavior is a function of and exacerbated by the limited educational experiences with sign language, a formal communication system, or formal education. He appeared to be of at least average intellectual ability and caught on quickly to teaching items. The rurality of the community was presented as a positive aspect and point of connection for school staff, the child, and the family. The primary intervention recommended and used was to provide education about the child's ecosystem, selecting only a few objectives, making a trusted community members as a liaison between the school and parents, and brainstorming with the school-based staff how to provide select, plan, and provide instruction for a select set of curricular objectives that would move him faster to the next levels of education.

Referral Question #5: Is the Child Amenable to Behavioral Change? What Would Behavior Change Require?

Case Excerpt

Seventeen-year-old, white, Hispanic, male, attending a prestigious private high school. His friends are the children of wealthy community members. He does not identify as Hispanic because he does not have a relationship with his biological father who is Hispanic. Mother is a white, business owner, and is fluent in Spanish. He was referred for a psychological evaluation due to problems with; (1) reading and critical thinking for comprehension since sixth grade, (2) refusal to read textbooks and use summary study guides instead, (3) excessive worrying, (4) variable motivation noted for the past 2–3 years.

Reasoning Strategy

- Gather background information from the child, parent, teachers, and records using a year-to-year approach records review.
- Observations during a conversation with the mother where they were given several conversation starters and then during the evaluation.

- Neuropsychological testing includes the Trail Making Test, Stroop Color Word Test, Beery-Buktenica Developmental Test of Visual Motor Integration (VMI), Wide Range Assessment of Memory and Learning, Second Edition (WRAML-2).
- Cognitive testing using the Differential Ability Scales, Second Edition (DAS-2).
- Achievement testing using the Wide Range Achievement Test, Fourth Edition (WRAT-4).
- In-depth personality measures including the Minnesota Multiphasic Personality Inventory, Second Edition, Adolescent, RF (MMPI-A, RF) and Behavioral Assessment for Children, Third Edition (BASC-3), Self, Parent and Teacher Forms.

Answer

He is amenable to behavioral changes provided interventions are focused on his need for control and mood regulation. Individual counseling using cognitive behavioral therapy to manage his worrying, variable motivation, and intentionality in his life is highly recommended. However, disaffiliativeness (i.e., tendency to disengage, separate himself, and not trust) may interfere with establishing a therapeutic relationship. His behaviors appear to also be a function of his personality style and habits. He would benefit from structure and a consistent schedule. While he is engaged in activities and interacts with many persons in a variety of environments, he presented as an individual who seems to be going from one thing to another as they appear and to participate in all aspects of his life with limited intention; almost as a spectator as opposed to truly managing his life.

Referral Question #6: What Specific Domain (e.g., Behavior, Academic Subject Area) or Environmental (e.g., School, Home, Work, Vocational, Extra-Curricular, Peer Group) Interventions Are Recommended?

Case Excerpt

A 5-year-old, African American, female attending a Montessori-based Kindergarten program. Single mother business owner. She was enrolled in the same Montessori program for preschool last year. In Kindergarten, she displayed difficulty acquiring early literacy, basic math, and copying skills.

Reasoning Strategy

Gather background information that addresses the match between this child's cognitive, academic, and behavioral tendencies and preferences and the philosophy, requirements, and teaching strategies of the specific Montessori program she attends.

Answer

As a result of exposure, this student speaks or acts in ways that make adults believe she has much stronger higher order thinking or reasoning skills than is actually the case. Her profile suggests that school will be more challenging for her than for her typical age and grade peers when learning new concepts. New skills need to be based upon already mastered concepts. This can be difficult when most of the class has already mastered a concept and is moving on or she is asked to learn independently. This can lead to gaps in knowledge and basic skills. The more gaps in a content area, the more challenging it is for her to learn new concepts. She is increasingly aware of her struggle with learning and this tends to make her look for ways to get out of doing or performing academic tasks and to quickly give up.

The best strategies for teaching her will include:

- Repetition, repetition, repetition.
- Concrete learning and teaching approach that connects the dots for her instead of expecting her to grasp these on her own.
- Experiencing a success to keep her engaged and connected (i.e., less avoidant) before asked to do a more difficult task.

She is in need of a consistent and structured behavior system across all important adults and settings. Once a system is decided upon, she will require direct instruction in that system and practice. She would also benefit from practice with sustained effort. She will do best with one-step directions and one direction at a time. When she has finished with a task she should report to the adult caregiver and be rewarded with specific verbal praise (e.g., you put your shoes in the right place). Consequences and rewards should also be consistent with those offered in the school setting. Her daily schedule is also affecting her ability to focus and sustain attention. She will need practice staying seated as she progresses through the elementary grades. Thus, it is recommended that at home and at school a timer be used to help her stay in a seat or in an area for short periods of time (e.g., 3 min to start and building up to longer time frames). She would also benefit from direct instruction and practices on how to play with others and boundaries with children and adults.

At times, psychological testing will fail to find the answer to the referral question. In those cases, the psychologist answer should include “I am not sure” or “I don’t know”, followed by “but here is what I suggest is done to figure it out.” Thereafter, the psychologist should make every effort to provide appropriate referrals to other professionals and give specific guidance for additional assessments or procedures that can provide the answers sought (e.g., a year of third grade using a sight word approach, using the test data as a baseline and retesting at a later date).

Perspectives and Approaches to Mental Health Prevention and Intervention

An evaluation feedback session or a psychological report should be about teaching about the results of your detective work. Moreover, it should inspire action. For efficiency's sake, report templates have become the norm. They can be generated solely by computer programs. However, for misfit children, all templates and feedback formats must be adapted. Clear written and oral feedback is the psychologist's greatest product. Written communication in the form of clear and useful reports, as well as proper documentation in counseling and consultation, are essential. Reports are not only for meeting documentation or legal mandate. They should convey information that walks a reader through the process of evaluation and provides guidance on the results of the evaluation. Excellent oral communication also is critical to being a successful psychologist. It is important to ask clear questions and actively listen to the answers so that no details are missed. Psychologists must also listen for inconsistencies or missing pieces in the information that a child or important adult is presenting. For example, in the case of a child who has parents with joint or partial custody, both parents must be interviewed. Efforts should be made to have additional meetings or phone calls to interview the other important adults in the child's home life. Often, for efficiency's sake, psychologists get only one side of guardianship or parental story. Sometimes the version of that story is not completely accurate. Moreover, if at all possible, one should seek to get all of the important adults in a child's home life to participate in feedback on the insights gleaned from the evaluation or the recommendations offered. For example, if only one parent is attempting a recommended behavioral intervention, then it could be undermined if the second home the child resides in because of a custodial arrangement does not follow the same behavioral strategy.

Reading body language is another important part of communication and helps in identifying what the child and important adults are experiencing during the assessment and feedback process. In the era of virtual meetings with important adults, word choice by all parties should also be considered as a clue to understanding a child and the environments he operates in.

In addition to the basic areas of reports and styles for data reporting, careful consideration should be given to psychological report features. There are some essential questions, that psychologists should ask themselves when writing a report or providing feedback about evaluation results (Ackerman, 2006). First, while I always provide feedback to key individuals about the evaluation (e.g., the child, the important adults), it is often the case, that because of logistics (e.g., being the only bilingual school psychologists serving over 100 schools, private practice hours), I cannot be a part of additional conversations about a case. Thus, I learned to set up my evaluation feedback opportunities including my reports in a way that answered the following:

1. If my report has to speak for me without me, how will it be "heard"?

2. If I was given only 5 min to say something about a child, what would I say?
3. Is there are at least one recommendation that is clearly specific to the child and demonstrates the individualism of the evaluation?

Conclusion

The clinical process pieces presented in this chapter are not necessarily new, what is new is the mindset that psychologists are asked to take so that they can increase the possibility of more socially just assessment and intervention processes. The approach presented here is also meant to transform psychological practice so that it leads to teaching and advocacy in ways that will truly enhance the lives of children. This will require that psychologists be willing to be more multi-culturally attentive, focused on child-wellbeing, and rephrase referral questions using a consumer-oriented lens. Psychologists must be willing to shine a light on the pieces that do not fit—the misfits between individuals and systems.

References

- Ackerman, M. J. (2006). Forensic report writing. *Journal of Clinical Psychology, 62*(1), 59–72.
- Booker, I. A. (1923). The child who is a misfit. *Elementary School Journal, 29*(2), 140–146.
- Causadias, J. M., Vitriol, J. A., & Atkin, A. (2018). Do we overemphasize the role of culture in the behavior of racial/ethnic minorities? Evidence of cultural (mis) attribution bias in American psychology. *American Psychologist, 73*(3), 243–255.
- Fletcher-Carter, R., & Páez, D. (1997). Exploring the personal cultures of rural deaf/hard of hearing students. *Rural Special Education Quarterly, 16*(2), 16–23. <https://doi.org/10.1177/875687059701600204>
- Lamber, M. C., Garcia, A. G., January, S. A., & Epstein, M. H. (2018). The impact of English language learner’s status on screening for emotional and behavioral disorders: A differential item functioning (DIF) study. *Psychology in the Schools, 55*(3), 229–239.
- Maslow, A. (1966). *The Psychology of Science*. New York: Harper & Row.
- Nieto, A. M., & Villarejo, M. R. (2020). Influence of experience on the thought process of clinical psychologists: An analysis from the Dual-Process Theories Framework. *Spanish Journal of Psychology, 23*, 1–9.
- Rahill, S. A. (2018). Parent and teacher satisfaction with school-based psychological reports. *Psychology in the Schools, 55*(6), 693–706.
- Rankin, A., & Bass, J. (Producers), (1964, December 6). *Rudolph the red nose reindeer* [Television broadcast]. Videocraft International.
- Rotenberg, K. J., Petrocchi, S., Lecciso, F., & Marchetti, A. (2013). Children’s trust beliefs in others and trusting behavior in peer interaction. *Child Development Research, 2013*, 806597. <https://doi.org/10.1155/2013/806597>
- Sinek, S. (2009). *Start with why: How great leaders inspire everyone to take action*. Portfolio/Penguin.
- Smith, P. (2018, April 1). *Understanding the relationship between Autism, OCD and repetitive behaviors*. Retrieved November 3, 2020, from <https://autismspectrumnews.org/understanding-the-relationship-between-autism-ocd-and-repetitive-behaviors/>

- Splett, J. W., Fowler, J., Weist, M. D., McDaniel, H., & Dvorksy, M. (2013). The critical role of school psychology in the school mental health movement. *Psychology in the Schools, 50*(3), 245–258. <https://doi.org/10.1002/pits.21677>
- Well-Being Concepts. (n.d.). *Centers for Disease Control and Prevention, Health-Related Quality of Life (HRQOL)*. Retrieved October 2020 from <https://www.cdc.gov/hrqol/wellbeing.htm#three>

Chapter 4

Screening and Assessment of Mental Health Problems in Students: Using an Integrated Assessment-to-Intervention Approach to Enhance Integrated Care



Shannon L. Stewart and Ashley Toohey

Abstract Mental health affects student well-being, academic performance, and resource allocation within schools. The ability to properly identify the needs of students while providing improved prioritization, triaging, and access to services is essential. This chapter provides an assessment-to-intervention approach to foster early identification, intervention, and enhanced service system integration.

Seventy percent of mental health issues have their onset during childhood or adolescence (Government of Canada, 2006). Furthermore, 34% of high school students in Ontario report experiencing at least moderate levels of anxiety and depression, and 4% indicate serious levels of anxiety and depression symptoms (Boak et al., 2016). Young people aged 15–24 years are most likely to experience mental illness and substance use disorders compared to individuals in other age ranges (Pearson et al., 2013). Furthermore, rates of comorbid disorders are high among children and youth. For example, roughly 3 in 4 children and youth aged 3–17 years who have been diagnosed with depression also have anxiety, and almost half of those children and youth with depression also, have externalizing issues (Danielson et al., 2016).

In Ontario, 14% of high school students report having seriously contemplated suicide in the past year and 4% report having attempted suicide (Ialomiteanu et al., 2016). In 2016, suicide accounted for 19% of the deaths among children 10–14 years of age and 29% of deaths among youth aged 15–19 years (Statistics Canada, 2018a). Suicide is the second leading cause of death among youth (Statistics Canada, 2018b). Despite the high prevalence of mental health issues among children and youth, about 75% of Canadian children with mental health disorders do not access specialized treatment services (Waddell et al., 2005). Furthermore, 28% of students

S. L. Stewart (✉) · A. Toohey
University of Western Ontario, London, ON, Canada
e-mail: sstewa24@uwo.ca

report not knowing who to turn to or where to go when they want to talk to someone about mental health (Boak et al., 2016). Although mental health concerns are prevalent among all children and youth, there are certain populations for which there are additional concerns and needs that must be identified and taken into consideration. For example, compared to their heterosexual peers, 2SLGBTQ+ youth face 14 times the risk of substance abuse and suicide (Canadian Mental Health Association-Ontario, 2021), and death rates due to suicide are roughly 5–6 times higher among First Nations youth compared to non-Aboriginal youth (Centre for Addictions and Mental Health, 2021). Furthermore, Black youth are significantly underrepresented in mental health and treatment-oriented services but are overrepresented in containment-oriented facilities (Gharabaghi et al., 2016). Research findings also highlight that youth living in lowest income neighborhoods had the highest rates of acute mental healthcare service use, emergency department visits for deliberate self-harm, and the highest rates of suicide (MHASEF Research Team, 2015).

In addition to the impact mental health issues have at the individual and familial level, there are significant implications at the societal level as well. For example, 25% of Ontario parents report missing work to care for a child with anxiety (Ipsos Public Affairs, 2017), and the annual economic impact of mental illness in Canada is estimated to be \$51 billion (Smetanin et al., 2011; Lim et al., 2008). The Canadian Institute for Health Information (2020) reported that, in Canada, between 2008/2009 and 2018/2019, there was a 61% increase in emergency department visits by children and youth for mental health issues and a 60% increase in hospitalizations. In Ontario alone, this costs the healthcare system \$260 million per year and places a significant strain on health care in hospitals (Kids Can't Wait, 2020). There is a growing international body of evidence demonstrating that promotion, prevention, and early intervention initiatives show positive returns on investment (Mental Health Commission of Canada, 2014; Roberts & Grimes, 2011; Canadian Centre on Substance Use and Addiction and University of Victoria Canadian Institute for Substance Use Research, 2018). By identifying student mental health needs early on, issues can begin to be addressed in a timely manner before they worsen thereby avoiding additional stress and suffering to students and their families while also reducing costs.

Researchers have begun to conduct cost-benefit analyses of mental health programs to underscore the individual- and societal-level benefits of mental health programs and early intervention on student populations. Findings from these studies consistently demonstrate that the monetary and societal benefits of these programs far exceed their costs. For example, Chisholm and colleagues (2016) found that for every dollar spent on treatment for anxiety and depression, the return on investment could be upwards of fourfold. In another study aimed at increasing access to services for Black and low-income families through school-based health centers, authors found a reduction in access barriers to care such as transportation and parents taking time off work (Guo et al., 2010). Furthermore, results from this study predicted a net social benefit of roughly \$1.35 million across four state school districts over 3 years. Taken together, these findings underscore the important role early intervention and school-based mental health services play in reducing

barriers, providing equitable services, and improving long-term individual, family, and societal outcomes. Notably, for effective early intervention to occur, the need for a cohesive mental health approach to care should be embedded within a strong clinical reasoning model to support an evidence-informed assessment-to-intervention approach within schools.

Clinical Reasoning Model for Mental Health Assessment, Prevention, and Intervention

Clinical reasoning is the process by which a client's or student's needs are identified and fosters appropriate care planning. To understand a student's strengths and needs and how best to address those needs, the use of an integrative framework is essential for assessment, prevention, and intervention. Engel's (1977) call for the biopsychosocial approach to replace the biomedical model was in an effort to provide care that was humanistic and allowed individuals to feel understood and empowered. Practice guidelines within the field of psychology and accreditation and licensure standards underscore that biological, psychological, and sociocultural considerations all need to be incorporated into assessments and intervention planning (e.g., see APA, 2002, *Ethics Code* 2.01(b); APA, 2003, multicultural guidelines). Furthermore, these guidelines suggest that failure to use a comprehensive and integrative approach can lead to case conceptualizations that are incomplete and can therefore have significant negative consequences (Melchert, 2010).

Psychologists bear the responsibility of recognizing and understanding both the uniqueness of the individual and the sociocultural influences affecting the individual (Bartolo, 2010). A biopsychosocial framework allows psychologists to integrate these approaches, stressing the importance of both the processes that occur within the individual as well as the processes that occur in the individual's immediate and broader environment and how these processes all interact and affect the individual. Factors within each of these domains impact students' academic achievement and mental health, and the interactions between these domains are often complex and highly nuanced. Additionally, understanding the subjective experience of the student within their context is essential (see Stewart et al., 2020d) and contributes to humane care and positive health outcomes (Borrello-Carrio et al., 2004).

As depicted in Fig. 4.1, the student is at the center of the clinical reasoning model. In line with a dynamic biopsychosocial framework, information must be gathered about the student's risk and protective factors with an understanding that wellness is a product of reciprocal influences of biological, interpersonal, psychological as well as macrosystem contextual dynamics that unfold across development (Lehman et al., 2017). With respect to biological factors, information impacting well-being must be considered including any existing medical conditions, medication the student is taking, nutrition, hearing or vision concerns, as well as any gross or fine motor or any other physical mobility challenges. With respect to

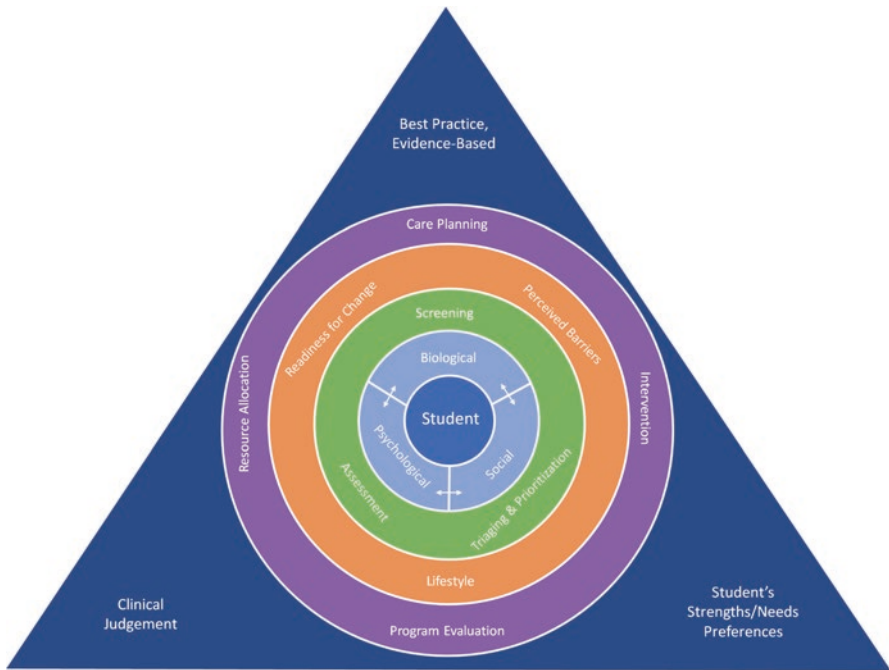


Fig. 4.1 Integrated model of psychological services clinical reasoning incorporating the World Health Organization's *International Classification of Function, Disability and Health* (WHO-ICF) model with important concepts from interRAI (www.interRAI.org) and Elven et al.' (2015) clinical reasoning model for physiotherapists

psychological constructs, information as to cognitive and intellectual abilities, academic skills, executive functioning, temperament, emotion regulation skills, mental state indicators, adaptive skills, traumatic life events, and any potential substance use problems will all be important for case conceptualization and care planning (Stewart et al., 2015c, 2016).

Among the sociocultural factors that need to be understood for care planning purposes are the student's peer and family relations (Arbeau et al., 2015) and attachment (DeOliveira et al., 2015) as well as their own beliefs and values (Stewart et al., 2020d). Furthermore, the student's access to services, clean water (Slekiene & Mosler, 2019), other basic necessities (Evans & Cassells, 2014), and education (Ferguson et al., 2007) need to be understood. Critical systems such as their neighborhood, community, religious groups, and socioeconomic status can influence the student independent of biological and psychological factors and therefore must be taken into consideration as part of the case conceptualization process. As depicted in Fig. 4.1, the biological, psychological, and sociocultural aspects are interactive and affect one another, which is monitored throughout the assessment-to-intervention process.

Information as to these various biopsychosocial factors can be gained from the student directly but may also come from the family, school staff, school records, other service providers (e.g., social workers, child, and youth workers), medical practitioners, and a review of medical records. Further, integrating information from these various collateral sources allows for further exploration and understanding of the goals each of these key stakeholders may have for the student and the work that is already being done to support student success and wellbeing.

All of these biopsychosocial constructs are used to inform care planning, intervention, program evaluation, and resource allocation, which, in turn, all affect one another and are also impacted by readiness for change, perceived barriers, and lifestyle (Hirdes et al., 2020; Zimmerman et al., 2000). These areas can interrupt treatment or impact response to treatment. Finally, all of this must occur within the context of the student's strengths and needs, the preferences of the student and family, best practice, evidence-based care as well as clinical judgment.

Perspectives and Approaches to Mental Health Assessment

There is a clear need for a uniform assessment system for use across multiple service sectors (e.g., schools, mental health facilities, hospitals, and crisis units) to promote a common language across disciplines while reducing assessment burden and duplication. The use of evidence-informed practice through the collection and application of comparable, high-quality data (Stewart & Hirdes, 2015) can foster improved outcomes for students and reduce barriers to integrated care coordination. The use of an integrated assessment-to-intervention system that supports care planning at multiple levels, across disciplines (e.g., psychology, speech and language, social work, nursing, physiotherapy) within the school setting is of the utmost importance (Sun et al., 2021). The biopsychosocial approach is inclusive of all domains that influence a student's successes as well as their needs. As such, this model supports all professionals within the school system and fosters an inclusive and cross-sector approach to assessment and care.

Need for Integrated Assessment

To date, mental health services within schools are fragmented and siloed in nature. School-specific assessments are often unstandardized across school boards and service settings making it difficult to compare acuity levels and need, evaluate outcomes, or track longitudinal changes as a student transitions from one educational setting or service to another. To enhance capacity, a scientifically sound assessment system for vulnerable students of different ages receiving mental health services is needed both within schools and diverse service settings (Hirdes et al., 2020; Stewart et al., 2015a; Stewart & Hirdes, 2015). Such information can guide service planning

and resource allocation across the life course (Stewart et al., 2020b, 2020c; Stewart & Hirdes, 2015) rather than a school-specific, age-limited approach to service provision. Current models of care wherein each professional who is in contact with a given student uses scales and forms (whether standardized or home-grown) designed to measure singular issues yields a conglomerated information system. Information gathering in this manner does not allow for a systematic, centralized way to track concerns, or evaluate outcomes longitudinally. Furthermore, population-level analyses are near impossible with this approach, and using scales in this manner limits the possibility of gaining information outside the parameters of the selected scales (Hirdes et al., 2020). That is, when scales are selected in response to referral concerns or presenting issues, the focus remains on those issues that are already known.

By using a more comprehensive approach (i.e., one that spans multiple domains such as in the biopsychosocial model) to assessment, there is more opportunity to gain information as to possible underlying or related issues that may otherwise go unnoticed and unaddressed (Hirdes et al., 2020). Through the use of a common approach to assessment and care planning based on meticulously tested items, scales, (Lau et al., 2019; Stewart et al., 2019a, 2020a), and decision-support algorithms (Stewart et al., 2017, 2019b, 2020b, 2020c), such an approach promotes continuity of care for students receiving services as they grow (Stewart & Hirdes, 2015). Moreover, the use of high-quality data can provide insights about common and divergent issues affecting students in different academic settings throughout their academic career (e.g., from preschool, elementary and secondary school, and college/university). Collaboration and use of a common language with multidisciplinary partners can reduce overall costs in avoiding duplication of services, improve prioritization and triaging efforts, contribute to wait list reduction strategies, and decrease frustration for families navigating the service system (Marshall et al., 2020; Stewart & Babcock, 2020).

Screening and Comprehensive Assessment

Ensuring students have access to timely, responsive, and integrated mental health services requires proper identification, with more in-depth assessment occurring when students present with more complex or urgent needs (Marshall et al., 2020; Stewart & Babcock, 2020; Stewart et al., 2017). There is a growing realization that many childhood problems have long-term consequences and costs for students, their family, their educational setting as well as society. Educators, school personnel, and clinicians play critical roles in the early identification of children with mental health problems and suicide risk (Fazel et al., 2014; Ligier et al., 2020; Schulte-Körne, 2016). Early identification can reduce the likelihood of negative sequelae such as emotional and social difficulties, poor academic achievement that results in adult underemployment (Darney et al., 2013; Hawton et al., 2012), and increased mental health service utilization later in life (Kirby & Keon, 2004).

School-based mental health professionals, including school psychologists, conduct a wide variety of assessments due to the significant needs of students. Due to increasingly limited resources, coupled with continuing high levels of mental health needs in students, a shift in service delivery is needed (Dowdy et al., 2010; Kleiver & Cash, 2005), providing universal, selected/targeted as well as indicated/intensive, supports, based on level of impairment and student need (Durlak & Wells, 1997; Doll & Cummings, 2008).

Screening and triaging of students for emotional, behavioral, and academic concerns is a first and critical step toward the early identification of students who need support. Moreover, screening allows students and their families to be connected with appropriate services when it is done as part of a coordinated mental health program (Weist et al., 2007). Implementing a multi-tiered *system of supports* framework wherein school-wide prevention-based initiatives, and system-level screening are implemented to appropriately allocate resources and identify and provide targeting supports to students with greater difficulty is not only in line with professional standards outlined by NASP (2020) but is also supported by the literature (e.g., Denton, 2012; Dexter et al., 2008; Gibbons, 2008). Proper screening should assess a student's short-term (e.g., suicide risk) and long-term risk of harm (e.g., substance use, school disengagement) with common, core items that integrate into a fully comprehensive assessment. Empirically derived algorithms, coupled with clinician opinion, can then provide a standardized case-finding methodology to assist in the identification of routine, urgent, and more emergent care (Stewart et al., 2020c, 2021; Stewart & Babcock, 2020) and impart information related to specific clinical issues needed for further assessment and follow-up. Consequently, students with the greatest urgency or most pressing issues can be prioritized as part of a triaging system. Further, by identifying areas of need as well as current severity, service providers within the school provide more timely access to appropriate services. More comprehensive assessments would be reserved for students with higher acuity levels and more complex co-occurring difficulties, thus making the distribution of comprehensive assessments more equitable.

When an integrated assessment-to-intervention system is part of the standard of care, the information can be used to enable care planning, outcome measurement, and more appropriate resource allocation thereby improving quality of care. By providing students and families with support before mental health issues become entrenched, screening contributes to positive mental health and educational outcomes that promote positive long-term effects (Dvorsky et al., 2014; Mass Levitt et al., 2007). Given the strong association between classroom behavior, emotional functioning, and academic achievement (e.g., Demaray & Elliott, 1998; Ringeisen et al., 2003), it is important that screening consider protective and risk factors in all domains. In line with the clinical reasoning model presented herein, the evidence underscores the importance of involving families, schools, and their broader communities for effective implementation of screening (Weist et al., 2007).

Perspectives and Approaches to Mental Health Prevention and Intervention

Schools are positioned to identify and address children's mental health issues. Specifically, schools have continued to take ownership of student mental health needs and many have adopted a multi-tiered approach to provide prevention and comprehensive, evidence-based intervention (August et al., 2018). There is a considerable body of literature that demonstrates when evidence-based mental health promotion programs in schools are implemented well, they can have a significant positive impact on children's mental health and academic performance (Atkins et al., 2003; Durlak & Wells, 1997; Durlak & Dupre, 2008). As part of their review of school mental health programs from four nations around the world, Weist and colleagues (2007) identified five critical themes for the advancement of these programs. Among these themes is the importance of cross-sector collaboration in building systems of care, meaningful engagement of the student and family, and the development of the workforce and mental health literacy (Weist et al., 2007).

Cross-Sector Collaboration

A recent review of the literature on mental health promotion in schools has demonstrated that, unfortunately, limited advancements have been made in the last decade (O'Reilly et al., 2018). More specifically, O'Reilly et al. (2018) identified variability in terminology being used, limited evaluation of long-term impacts of programs, inconsistencies in application, as well as a lack of well-trained individuals to implement the intervention programs as being some of the biggest shortcomings.

Both in Canada and the United States, there has been a strong push toward school psychology adopting a public health model wherein a major focus is on the coordination and integration of services (e.g., Schwean & Rodger, 2013; Strein et al., 2003). Time and again, researchers and policymakers have stressed the fact that schools play an essential role not only in assessment, intervention, and prevention of mental health issues but also in meaningfully engaging and involving their local communities (Leschied et al., 2012). As Weist (2003) outlined, for community and school mental health professionals to come together and move towards a model that stresses coordination and integration, a systematic assessment of needs as well as identification of available resources, and discussions as to who will do what along the prevention/intervention continuum is critical. Furthermore, it is crucial that the school environment values and prioritizes health practices (McIssac et al., 2017) as sustaining school-wide initiatives such as these requires continuous engagement and collaboration from all stakeholders (McIssac et al., 2017).

Based on the extant literature, school psychologists value practices that are relevant and effective in a rapidly changing world and recognize that child development is not purely an accumulative process, but rather dynamic and interactive in

nature. As such, school psychology must occur within an ecological framework with a multi-systems approach to practice, inclusion, and respect for diversity. Due to the acknowledged importance of implementing evidence-based, theoretically driven practice (Annan & Priestley, 2011), there have been calls to action within the school psychology community for an emphasis on prevention of mental health and academic problems since the 1990s (Bradley-Johnson & Dean, 2000).

With an appropriate assessment and consent processes in place, sharing of information among stakeholders is paramount to move toward service-system integration and away from fragmented and siloed approaches to service delivery. On the individual level, this allows for students and families who are in need to access the appropriate services in a timely fashion rather than having to follow up on numerous referrals, often duplicating resources. On a more systems level, through high-quality data at the district level, school boards can engage in equitable resource allocation such that higher needs schools would be allocated greater resources. Populations can be stratified based on specific algorithms, used across large catchment areas to compare performances across school boards, hospitals, and agencies. Practice patterns could then be evaluated at the regional, organizational, national, or global levels (Hirdes et al., 2008). This would allow for the examination of variations across regions with respect to how services are used based on risk and need (Stewart et al., 2020a, 2020b, 2020c, 2020d, 2021).

Student and Family Engagement

In line with the professional standards as outlined by the National Association of School Psychologists (NASP, 2020), schools must collaborate with families with respect to decision-making for their children. To foster a positive and collaborative relationship with families, school psychologists must be aware of potential barriers to parents' seeking school psychology services. Ohan and colleagues (2015) found that stigma, lack of school resources, perceptions that psychological services are ineffective, and concerns about lack of confidentiality were among the main barriers to parents seeking school psychology services. Additional barriers include those related to sociopolitical factors such as funding and access to services and cultural/familial factors such as beliefs about mental health services/treatments and their providers. Of note, a strong positive relationship with school staff is key for parents' reporting no perceived barriers to using school psychology services for their children's mental health problems (Ohan et al., 2015).

Given that parents may be more inclined to be involved in school-based mental health programs compared to clinic-based programs (Atkins et al., 2003), school psychologists are well-placed to build and foster collaborative relationships with families to support students' mental well-being. Guidelines that can help clinicians to overcome some of these cultural/familial barriers include determining where the child and family are with respect to help-seeking and the desire/willingness to change, providing psychoeducation for families and community members that take

into account their beliefs and values, and refraining from implementing evidence-based intervention before the child and family are ready to avoid poor adherence or withdrawal (Power et al., 2005). In line with the clinical reasoning model presented herein, it is important that goals set for students are consistent with student/family preferences to see the most gain.

Training and Supporting School Personnel

One of the organizational principles outlined by NASP (n.d) underscores the importance of all non-mental health professionals within schools being equipped with the knowledge needed to support students' mental health. The need for school psychologists to move towards program evaluation and psychoeducation, while collaborating with other key stakeholders who work directly with students has been highlighted since the 1930s (Bradley-Johnson & Dean, 2000). Although there are opportunities for early identification and intervention of academic and mental health problems in school, the extant literature indicates that education enhanced training efforts are required to allow staff to become better equipped with the knowledge of early warning signs, most especially of internalizing problems (Bradshaw et al., 2008). Research has demonstrated that having teachers who have additional or specialized training and who can act as champions or coaches to support educators who are implementing classroom programs is important for both teacher confidence (Atkins et al., 2003; Stormont et al., 2015) and promoting sustainability of programs and initiatives (Atkins et al., 2003).

Unfortunately, oftentimes, teachers do not believe they have the training needed to implement classroom-based socioemotional behavioral lessons nor to support children's mental health needs (Reinke et al., 2011). Hence, it is not surprising that teachers have identified the need for more training opportunities (Moon et al., 2017) and for the preference to have other teaching staff already embedded in their network as opposed to school psychology staff who are not as available to support the day-to-day classroom initiatives (Atkins et al., 2003). In fact, research findings suggest the need for more effective communication and collaboration among special educators and mental health professionals (Babyak & Koorland, 2001). Moreover, school psychologists have reported perceived resistance/concerns from school staff (Marrs & Little, 2014; Little et al., 2017) and a lack of clarity as to the roles of school psychologists (Marrs & Little, 2014; Little et al., 2017) as potential barriers to their work in the school environment. Given the importance of consultation and collaboration to effectively promote interventions (NASP, 2020), these findings highlight the need for school-wide initiatives that develop shared goals, objectives, and a clear understanding of student mental health promotion.

Using Assessment Data to Inform Intervention

Data-based decision-making and accountability have been identified by NASP (n.d.) as one of the ten Professional Standards for school psychologists. That is, assessment and data collection should focus on identifying areas of strength and need while fostering outcome measurement of interventions. Further, as a result of their review of school mental health programs around the world, Weist and colleagues (2007) identified the use of evidence-based practices and ongoing monitoring for quality assurance as being two of the critical themes for the advancement of these programs. By using an empirically based assessment-to-intervention approach, schools can monitor progress seamlessly and compare pre/post data easily for individual students, schools, school districts, and across provinces, states, and countries.

Care Planning

Care planning can and should be an integral part of an assessment-to-intervention process (e.g., Arbeau et al., 2017; Mathias et al., 2010; Redquest et al., 2020; Stewart et al., 2015c, 2016, 2021). For more effective outcomes, evidence-informed guidelines should integrate a comprehensive, multidisciplinary evaluation of the students' strengths, preferences, and needs. Care planning applications support clinical and service decision-making as well as capacity building through enhanced training and best practice, including enhanced professional development and knowledge mobilization to improve awareness among school staff while fostering responsiveness to particular needs identified through the assessment process. Tailored to the individual needs of the student, specific care planning protocols provide students and their families with needed information about evidence-informed mental health strategies based on best practice, supporting a multimodal approach to intervention. A strong assessment approach uses empirically validated algorithms that can improve clinical decision-making as part of the care planning process and alert professionals to an imminent problem or need (Stewart et al., 2015a). This care planning is best implemented when facilitated through shared decision-making between the professional/clinician and the student/family resulting in a collaborative discussion as to the strengths, preferences, and needs that have been identified, thereby increasing the level of engagement (Hirdes et al., 2020). These guidelines can also assist with issues related to sociopolitical factors such as funding and access to services, and cultural/familial factors such as beliefs about mental health services and their providers (Ohan et al., 2015). Such evidence-informed practice contributes to proper case disposition, expedited triaging, and enhanced knowledge mobilization and capacity building (Stewart et al., 2015a).

Demonstration of an Assessment-to-Intervention Approach: A Case Study

To demonstrate the importance of an assessment-to-intervention approach to mental health service delivery and how high-quality data can be used for multiple purposes, a case study will be utilized to illustrate the constructs outlined throughout this chapter. This case study will demonstrate how an assessment-to-intervention approach can be used to support the mental health needs of students while also informing program evaluation and system-level needs.

Referral Information Shaza is a 14-year-old primarily English-speaking female, with an African background, who lives in a midsize city in Ontario. She has been referred to the psychological services staff member at her school for self-harm, possible depression, and learning difficulties in reading and writing. A few days ago, one of Shaza's teachers noticed what appeared to be some marks on Shaza's leg and he was concerned they could be a result of self-injurious behavior.

As a result of the referral, a screening assessment is completed. Shaza, her family, and school staff are interviewed as part of this screening to help determine appropriate needs as well as support prioritization and triaging to specific services based on acuity level and individualized needs. The following information is gained as part of the screener assessment.

Shaza was born in Liberia to Fatmata, then 21 years of age, and Musah (deceased). There was no reported substance use during pregnancy. Fatmata, however, experienced significant stress during her pregnancy. Twelve months after Shaza's birth, her father was killed, leaving Shaza's mother as the sole caregiver. Shaza and her mother immigrated to Canada when Shaza was 4 years old. Shaza's mother remarried approximately 4 years ago and she and her mother moved in with her stepfather and his two teenage sons.

Both her mother and step-father have been concerned about Shaza's mood for the past month. During that time, there have been several occasions when Shaza has complained of feeling too tired and has expressed distress over insignificant things like her step-brothers sitting next to her on the couch. Shaza has also appeared sad, remaining indifferent, even in relation to things she would normally be excited about. She was admitted to the emergency department 1 week ago as a result of self-injurious behavior. Currently, Shaza is enrolled in a full-time education program. Except for the last week, Shaza has not missed any days of school this year and until recently always seemed to look forward to going to school although she has always been behind her peers with reading.

Shaza has stated that she has not engaged in any substance use. Neither her parents nor school staff is concerned about illicit drug use or risk-taking behavior. Shaza is able to complete activities of daily living without assistance and is still completing self-care activities. There is no concern noted for the risk of harm to others or externalizing behaviors. Shaza shared that she is considering quitting school as she feels it's pointless to attend because she isn't doing well in some of her classes.

One of the clinical utilities of a screening assessment is to determine service urgency using embedded algorithms and empirically validated scales (see Stewart et al., 2017). For example, using an empirically based decision-support tool that is used to inform the need and urgency of timing for a comprehensive mental health assessment can be obtained (Stewart et al., 2017). Key factors increasing level of urgency include danger to self, family breakdown, lack of interest in social interaction, expressing an interest in quitting school, violence or danger to others, experiencing intrusive thoughts, expressing shame or guilt, and recent emotional abuse (Stewart et al., 2017; Stewart & Babcock, 2020).

Based on Shaza's screening assessment and the endorsement of items related to self-harm, lack of interest in social interaction, and a desire to quit school, Shaza would be considered to have a moderate to high urgency level. As a result, the need for a more comprehensive assessment is needed due to risk indicators and case complexity. Using this approach allows for expedited referrals to the most appropriate services due to proper triaging and prioritization based on urgency level. The information obtained from the screener can be used to complete parts of the comprehensive assessment thereby reducing the assessment burden on the part of the student and the family while decreasing the time required to complete the assessment.

Integrated into the comprehensive assessment-to-intervention system (Stewart & Hirdes, 2015; Stewart et al., 2015b) is a developmental history. For Shaza, there is a need to rule out issues around vision and hearing, given that she has been struggling with reading which may be contributing to her presenting problems. As a young child, Shaza had strong motor skills. Her mother shared that Shaza met most of her developmental milestones on time and that both Shaza's speech and toileting skills improved a year after she began receiving support from the infant-child health and development program on an outpatient basis. She has not experienced any regression in these skills.

A review of Shaza's report cards highlights that her teachers have consistently noted they believe Shaza has more knowledge of the curriculum than she can express on tests and that Shaza is reading below her expected grade level, although they have no concerns about Shaza's receptive language skills. Upon interviewing them, Shaza's teachers all shared that they first noticed a shift in Shaza's mood about a month ago. They noted reduced participation during lessons and, in the past few weeks, Shaza has been handing in her schoolwork late, and often incomplete. Her math and art teachers both noticed that Shaza does not seem to enjoy their classes as much as she used to.

Both her mother and step-father describe Shaza as a bright girl who loves to explore new ways of doing things and makes friends easily. About 6 months ago, Shaza was the lead in the school musical and won an award for one of her drawings during the school art competition. Shaza loves to help others and occasionally spends her spare time volunteering at the community center to have a sense of belonging with the community. Shaza's parents consider their family to be close-knit and Shaza agrees.

While in the emergency department, Shaza received care from a child psychiatrist, the emergency department physician, and a registered nurse. Shaza recently

made comments that she hates her life, that she is stupid, and feels as though trying is pointless. Shaza has been very restless and has a lot of difficulty falling and staying asleep. Shaza has recently complained of having headaches. She has also complained about feeling extremely tired and has not been able to start some normal day-to-day activities.

Shaza's mother feels overwhelmed and expresses feelings of anger and distress about Shaza's condition. With respect to social support, Shaza's mother and stepfather have friends but no extended relatives in Canada. Their friends live far away (the closest friend is about 30 h away by car) and so they do not have any support for, respite, or anyone to turn to during times of crisis. When they are in need of financial assistance, the mother's best friend is occasionally able to help. Both parents can talk to their friends on the telephone for emotional support.

Shaza says she always feels anxious, depressed and that she is tired of having to work harder than her classmates to understand the academic material. Shaza does think that she would feel better if her sleep improved. Although Shaza has been rejecting her family recently, she is grateful that she feels a sense of belonging with them. Shaza indicated that she is grateful to have close friends and although she has not felt like painting lately, she does want to continue with this hobby.

Where possible, Shaza and her parents should be involved in the decision-making process and service providers should consider their needs, strengths, and preferences. Through the use of an integrated assessment system, follow-up assessments can be completed using specific sections of the comprehensive assessment. These follow-ups would allow for progress monitoring to ensure care planning is still reflective of Shaza's needs and the needs of her family. Furthermore, because this type of assessment system is meant to be used by clinicians from a variety of backgrounds (e.g., speech-language, nursing, psychology) across several service sectors (e.g., hospital, mental health agencies, policing), a common tool allows for all care providers to use the same language which promotes cross-sector collaboration.

By using a decision support tool with embedded algorithms and accompanying evidence-based care plans, school staff can quickly and easily identify areas of need and strength and begin discussions with Shaza and her family around care planning. While service providers have access to information for all care planning protocols, certain protocols are indicated for Shaza based on her needs at the time of the assessment. Service providers can obtain critical information from the assessment to address Shaza's needs based on international best practices to existing evidence. The promotion of evidence-informed intervention fosters clinical skill development and knowledge mobilization/dissemination, while also meeting the needs of Shaza.

Specific clinical profiles can be used to also assess and report on service outcomes that assist with quality improvement and outcome measurement. This allows opportunities for schools to develop specialized services and champion skill development within the school board, resulting in community collaboration, an essential part of service system integration. It should be noted that the information (i.e., scale scores, triggered care planning protocols) from Shaza's assessment is not meant to be used as part of an automated decision-making system. Rather, service providers should use their clinical judgment to evaluate scale scores and care planning

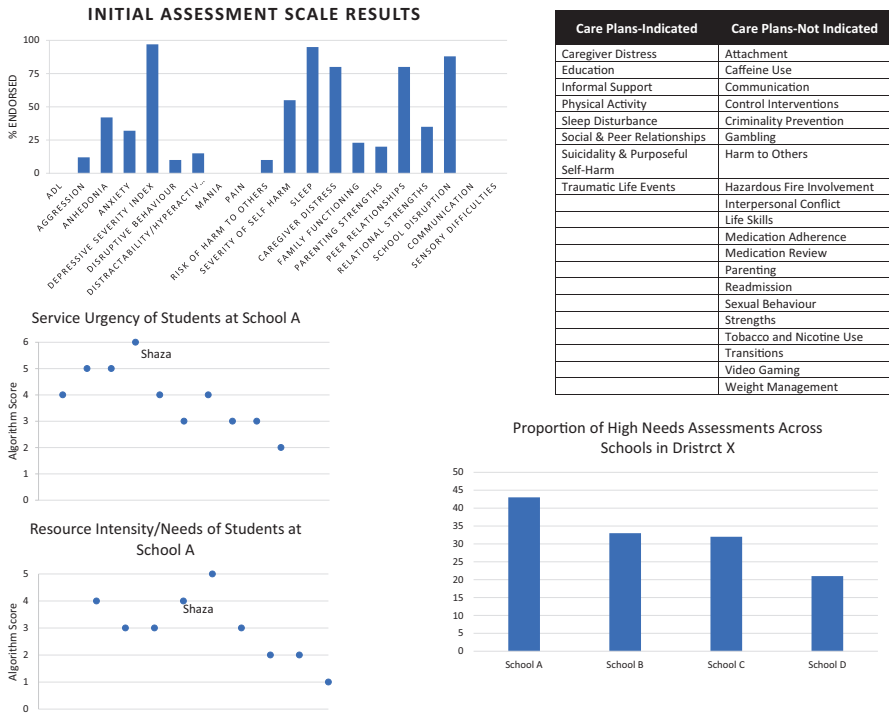


Fig. 4.2 Example assessment output following Shaza’s interRAI Child and Youth Mental Health comprehensive assessment

protocols within the context of other information obtained during interviews, file reviews, and Shaza’s assessment.

Areas of need that have been highlighted (see Fig. 4.2) as a result of this assessment include sleep, risk of self-harm, mental health indicators (specifically mood), peer relations, academics, and support for caregivers. Areas of strength for Shaza and her family include parenting and family functioning, as well as her social connections (e.g., she has close friends she can turn to for support). Moreover, Shaza has individual talents that foster resiliency.

As would be expected, not all care planning needs identified for Shaza are treated equally; rather, care planning should prioritize safety needs. Based on the results of Shaza’s assessment, a safety plan with frequent check-ins as to her suicidality would be developed with Shaza, her family, and school staff to ensure Shaza’s physical safety. Once these safety needs have been met, discussions with Shaza and her family would help the clinician to prioritize which areas of need they would like to focus on. Some of the recommendations would include counseling for Shaza for the trauma-related and depressive symptoms she is experiencing, a psychoeducational assessment to further understand her learning difficulties and how best to support them, guidelines for school staff and parents to help understand Shaza’s behavior in the context of her recent traumatic experience, best-practice strategies to help

address Shaza's sleep difficulties, and connecting parents with community resources for themselves so they can feel supported. Further, discussions as to the importance of sleep and how it can impact all areas of functioning are recommended, and likely of interest to Shaza and her family.

Outcome Measurement

It is important to monitor progress and evaluate intervention outcomes. To this end, follow-up and discharge assessments may be conducted as needed. Through the use of outcome measurement, a student's level of functioning, academic status, mental health, and service planning needs can be monitored. Additionally, change can be observed over time, evaluating the impact of interventions (Martin et al., 2007). Through the use of multiple assessment points, areas of improvement or deterioration, and outcomes of services can be acquired. A growing database utilizing the assessment-to-intervention approach within and outside school boards can provide benchmarking against other organizations to provide additional information regarding equity levels as well as for continuous improvement related to both academic and mental health services.

The use of a standardized assessment tool with embedded empirically derived scales allows school staff to monitor progress for individual students, as well as monitor the efficacy of addressing needs in certain areas across students. Scales with strong psychometric properties are needed to ensure that individual items properly capture the complexity of areas of need (Stewart & Hamza, 2017) such as self-harm (e.g., Stewart et al., 2020a, 2020b, 2020c, 2020d), functional ability (Stewart et al., 2019a) risk of injury to others (e.g., Stewart et al., 2021), parental distress (Stewart et al., 2021), depression (Li et al., 2021), and anxiety (Stewart et al., 2020a, 2020b, 2020c, 2020d). Scales provide a detailed account of the student's status in major domains (e.g., risk of school disengagement, cognitive functioning, activities of daily living) without increasing assessor burden and by calculating a summary of observations subsequent to an assessment (Perlman & Hirdes, 2008). Scales that are comprised of items with diverse response options (e.g., functioning ratings, behavior frequencies) and use of algorithms based on differential risk pathways can produce measures related to status or functioning rather than calculating global scores through a simple summation of individual items (Martin et al., 2007; Stewart et al., 2015a).

Determining Resource Allocation

NASP (2003) advocates for increased school-based mental health funding from the federal, state/provincial, local, and private sectors. This funding is necessary to promote psychological resiliency as well as educational attainment, achievement, and

success. However, budget cuts can pose a threat to resources available for school-based mental health services. Schools vary considerably in the number and type of mental health resources that they provide (Greif Green et al., 2013). For example, research has consistently demonstrated that rural schools are much less likely to have access to mental health service providers, and/or have less access to mental health services compared to urban schools (Greif Green et al., 2013; Moon et al., 2017).

Concerns arise when the needs of students and their families exceed the capabilities of one school, further underlining the importance of cross-sector collaboration between schools and community service providers. The importance of understanding service users' needs and using data to tailor resource allocation to specific sub-populations' needs is longstanding (Leff et al., 1985). The use of high-quality data from the assessments (see Hirdes et al., 2020) can be amalgamated into large, de-identified databases and utilized at the school board, regional, and population level to better understand which schools have the highest need for resources. Within schools, it would allow school personnel to identify their highest need students to provide the required supports to improve student wellbeing. Rather than dividing resources based on a model wherein the number of students per district or school would determine the funding and resource levels, districts and schools would receive funding and resources based on need, thus supporting a more equitable division of services based on the intensity of need. Funding models addressing student mental health often employ uniform rates on a per-student basis rather than on the complexity of individual needs. Case-mix-based systems (e.g., Fries et al., 2019; Stewart et al., 2020b) result in more equitable funding systems that are driven by individual needs rather than provider, facility, or school-based characteristics.

As a result of the comprehensive assessment, an empirically based decision-support tool provides service providers with key information as to the intensity and nature of services needed by Shaza (see Fig. 4.2), thereby identifying the level of resources needed in comparison to other students her age. The use of such algorithms allows service providers to make decisions as to allocation of resources in an empirically validated, and therefore more equitable, manner. Shaza's score on this algorithm, along with clinical judgment and all available collateral information, should be used to assist the clinical team in determining the need for intensive or complex services. In this case, given that Shaza's score is in the upper range, it would be recommended that the clinical team consider her to be at a higher need for intensive services.

Quality Indicators

Quality indicators are standardized, evidence-based measures that can be obtained from existing databases to monitor quality and track performance and outcome of services (Perlman et al., 2013). As such, quality indicators support accountability for funding, service delivery, effectiveness, and improvement of services (Hermann

et al., 2000). Within mental health, process indicators such as safety, accessibility, timeliness of treatments/services, and appropriateness (Hall & Siegel, 2005) are most often used (Hermann, 2005) to gauge the quality of mental health care (Hermann et al., 2002a, 2002b, 2006). Despite the well-known need for quality indicators that focus on clinical status, there is limited research in this area (Dow et al., 2001; McGrath & Tempier, 2003). Furthermore, few studies have used outcome measures to compare quality among mental health service providers (e.g., Barrett et al., 1998; Mant, 2001; Meehan et al., 2007), especially in schools. When used in combination with process indicators, outcome indicators can provide information about the link between service delivery and effectiveness (Cleary et al., 2002; Kissling et al., 2001).

Research findings underscore the utility of having comprehensive clinical information to improve the effectiveness of risk adjustment of mental health quality indicators (Perlman et al., 2013). Quality indicators can be utilized to monitor care and assist with public awareness and accountability. Schools often provide mental health services to unique populations of students, making it difficult to compare outcome quality across different schools. Adjusting for unique variations to ensure fair comparison through the use of extensive statistical modeling using longitudinal data is required (Hirdes et al., 2020; Perlman et al., 2013) to identify specific student characteristics that require adjustments for fair comparisons across districts, regions, and provinces/states. Differential outcomes based on individual student characteristics can provide opportunities to examine sub-populations that respond well to specific types of academic and mental health interventions, compared to those students that fail to respond or deteriorate. This approach also allows the opportunity to identify new innovative treatment approaches for specialized sub-populations (e.g., those with specific learning issues and developmental disabilities) that may not respond well to certain evidence-based interventions (Stewart et al., 2015a). Quality indicators also assist with risk management issues associated with the prevalence of adverse events (e.g., school safety, suicide risk, bullying).

Continuous assessment of needs should be integrated into the intervention process. Readiness for change in perceived barriers and lifestyle are not fixed factors and are therefore in need of reevaluation. Furthermore, care planning, program evaluation, and resource allocation should be reviewed frequently to ensure appropriate intervention and supports for students and families. By working within a model that promotes cross-sector collaboration, and early identification and prevention as part of a multi-tiered approach to supporting mental health needs, school boards can more appropriately allocate resources so that students with complex, comorbid needs can obtain the needed interventions and supports to reach their optimal potential.

In addition to being utilized for resource allocation decisions on an individual basis, a resource intensity algorithm can also provide comprehensive, standardized data across large catchment areas, allowing for service-wide identification of needs (see Stewart et al., 2020b). Populations could then be stratified and used to compare the performance of specific schools with respect to outcomes of care (Stewart et al., 2020a, 2020b, 2020c, 2020d). Practice patterns can be evaluated at multiple levels

within the service system (e.g., school, regional, provincial, national) and can be utilized to examine variations with respect to how services are used by the level of need. Through the use of this methodology, students with higher levels of need would be directed toward more intensive resources and services than those with lower needs. This would allow the ability to utilize high-quality data at the individual level to support clinical decision-making and can be used with aggregated data to inform policy development and planning (Stewart et al., 2020a, 2020b, 2020c, 2020d).

Implementing a standardized assessment tool would also allow for quality indicators, as well as service and resource needs to be evaluated within and between schools (e.g., see Fig. 4.2) as well as across much larger regions such as provinces/territories/states and countries. In the long run, this would provide data as to mental health acuity among children and youth, as well as assess and monitor specific mental health indicators (i.e., anxiety, mood, distraction/hyperactivity, psychosis) and care planning needs. A model such as this one could help ensure equitable resource allocation at all levels while informing budgeting for various resources to ensure the actual needs of those accessing services are met (e.g., higher need for certain services over others in particular schools or boards/districts). Furthermore, comprehensive, standardized data across schools would provide policymakers and funders with accurate information so that appropriate decisions can be made that reflect actual needs and service use.

Conclusions

Throughout this chapter, we have presented an assessment-to-intervention model to foster improved clinical reasoning and decision-making within the school system. Such an integrated system is innovative and transformative, providing a multi-tiered approach that: (a) supports a common language for improved communication across disciplines and service sectors; (b) utilizes empirically derived clinician-focused decision-support tools to foster triaging/prioritization; (c) applies case-finding methodologies to identify risk and resilience; (d) provides high-quality data systems for program evaluation and outcome measurement; (e) utilizes quality indicators and case-mix systems for resource allocation; (f) integrates and disseminates best practice and knowledge mobilization into care planning at the point of contact based on an individualized needs-based approach to care; and (g) facilitates service system integration.

Through the use of a comprehensive, scientifically rigorous approach to mental health assessment and improved screening, streamlined triaging and prioritization to support needs-based care can be achieved (Stewart & Hirdes, 2015). Further, using high-quality data across multiple service levels from educational systems, primary care, and specialized services would allow for improved service system integration. There are a variety of other benefits including reducing the assessment burden on students, their families, care providers, and collateral sources of

information (e.g., teachers). At the same time, the needs-based approach provides contextual information related to various risk and protective factors and mechanisms (e.g., financial and social support, childhood experiences, family functioning and structure, life events, neighborhood) based on evidence-based algorithms to facilitate a more equitable distribution of services thereby reducing mental health service disparities. Such a needs-based approach supports social justice and advocacy through the use of more equitable approaches to service delivery to support improved educational attainment, career success, and social mobility of the most vulnerable students (Sawhill & Karpilow, 2015).

By using this approach across multiple school boards and districts, vulnerable students who are disadvantaged due to historical trauma, marginalization, oppression, language barriers, poverty, or acculturation would have increased access to resources and related services. From a multi-culturally attentive lens, families who are unable to advocate for their child can then be prioritized based on need, promoting a more coordinated, accountable, and integrated system of mental health care.

Furthermore, assessment tools with embedded decision-support algorithms and care planning protocols allow for evidence-based intervention, as well as data-based decision-making and program evaluation. This method also contributes to the continuity of care by assisting with transitions across service sectors, resulting in improved care (Stewart & Hirdes, 2015). Integrated outcome measurement can foster improved quality assurance and enhance student experiences related to their care while ensuring accountability at multiple levels (school, region/district, province, country). Through the use of case-mix systems (e.g., Fries et al., 2019; Stewart et al., 2020b), more equitable funding models can be utilized to improve the allocation of resources so that the most vulnerable students with the highest needs are able to access services.

Through the use of a common assessment suite, service providers across disciplines can speak the same language when discussing a student's strengths and needs, thereby fostering greater interdisciplinary collaboration. Coordination and collaboration are especially important given the limited resources for children's mental health services, long wait lists, and the fact that families are already overwhelmed and having difficulty navigating a complex service system. Ensuring the student and family are part of the assessment and care planning process and building strong partnerships with service providers within the community, allows for a consultative and collaborative approach to service provision (NASP, 2020).

Social-justice-oriented assessment, intervention, and prevention practices are integral aspects within any clinical reasoning model. Fostering advocacy and activism throughout the assessment-to-intervention process is essential to ensure multi-cultural sensitivities are fostered to promote strong connections among the families, students, and schools (Fernandez, 2015). Professional practice must incorporate diversity, inclusion, and multi-cultural sensitivity within any mental health service delivery system, integrating education, knowledge, and advanced training to promote social-justice-oriented service delivery approaches.

An integrated suite of mental health assessments that extends from the earliest stages of life (e.g., Stewart et al., *in press*) into adulthood, provides an

unprecedented opportunity to develop solutions to alleviate the impact of mental illness (Hirdes et al., 2020) and facilitate transformative changes to improve our mental health delivery system. Through the use of this scientifically rigorous approach to improved clinical reasoning and decision-making, quality of care can be examined longitudinally, thereby providing opportunities to examine the differential pathways of clinical, developmental, and functional change over time. This would foster a new, transformative approach to evidence-based care that can track the role of context, developmental processes, and diversity as well as interactive processes, events, and experiences that shape student mental health and wellness.

References

- American Psychological Association. (2002). Ethical principles of psychologist and code of conduct. *American Psychologist*, *57*, 1060–1075.
- American Psychological Association. (2003). Guidelines in multicultural education, training, research, practice, and organizational change for psychologists. *American Psychologist*, *58*, 377–402.
- Annan, J., & Priestley, A. (2011). A contemporary story of school psychology. *School Psychology International*, *33*(3), 325–344. <https://doi.org/10.1177/0143034311412845>
- Arbeau, A., Stewart, S. L., Jordan, P., Smith, T., Theall, L., Hirdes, J. P., Thorsdottir, R., & Szczerbinska, K. (2015). Social and peer relationships. In S. L. Stewart, L. A. Theall, J. N. Morris, K. Berg, M. Björkgren, A. Declercq, et al. (Eds.), *interRAI (CAPs) for use with the interRAI (ChYMH) assessment instrument, research version 1 standard edition*. interRAI.
- Arbeau, K., Theall, L., Willoughby, K., Berman, J., & Stewart, S. L. (2017). What happened? Exploring the relationship between trauma and provisional mental health diagnoses for children and youth. *Psychology*, *8*(14), 2485–2495.
- Atkins, M. S., Graczyk, P. A., Frazier, S. L., & Abdul-Adil, J. (2003). Toward a new model for promoting urban children’s mental health: Accessible, effective, and sustainable school-based mental health services. *School Psychology Review*, *32*(4), 503–514. <https://doi.org/10.1080/002796015.2003.12086214>
- August, G. J., Piehler, T. F., & Miller, F. G. (2018). Getting “SMART” about implementing multi-tiered systems to promote school mental health. *Journal of School Psychology*, *66*, 85–96. <https://doi.org/10.1016/j.jsp.2017.10.001>
- Babyak, A. E., & Koorland, M. A. (2001). Working together: Mental health and special education collaboration. *Children and Youth Services Review*, *23*(8), 633–649. [https://doi.org/10.1016/S0190-7409\(01\)00151-7](https://doi.org/10.1016/S0190-7409(01)00151-7)
- Barrett, T. J., Bartsch, D. A., Zahniser, J. H., & Belanger, S. (1998). Implementing and evaluating outcome indicators of performance for mental health agencies. *Journal for Healthcare Quality*, *20*(3), 6–13. <https://doi.org/10.1111/j.1945-1474.1998.tb00245.x>
- Bartolo, P. A. (2010). Why school psychology for diversity? *School Psychology International*, *31*(6), 567–580. <https://doi.org/10.1177/0143034310386532>
- Boak, A., Hamilton, H., Adlaf, E., Henderson, J., & Mann, R. (2016). The mental health and well-being of Ontario students, 1991-2015: Detailed OSDUHS findings (CAMH Research Document Series No. 43).
- Borrello-Carrio, F., Suchman, A. L., & Epstein, R. M. (2004). The biopsychosocial model 25 years later: Principles, practice, and scientific inquiry. *The Annals of Family Medicine*, *2*(6), 576–582. <https://doi.org/10.1370/afm.245>
- Bradley-Johnson, S., & Dean, V. J. (2000). Role change for school psychology: The challenge continues in the new millennium. *Psychology in the Schools*, *37*(1), 1–5. [https://doi.org/10.1002/\(SICI\)1520-6807\(200001\)](https://doi.org/10.1002/(SICI)1520-6807(200001)37(1)1-5)

- Bradshaw, C. P., Buckley, J. A., & Ialongo, N. S. (2008). School-based service utilization among urban children with early onset educational and mental health problems: The squeaky when phenomenon. *School Psychology Quarterly*, 23(2), 169–186. <https://doi.org/10.1037/1045-3830.23.2.169>
- Canadian Centre on Substance Use and Addiction and University of Victoria Canadian Institute for Substance Use Research. (2018). Canadian substance use costs and harms 2007–2014.
- Canadian Institute for Health Information. (2020). *Child and youth mental health in Canada* [infographic].
- Canadian Mental Health Association. (2021). *Lesbian, gay, bisexual, trans & queer identified people and mental health*. Retrieved from <https://ontario.cmha.ca/documents/lesbian-gay-bisexual-trans-queer-identified-people-and-mental-health>
- Centre for Addictions and Mental Health. (2021). *Mental illness and addiction: Facts and statistics*. Retrieved from <https://www.camh.ca/en/driving-change/the-crisis-is-real/mental-health-statistics>
- Chisholm, D., Sweeny, K., Sheehan, P., Rasmussen, B., Smit, F., Cuijpers, P., & Saxena, S. (2016). Scaling-up treatment of depression and anxiety: A global return on investment analysis. *The Lancet Psychiatry*, 3(5), 415–424. [https://doi.org/10.1016/S2215-0366\(16\)30024-4](https://doi.org/10.1016/S2215-0366(16)30024-4)
- Cleary, P., Carlson, M. J., Shaul, J. A., & Eisen, S. V. (2002). The influence of patient characteristics on ratings of managed behavioral health care. *Journal of Behavioral Health Services & Research*, 29, 481–489. <https://doi.org/10.1007/BF02287354>
- Danielson, M. L., Bitsko, R. H., Ghandour, R. M., Holbrook, J. R., & Blumberg, S. J. (2016). Prevalence of parent-reported ADHD diagnosis and associated treatment among U.S. children and adolescents. *Journal of Clinical Child and Adolescent Psychology*, 47(2), 199–212. <https://doi.org/10.1080/15374416.2017.1417860>
- Darney, D., Reinke, W. M., Herman, K. C., Stormont, M., & Ialongo, N. S. (2013). Children with co-occurring academic and behavior problems in first grade: Distal outcomes in twelfth grade. *Journal of School Psychology*, 51(1), 117–128. <https://doi.org/10.1016/j.jsp.2012.09.005>
- Demaray, M. K., & Elliott, S. N. (1998). Teachers' judgments of students' academic functioning: A comparison of actual and predicted performances. *School Psychology Quarterly*, 13, 8–24. <https://doi.org/10.1037/h0088969>
- Denton, C. (2012). *RTI: Selecting and implementing evidence-based reading interventions*. Children's Learning Institute Department of Pediatrics. University of Texas Health Science Center Houston. Retrieved from https://nysrti.org/files/statewide_trainings/2012/new_york_rti_11-2-12_part_1_handouts.pdf
- DeOliveira, C. A., Rupert, K., Arbeau, K., Stewart, S. L., & Theall, L. A. (2015). Attachment. In S. L. Stewart, L. A. Theall, J. N. Morris, K. Berg, M. Björkgren, A. Declercq, et al. (Eds.), *interRAI (CAPs) for use with the interRAI (ChYMH) assessment instrument, research version 1 standard edition*. interRAI.
- Dexter, D., Hughes, C., & Farmer, T. (2008). Responsiveness to intervention: A review of field studies and implications for rural special education. *Rural Special Education Quarterly*, 27(4), 3–9.
- Doll, B., & Cummings, J. (2008). Why population-based services are essential for school mental health, and how to make them happen in your school. In B. Doll & J. Cummings (Eds.), *Transforming school mental health services: Population-based approaches to promoting the competency and wellness of children*. Corwin Press.
- Dow, M. G., Boaz, T. L., & Thornton, D. (2001). Risk adjustment of Florida mental health outcomes data: Concepts, methods, and results. *Journal of Behavioral Health Services and Review*, 28, 258–272. <https://doi.org/10.1007/BF02287243>
- Dowdy, E., Ritchey, K., & Kamphaus, R. W. (2010). School-based screening: A population-based approach to inform and monitor children's mental health needs. *School Mental Health*, 2(4), 166–176. <https://doi.org/10.1007/s12310-010-9036-3>
- Durlak, J. A., & DuPre, E. P. (2008). Implementation matters: A review of research on the influence of implementation on program outcomes and the factors affecting implementation. *American Journal of Community Psychology*, 41, 327–350. <https://doi.org/10.1007/s10464-008-9165-0>

- Durlak, J. A., & Wells, A. M. (1997). Primary prevention mental health programs: The future is exciting. *American Journal of Community Psychology*, 25, 233–243. <https://doi.org/10.1023/A:1024674631189>
- Dvorsky, M. R., Girio-Herrera, E., & Owens, J. (2014). School-based screening for mental health in early childhood. In M. Weist, N. Lever, C. Bradshaw, & J. Owens (Eds.), *Handbook of school mental health. Issues in clinical child psychology*. Springer. https://doi.org/10.1007/978-1-4614-7624-5_22
- Elven, M., Hochwalder, J., Dean, E., & Soderlund, A. (2015). A clinical reasoning model focused on clients' behavior change with reference to physiotherapists: Its multiphase development and validation. *Physiotherapy Theory and Practice*, 31(4), 231–243. <https://doi.org/10.3109/09593985.2014.994250>
- Engel, G. (1977). The need for a new medical model: A challenge for biomedicine. *Science*, 196, 129–136.
- Evans, G. W., & Cassells, R. C. (2014). Childhood poverty, cumulative risk exposure, and mental health in emerging adults. *Clinical Psychological Science*, 2(3), 287–296. <https://doi.org/10.1177/2167702613501496>
- Fazel, M., Hoagwood, K., Stephan, S., & Ford, T. (2014). Mental health interventions in schools 1: Mental health interventions in schools in high-income countries. *The Lancet Psychiatry*, 1(5), 377–387. [https://doi.org/10.1016/S2215-0366\(14\)70312-8](https://doi.org/10.1016/S2215-0366(14)70312-8)
- Ferguson, H. B., Bovaird, S., & Mueller, M. P. (2007). The impact of poverty on educational outcomes for children. *Paediatrics & Child Health*, 12(8), 701–706. <https://doi.org/10.1093/pch/12.8.701>
- Fernandez, I. T. (2015). A social justice perspective on children's mental health: A borderlands view. *Communiqué*, 43(6), 24–26.
- Fries, B. E., James, M. L., Martin, L., Head, M. J., Stewart, S. L., & Park, P. S. (2019). A case-mix system for adults with developmental disabilities. *Health Services Insights*, 12, 1–8. <https://doi.org/10.1177/1178632919856011>
- Gharabaghi, K., Trocmé, N., & Newman, D. (2016). Because young people matter: Report of the residential services review panel.
- Gibbons, K. (2008). Evaluating RTI's effectiveness over the long term. *School Administrator*, 65(8), 13.
- Government of Canada. (2006). *The human face of mental health and mental illness in Canada*. Minister of Public Works and Government Services Canada.
- Greif Green, J., McLaughlin, K. A., Algeria, M., Costello, J., Gruber, M. J., Hoagwood, K., Leaf, P. J., Olin, S., Sampson, N. A., & Kessler, R. C. (2013). School mental health resources and adolescent mental health service use. *Journal of American Academy of Child and Adolescent Psychiatry*, 52(5), 501–510. <https://doi.org/10.1016/2013.03.002>
- Guo, J. J., Wade, T. J., Pan, W., & Keller, K. N. (2010). School-based health centers: Cost-benefit analysis and impact on health care disparities. *American Journal of Public Health*, 100, 1617–1623.
- Hall, D., & Siegel, B. (2005). Taking the measure of measures: Quality data initiatives and the challenge of effective and efficient data. *Journal of AHIMA*, 76(2), 42–46.
- Hawton, K., Bergen, H., Kapur, N., Cooper, J., Steeg, S., Ness, J., & Waters, K. (2012). Repetition of self-harm and suicide following self-harm in children and adolescents: Findings from the Multicentre Study of Self-harm in England. *Journal of Child Psychology and Psychiatry*, 53, 1212–1219.
- Hermann, Leff, H. S., Palmer, R. H., Yang, D., Teller, T., Provost, S., Jakubiak, C., & Chan, J. (2000). Quality measures for mental health care: results from a national inventory. *Medical Care Research and Review*, 57 Suppl 2(3), 136–154. <https://doi.org/10.1177/107755800773743763>
- Hermann, R. C. (2005). *Improving mental healthcare: A guide to measurement-based quality improvement*. American Psychiatric Press, Inc.
- Hermann, R. C., Finnerty, M., Provost, S., Palmer, R. H., Chan, J., Lagodmos, G., Teller, T., & Myrhol, B. J. (2002a). Process measures for the assessment and improvement of quality of care

- for schizophrenia. *Schizophrenia Bulletin*, 28(1), 95–104. <https://doi.org/10.1093/oxfordjournals.schbul.a006930>
- Hermann, R. C., Leff, H. S., Palmer, R. H., Yang, D., Teller, T., Provost, S., Jakubiak, C., & Chan, J. (2002b). Quality measures for mental health care: Results from a national inventory. *Medical Care Research and Review*, 57(Suppl 2), 136–154. <https://doi.org/10.1177/1077558700057002S08>
- Hermann, R. C., Mattke, S., Somekh, D., Silfverhielm, H., Goldner, E., Glover, G., Pirkis, J., Mainz, J., & Chan, J. A. (2006). Quality indicators for international benchmarking of mental health care. *International Journal for Quality in Healthcare*, 18(Suppl 1), 31–38. <https://doi.org/10.1093/intqhc/mzl025>
- Hirdes, J. P., Poss, J. W., & Curtin-Telegdi, N. (2008). The Method for Assigning Priority Levels (MAPLe): A new decision-support system for allocating home care resources. *BMC Medicine*, 6, 9. <https://doi.org/10.1186/1741-7015-6-9>
- Hirdes, J. P., van Everdingen, C., Ferris, J., Franco, M. A., Fries, B. E., Heikkila, J., Hirdes, A., Hoffman, R., James, M. L., Martin, L., Perlman, C., Rabinowitz, T., Stewart, S., & Van Audenhove, C. (2020). The InterRAI suite of mental health assessment instruments: An integrated system for the continuum of care. *Frontiers in Psychiatry*, 10, 926. <https://doi.org/10.3389/fpsyt.2019.00926>
- Ialomiteanu, A. R., et al. (2016). *CAMH Monitor eReport: Substance use, mental health and well-being among Ontario adults, 1977-2015. CAMH Research Document Series no. 45*. Centre for Addiction and Mental Health.
- IpsosPublicAffairs. (2017). *Childrenand youth mental health survey: Getting help in Ontario*. Webpage: <https://www.ipsos.com/en-ca/news-polls/CMHO-children-and-youth-mental-health-ontario>
- Kids Can't Wait. (2020). 2020 report on for child and youth mental health care in Ontario.
- Kirby, M. J. L., & Keon, W. J. (2004). *Mental health, mental illness and addiction: Overview of policies and programs in Canada*. Retrieved from <http://www.parl.gc.ca/38/1/parlbus/com-mbus/senate/com-e/soci-e/rep-e/repintnov04-e.htm>
- Kissling, W., Seemann, U., & Piwernetz, K. (2001). Quality management in psychiatry. *International Clinical Psychopharmacology*, 16(Suppl 3), S15–S24. <https://doi.org/10.1097/00004850-200104003-00003>
- Kleiver, A., & Cash, R. E. (2005). Characteristics of a public health model of a mental health service delivery. *Communiqué*, 34(3), 19.
- Lau, C., Stewart, S. L., Saklofske, D. H., & Hirdes, J. P. (2019). The interRAI Child and Youth Mental Health Internalizing Subscale: Scale development and psychometric properties. *Psychiatric Research*, 278, 235–241.
- Leff, H. S., Graves, S. C., Natkins, J., & Bryan, J. (1985). A system for allocating mental health resources. *Administration in Mental Health*, 13, 43–68.
- Lehman, B. J., David, D. M., & Gruber, J. A. (2017). Rethinking the biopsychosocial model of health: Understanding health as a dynamic system. *Social and Personality Psychology Compass*, 11(8), 1–17. <https://doi.org/10.1111/spc3.12328>
- Leschied, A. D. W., Flett, G. L., & Saklofske, D. H. (2012). *Canadian Journal of School Psychology*, 28(1), 5–11. <https://doi.org/10.1177/0829573512468854>
- Li, Y., Babcock, S., & Stewart, S. L. (2021). Psychometric evaluation of the Depression Severity Index (DSI) among children and youth using the interRAI Child and Youth Mental Health Assessment (ChYMH) Tool. *Child and Youth Care Forum*, 50, 611–630. <https://doi.org/10.1007/s10566-020-09592-z>
- Ligier, F., Giguère, C. E., Notredame, C. E., et al. (2020). Are school difficulties an early sign for mental disorder diagnosis and suicide prevention? A comparative study of individuals who died by suicide and control group. *Child & Adolescent Psychiatry & Mental Health*, 14(1). <https://doi.org/10.1186/s13034-019-0308-x>
- Lim, K.-L., Jacobs, P., Ohinmaa, A., Schopflocher, D., & Dewa, C. S. (2008). A new population-based measure of the burden of mental illness in Canada. *Chronic Diseases in Canada*, 28(3), 92–98.

- Little, S., Marrs, H., & Bogue, H. (2017). Elementary school psychologists and response to intervention (RTI). *Contemporary School Psychology, 21*, 103–114. <https://doi.org/10.1007/s40688-016-0104-z>
- Mant, J. (2001). Process versus outcome indicators in the assessment of quality of health care. *International Journal for Quality in Healthcare, 13*(6), 475–480. <https://doi.org/10.1093/intqhc/13.6.475>
- Marrs, H., & Little, S. (2014). Perceptions of school psychologists regarding barriers to response to intervention (RTI) implementation. *Contemporary School Psychology, 18*, 24–34. <https://doi.org/10.1007/s40688-013-0001-7>
- Marshall, C., Semovski, V., & Stewart, S. L. (2020). Exposure to childhood interpersonal trauma and mental health service urgency. *Child Abuse & Neglect, 106*, 104464. <https://doi.org/10.1016/j.chiabu.2020.104464>
- Martin, L., Hirdes, J. P., Fries, B. E., & Smith, T. F. (2007). Development and psychometric properties of an assessment for persons with Intellectual Disability—The interRAI ID. *Journal of Policy and Practice in Intellectual Disabilities, 4*(1), 23–29. <https://doi.org/10.1111/j.1741-1130.2006.00094.x>
- Mass Levitt, J., Saka, N., Hunter Romanelli, L., & Hoagwood, K. (2007). Early identification of mental health problems in schools: The status of instrumentation. *Journal of School Psychology, 45*(2), 163–191. <https://doi.org/10.1016/j.jsp.2006.11.005>
- Mathias, K., Hirdes, J. P., & Pittman, D. A. (2010). Care planning strategy for traumatic life events in community mental health and inpatient psychiatry based on the InterRAI assessment instruments. *Journal of Community Mental Health, 46*, 621–627. <https://doi.org/10.1007/s10597-010-9308-2>
- McGrath, B. M., & Tempier, R. (2003). Implementing quality management in psychiatry: From theory to practice—shifting focus from process to outcome. *Canadian Journal of Psychiatry, 48*(7), 467–474. <https://doi.org/10.1177/070674370304800707>
- McIssac, J.-L. D., Read, K., Veugelers, P. J., & Kirk, S. F. L. (2017). Culture matters: A case of school health promotion in Canada. *Health Promotion International, 32*, 207–217. <https://doi.org/10.1093/heapro/dat055>
- Meehan, T. J., Stedman, T. J., Neuendorf, K. E., Francisco, I. D., & Neilson, M. G. (2007). Benchmarking Australia's mental health services: Is it possible and useful? *Australian Health Review, 31*(4), 623–627. <https://doi.org/10.1071/AH070623>
- Melchert, T. P. (2010). The growing need for a unified biopsychosocial approach in mental health care. *Procedia Social and Behavioral Sciences, 5*, 356–361. <https://doi.org/10.1016/j.sbspro.2010.07.104>
- Mental Health Commission of Canada. (2014). *Why investing in mental health will contribute to Canada's economic prosperity and to the sustainability of our health care system*. Retrieved from <http://www.mentalhealthcommission.ca/English/node/742>
- MHASEF Research Team. (2015). *The mental health of children and youth in Ontario: A baseline scorecard*. Institute for Clinical Evaluative Sciences.
- Moon, J., Williford, A., & Mendenhall, A. (2017). Educators' perceptions of youth mental health: Implications for training and the promotion of mental health services in schools. *Children and Youth Services Review, 73*, 384–391. <https://doi.org/10.1016/j.chilcyouth.2017.01.006>
- National Association of School Psychologists. (2020). *The Professional Standards of the National Association of School Psychologists*.
- National Association of School Psychologists. (n.d.). *NASP practice model 10 domains*. Retrieved from <https://www.nasponline.org/standards-and-certification/nasp-practice-model/nasp-practice-model-implementation-guide/section-i-nasp-practice-model-overview/nasp-practice-model-10-domains>
- National Association of School Psychologists (NASP). (2003). NASP position statement on mental health services in schools. .
- O'Reilly, M., Sviryzdenka, N., Adams, S., & Dogra, N. (2018). Review of mental health promotion interventions in schools. *Social Psychiatry and Psychiatry Epidemiology, 53*, 647–662. <https://doi.org/10.1007/s00127-018-1530-1>

- Ohan, J. L., Seward, R. J., Stallman, H. M., Bayliss, D. M., & Sanders, M. R. (2015). Parents' barriers to using school psychology services for their children's mental health problems. *School Mental Health, 7*, 287–297. <https://doi.org/10.1007/s12310-015-9152-1>
- Pearson, K., Janz, T., & Ali, J. (2013). *Health at a glance: Mental and substance use disorders in Canada*. Statistics Canada Catalogue no. 82-624-X.
- Perlman, C. M., & Hirdes, J. P. (2008). The Aggressive Behavior Scale: A new scale to measure aggression based on the Minimum Data Set. *Journal of the American Geriatrics Society, 56*(12), 2298–2303. <https://doi.org/10.1111/j.1532-5415.2008.02048.x>
- Perlman, C. M., Hirdes, J. P., Barbaree, H., Fries, B. E., McKillop, I., Morris, J. N., & Rabinowitz, T. (2013). Development of mental health quality indicators (MHQIs) for inpatient psychiatry on the interRAI mental health assessment. *BMC Health Services Research, 13*, 15. <https://doi.org/10.1186/1472-6963-13-15>
- Power, T. J., Eiraldi, R. B., Clarke, A. T., Mazzuca, L. B., & Krain, A. L. (2005). Improving mental health service utilization for children and adolescents. *School Psychology Quarterly, 20*(2), 187–205. <https://doi.org/10.1521/scpq.20.2.187.66510>
- Redquest, B. K., Stewart, S. L., Bryden, P. J., & Fletcher, P. C. (2020). Assessing the Wellbeing of Individuals with Autism Using the interRAI Child and Youth Mental Health (ChYMH) and the interRAI Child and Youth Mental Health—Developmental Disabilities (ChYMH-DD) Tools. *Pediatric Nursing, 46*(2), 83–91.
- Reinke, W. M., Stormont, M., Herman, K. C., Puri, R., & Goel, N. (2011). Supporting children's mental health in schools: Teacher perceptions of needs, roles, and barriers. *School Psychology Quarterly, 26*(1), 1–13. <https://doi.org/10.1037/a0022714>
- Ringeisen, H., Henderson, K., & Hoagwood, K. (2003). Context matters: Schools and the research to practice gap in children's mental health. *School Psychology Review, 32*, 153–168.
- Roberts, G., & Grimes, K. (2011). *Return on investment: Mental health promotion and mental illness prevention*. A Canadian Policy Network/Canadian Institute for Health Information report. CIHI.
- Sawhill, I. V., & Karpilow, Q. (2015). *How much could we improve children's life chances by intervening early and often?* A Center on Children and Families at BROOKINGS Brief.
- Schulte-Körne, G. (2016). Mental health problems in a school setting in children and adolescents. *Deutsches Arzteblatt International, 113*(11), 183–190. <https://doi.org/10.3238/arztebl.2016.0183>
- Schwean, V., & Rodger, S. (2013). Children first: It's time to change! Mental health promotion, prevention, and treatment informed by public health, and resiliency approaches. *Canadian Journal of School Psychology, 28*(1), 136–166. <https://doi.org/10.1177/0829573513475773>
- Slekiene, J., & Mosler, H. J. (2019). The link between mental health and safe drinking water behaviors in a vulnerable population in rural Malawi. *BMC Psychology, 7*, 44. <https://doi.org/10.1186/s40359-019-0320-1>
- Smetanin, P., Stiff, D., Briante, C., Adair, C. E., Ahmad, S., & Khan, M. (2011). The life and economic impact of major mental illnesses in Canada: 2011 to 2041. RiskAnalytica, on behalf of the Mental Health Commission of Canada.
- Statistics Canada. (2018a). Deaths and age-specific mortality rates, by selected grouped causes, Canada, 2016. Table: 13-10-0392-01.
- Statistics Canada. (2018b). Leading causes of death, total population, by age group. Canada, 2016. Table 13-10-0394-01.
- Stewart, S. L., & Babcock, S. (2020). interRAI Child and Youth Mental Health Screener (ChYMH-S): A psychometric evaluation and validation study. *Child Psychiatry and Human Development, 51*, 769–780.
- Stewart, S. L., & Hamza, C. A. (2017). The Child and Youth Mental Health Assessment (ChYMH): An examination of the psychometric properties of an integrated assessment developed for clinically referred children and youth. *BMC Health Services Research, 17*(1), 82.
- Stewart, S. L., & Hirdes, J. P. (2015). Identifying mental health symptoms in children and youth in residential and inpatient care settings. *Healthcare Management Forum, 28*(4), 150–156.

- Stewart, S. L., Currie, M., Arbeau, K., Leschied, A., & Kerry, A. (2015a). Assessment and planning for community and custodial services: The application of interRAI assessment in the youth justice system. In R. Corrado & A. Leschied (Eds.), *Serious and violent young offenders and youth criminal justice: A Canadian perspective* (pp. 355–397). Simon Fraser University Press.
- Stewart, S. L., LaRose, L., Gleason, K., Nicolson, R., McKnight, M., Knott, W., Currie, M., Hirdes, J. P., Curtin-Telegdi, N., Perlman, C. M., MacLeod, K., Ninan, A., Carson, S., Morris, J. N., Berg, K., Björkgren, M., Declercq, A., Finne-Soveri, H., Fries, B. E., ... Topinková, E. (2015b). *interRAI Child And Youth Mental Health—Developmental Disabilities (ChYMH-DD) assessment form and user’s manual. Version 1*. interRAI.
- Stewart, S. L., Theall, L. A., Morris, J. N., Berg, K., Björkgren, M., Declercq, A., Finne-Soveri, H., Fries, B. E., Frijters, D., Gray, L., Head, M., Hirdes, J. P., James, M., Ljunggren, G., Meehan, B., Smith, T., Steel, K., Szczerbinska, K., & Topinková, E. (2015c). *interRAI Child and Youth Mental Health Collaborative Action Plans (CAPs) for use with the interRAI Child and Youth Mental Health (ChYMH) assessment instrument. Version 9.3, standard edition*. interRAI.
- Stewart, S. L., Theall, L. A., Morris, J. N., Berg, K., Björkgren, M., Declercq, A., Finne-Soveri, H., Fries, B. E., Gray, L., Hirdes, J. P., Head, M., James, M., Ljunggren, G., Meehan, B., Smith, T., Steel, K., Szczerbinska, K., & Topinková, E. (2016). *interRAI Child and Youth Mental Health Collaborative Action Plans (CAPs) for use with the interRAI Child and Youth Mental Health Developmental Disability (ChYMH-DD) assessment instrument. Version 1, standard edition*. interRAI.
- Stewart, S. L., Hirdes, J. P., McKnight, M., Curtin-Telegdi, N., Perlman, C. M., MacLeod, K., Ninan, A., Currie, M., Carson, S., Morris, J. N., Berg, K., Björkgren, M., Declercq, A., Finne-Soveri, H., Fries, B. E., Gray, L., Head, M. J., James, M. L., Ljunggren, G., ... Topinková, E. (2017). *interRAI Child and Youth Mental Health Screener (ChYMH-S) assessment form and user’s manual. Version 9.3*. interRAI.
- Stewart, S. L., Morris, J. N., Asare-Bediako, Y. A., & Toohy, A. (2019a). Examining the structure of a new pediatric measure of functional independence using the interRAI Child and Youth Mental Health assessment system. *Developmental Neurorehabilitation*, 23(8), 526–533. <https://doi.org/10.1080/17518423.2019.1698070>
- Stewart, S. L., Thornley, E., Poss, J., & Hirdes, J. (2019b). Resource intensity for children and youth (RICHY): The development of an algorithm to identify high service users in children’s mental health. *Health Services Insights*, 12. <https://doi.org/10.1177/1178632919827930>
- Stewart, S. L., Babcock, S. E., Li, Y., & Dave, H. P. (2020a). A psychometric evaluation of the interRAI Child and Youth Mental Health instruments (ChYMH) anxiety scale in children with and without developmental disabilities. *BMC Psychiatry*, 20, 390. <https://doi.org/10.1186/s12888-020-02785-9>
- Stewart, S. L., Celebre, A., Head, M., James, M., Martin, L., & Fries, B. E. (2020b). A case-mix system for children and youth with developmental disabilities. *Health Services Insights*, 13, 1–7.
- Stewart, S. L., Celebre, A., Hirdes, J. P., & Poss, J. W. (2020c). Risk of suicide and self-harm in kids: The development of an algorithm to identify high-risk individuals within the children’s mental health system. *Child Psychiatry and Human Development*, 51(6), 913–924. <https://doi.org/10.1007/s10578-020-00968-9>
- Stewart, S. L., Theall, L. A., Morris, J. N., Berg, K., Björkgren, M., Declercq, A., Finne-Soveri, U. H., Fries, B. E., Frijters, D., Gray, L., Henrard, J.-C., Hirdes, J. P., James, M. L., Ljunggren, G., Martin, L., Meehan, B., Smith, T. F., Steel, K., Szczerbińska, K., & Topinková, E. (2020d). *interRAI self-reported Quality of Life—Child and Youth Mental Health (QOL-ChYMH) surveys and user’s manual; interRAI standard edition, Version 10.0*. interRAI.
- Stewart, S. L., Lapshina, N., & Semovski, V. (2021). Interpersonal polyvictimization: Addressing the care planning needs of traumatized children and youth. *Child Abuse & Neglect*, 114, 104956. <https://doi.org/10.1016/j.chiabu.2021.104956>
- Stewart, S. L., Iantasca, J. M., Klassen, J. A., Cloutier, S., Tucker, M., Fisman, S., McLean, J., Morris, J. N., Berg, K., Björkgren, M., Declercq, A., Finne-Soveri, H., Fries, B., Gray, L.,

- Henrard, J. C., Hirdes, J. P., James, M. L., Ljunggren, G., Martin, L., ... Topinková, E. (in press). *interRAI 0-3 assessment form and user's manual. Version 10.0*. interRAI.
- Stewart, S. L., Celebre, A., Hirdes, J. P., & Poss, J. W. (2021). Risk of injury to others: The development of an algorithm to identify Children and youth at high-risk of aggressive behaviours. *Frontiers in Psychiatry, 12*, 750625–750625. <https://doi.org/10.3389/fpsy.2021.750625>
- Stewart, S.L., Toohey, A., & Poss, J. W. (2021). iCCareD: The Development of an Algorithm to Identify Factors Associated With Distress Among Caregivers of Children and Youth Referred for Mental Health Services. *Frontiers in Psychiatry, 12*, 737966–737966. <https://doi.org/10.3389/fpsy.2021.737966>
- Stormont, M., Reinke, W. M., Newcomer, L., Marchese, D., & Lewis, C. (2015). Coaching teacher's use of social behavior interventions to improve children's outcomes: A review of the literature. *Journal of Positive Behavior Interventions, 17*(2), 69–82. <https://doi.org/10.1177/1098300714550657>
- Strein, W., Hoagwood, K., & Cohn, A. (2003). School psychology: A public health perspective I. Prevention, populations, and systems change. *Journal of School Psychology, 41*, 23–38. [https://doi.org/10.1016/S0022-4405\(02\)00142-5](https://doi.org/10.1016/S0022-4405(02)00142-5)
- Sun, L., Semovski, V., & Stewart, S. L. (2021). A study of risk factors predicting school disruption in children and youth living in Ontario. *Canadian Journal of School Psychology, 36*(1), 1–12. <https://doi.org/10.1177/0829573521991421>
- Waddell, C., McEwan, K., Shepherd, C. A., Offord, D. R., & Hua, J. M. (2005). A public health strategy to improve the mental health of Canadian children. *Canadian Journal of Psychiatry, 50*(4), 226–233. <https://doi.org/10.1177/070674370505000406>
- Weist, M. D. (2003). Challenges and opportunities in moving toward a public health approach in school mental health. *Journal of School Psychology, 41*(1), 77–82. [https://doi.org/10.1016/S0022-4405\(02\)00146-2](https://doi.org/10.1016/S0022-4405(02)00146-2)
- Weist, M. D., Rubin, M., Moore, E., Adelsheim, S., & Wrobel, G. (2007). Mental health screening in schools. *Journal of School Health, 77*(2), 53–58. <https://doi.org/10.1111/j.1746-1561.2007.00167.x>
- Zimmerman, G. L., Olsen, C. G., & Bosworth, M. F. (2000). A 'stages of change' approach to helping patients change behavior. *American Family Physician, 61*, 1409–1416. Retrieved from <http://www.aafp.org/afp/20000301/1409.html>

Chapter 5

Skill-by-Treatment Interaction: Increasing the Likelihood for Success in Reading and Math



Matthew K. Burns, McKinzie D. Duesenberg, and Monica E. Romero

Abstract The current chapter describes the skill-by-treatment interaction (STI) framework for directing academic interventions, which use preintervention data in the skill being intervened to identify skill deficits and select interventions with the highest likelihood of success. Poor academic skills place children and youth at extraordinarily high risk for mental health issues during school and later in life. Strong academic skill interventions may be the strongest possible prevention activity for improving mental health. We summarize relevant research and outline specific guidelines to select interventions for reading and math. The chapter concludes with case studies demonstrating STIs in action.

Schools are facing an ongoing crisis of low academic proficiency as students are graduating with lower skills in reading and math in 2019 than they did in 2015, and only 37% of them are proficient in reading and 24% in math (National Center for Educational Statistics, 2019). School psychologists are trained in interventions to enhance academic skills given that all major professional standards address intervening in this area (Burns, 2019). However, there is no complete agreement on how best to do so.

Using preintervention measures of achievement to predict intervention effects has been called a skill-by-treatment interaction (STI; Burns et al., 2010) and has been used to identify interventions that were most likely to be successful for individual students. Interventions are developed from an STI paradigm based on student functioning within the skill rather than by assessing assumed underlying aptitudes (Burns et al., 2014). For example, a student with a deficit in reading decoding would respond better to an intervention that addresses decoding than a student for whom

M. K. Burns (✉) · M. D. Duesenberg · M. E. Romero
University of Missouri, Columbia, MO, USA
e-mail: burnsmk@missouri.edu

that skill is well developed but who struggles in a different aspect of reading such as comprehension. Within the skill of reading decoding, a student who is slow and inaccurate would likely benefit from an intervention that involves high modeling of the skill with immediate corrective feedback, but a student who is accurate and slow might require more practice opportunities with feedback. This chapter will discuss the theoretical underpinnings of STI, the clinical reasoning model for implementing STI, and the implications for prevention and assessment within school psychology. Finally, we will present case studies demonstrating an STI framework in action.

Guiding Framework/Theoretical Approach for Assessment, Prevention, and Intervention

The process of targeting interventions within STI involves identifying the most fundamental skill in which a student struggles. For example, a student who is low in reading fluency and comprehension, but who has acceptable phonemic awareness and reading decoding skills, would likely benefit from a reading fluency intervention because that would be the most fundamental skill in which the student experiences difficulty. In math, if a student struggles with the conceptual understanding of basic computation, then the intervention should focus on understanding the underlying concepts rather than practice completing the computation. We will discuss relevant reading and math development and will provide information about the instructional-level construct because that is a conceptual basis for much of an STI approach. Finally, we will conclude with a discussion of the learning hierarchy because it provides the conceptual framework for advanced decision-making within STI.

Reading Development

The National Reading Panel (2000) identified five critical reading skills that children need to acquire to become functionally independent readers. The five reading skills for reading success include *phonemic awareness* (the manipulation of spoken syllables in words), *phonics*, (letters-sound correspondences), *fluency* (reading speed and accuracy), *vocabulary* (lexicon of known words), and *comprehension skills* (deriving meaning from print). All five reading skills are essential features of the reading process that need to be measured systematically to drive information-based decision-making.

Phonological awareness (PA) interventions are defined as those that increase children's awareness of the sounds at the word level (e.g., dag, dig, dog). PA interventions target awareness of the sounds (i.e., phonemes) composing words (e.g., "cat" as /k/-/a/-/t/). Accordingly, PA is more specific to reading because this often requires decoding words at the phoneme level. Phonics interventions teach associations between phonemes and orthography, thereby differing from PA interventions in that they directly incorporate letters or text. Fluency interventions target the

ability to read with speed and fluency (Therrien, 2004). Reading comprehension interventions provide “specific procedures that guide students to become aware of how well they are comprehending as they read” (National Reading Panel, 2000). Typical activities in reading comprehension interventions involve identifying themes, inferential thinking, pictorial cues, prior knowledge, reflection, question generation, summarization, and story structure (Suggate, 2010).

Reading is conceptualized as the combination of all of the skills listed earlier. The Simple View of Reading (SVR) defines reading as the product of decoding and linguistic comprehension (Hoover & Gough, 1990). Simply comparing word reading to comprehension can help target interventions. For example, Vadasy and Sanders (2009) added a word-level intervention to repeated reading with 98 second- and third-grade struggling readers who had low fluency skills, which led to higher scores than just repeated reading alone on measures of letter-sound knowledge ($d = 0.41$), reading fluency ($d = 0.37$ – 0.38), and reading comprehension ($d = 0.30$ – 0.31). Interventionists can become more precise in their efforts by examining all of the areas described above. Among struggling readers, phonological decoding predicted word reading, and the rate and accuracy of word reading predicted comprehension (Berninger et al., 2006). Thus, interventions can be targeted according to phonemic awareness, decoding, reading fluency, or vocabulary and comprehension based on the most fundamental skill in which the student struggles, and doing so led to significantly more growth on measures of reading fluency and comprehension ($\eta^2 = .12$ for second grade and $\eta^2 = .16$ for third grade) than a control group that used a comprehensive intervention that addressed multiple aspects of reading (Burns et al., 2016).

Math Development

The National Mathematics Advisory Panel (NMAP, 2008) identified three fundamental clusters of skills that are essential to developing proficiency with algebra: *Number sense* refers to a wide range of abilities from the capacity to immediately identify quantities, to an understanding of the distributive property. *Fractions* refer to the segmentation of whole numbers represented by traditional fractions, decimals, and percentages as well as the ability to apply basic arithmetic models to them. *Geometry and measurements* involve the ability to calculate the perimeter and area of two and three-dimensional shapes, as well as the slope of lines and the relationships among shapes.

The National Council of Teachers of Mathematics (NCTM, 2000) identified five components for what constitutes math proficiency, (1) conceptual understanding, (2) procedural fluency, (3) adaptive reasoning, (4) strategic competence, and (5) productive disposition. The different areas of math competence described are interwoven and complement one another throughout skill development, but conceptual understanding and procedural fluency are often the first components to develop (NCTM, 2000). Conceptual understanding is the relations that underlie math problems and procedural fluency is the understanding of the rules and steps to solve the

problems (Hiebert & Lefevre, 1986). It is somewhat unclear as to which type of knowledge develops first, and the sequence may be specific to the domain or the individual (Rittle-Johnson et al., 2001), conceptual understanding may provide the basis for procedural fluency. For example, students with conceptual understanding should be able to apply certain concepts of understanding to solve familiar problems, even if they do not have procedural fluency (Burns, 2011).

There is less research regarding how to target math interventions in relation to targeting reading interventions. Given that students with math difficulties frequently struggle to quickly solve basic math facts (Burns, 2011; Geary et al., 2007), intervention efforts may be more effective for some students if they focus on procedural issues such as accurately recalling the basic math fact or completing the steps within a problem. For other students, a conceptual intervention might have the most promise because they lack the basic understanding of the underlying concepts, and teaching the steps to solve the problem would not address the deficit. Burns (Burns, 2011; Burns et al., 2015) used measures of conceptual understanding, demonstrated in Fig. 5.1, to target interventions. Students who demonstrated low procedural fluency and acceptable conceptual understanding received a procedural fluency intervention, and those who were low in both received an intervention that focused on conceptual understanding, both of which led to large effects as compared to interventions that did not target the student deficit.

Instructional Level

The term instructional level is probably one of the most used and misused terms in education today. We define an instructional level as the appropriate balance between task expectations and student performance so that the student can be challenged enough to learn new information while having enough background knowledge to complete the task (Gravois & Gickling, 2008). An instructional level is conceptually similar to Vygotsky's (1978) Zone of Proximal Development in which a student learns the most when taught information that requires some guidance from a skilled partner. Academic difficulties are viewed as the results of a mismatch between a student's skill and the curriculum or instructional materials (Gravois & Gickling, 2008). A curriculum that is too difficult results in student frustration, and one that is not challenging enough results in student boredom. Instructional material that represents the perfect match of new material and review so that optimal learning occurs represents an instructional level.

The term instructional level came from Betts's (1946) famous observation that students can read books better if they can read about 95% of the words correctly. That anecdotal observation led to an entire industry of educational assessments used to assess the instructional level, but most of the data generated by published tools did not accurately represent an instructional level when independently evaluated (McCarthy & Christ, 2010; Parker et al., 2015). In 1977, Ed Gickling coined the phrase curriculum-based assessment (Coulter, 1988) to refer to systematic assessment of the "instructional needs of a student based upon the on-going performance

Sample Conceptual Assessment for Single-Digit Computation

Student Name _____ Grade _____ Date _____

Look at the picture of dots below the two problems and circle the problem that best goes with the picture.

1. $6 + 5 = 11$

$6 + 3 = 9$



2. $5 + 2 = 7$

$5 + 3 = 8$



3. $4 + 4 = 8$

$6 + 4 = 10$



4. $2 + 5 = 7$

$3 + 5 = 8$



5. $6 + 6 = 12$

$6 + 2 = 8$



6. $3 + 6 = 9$

$4 + 6 = 10$



7. $6 + 5 = 11$

$4 + 5 = 9$



Fig. 5.1 Sample conceptual understanding assessment from curriculum-based assessment for instructional design. *Note.* The student is presented with 20 items. Each correctly circled equation represents 1 correct answer. An instructional level = 18 out of 20 correct

within the existing course content in order to deliver instruction as effectively as possible” (Gickling et al., 1989, pp. 344–345). The term evolved to Curriculum-Based Assessment for Instructional Design (CBA-ID; Gickling & Havertape, 1981) to differentiate it from other curriculum-based approaches.

Essentially, an instructional level is determined with CBA-ID by having the student engage in the skill with the materials used for instruction and record the number and percentage of items for which the student responded correctly (e.g., words read correctly, gave the correct letter sound) to determine appropriately challenging material for intervention. For example, reading is determined by having a student read from instructional material for 1-min, recoding the number of words read correctly and incorrectly, and then dividing the number read correctly by the total number of words to find the percentage of words read correctly. Math involves having the student complete a math task for 2 min in a single skill (e.g., a probe of single-digit multiplication facts) and computing the number of digits correct per minute. As shown in Table 5.1, an instructional level for reading would be material in which the student can read 93–97% of words correctly (Gickling & Thompson, 1985). The material in which the student reads more than 97% is called an independent level and is too easy while less than 93% is a frustration level and is too difficult. An instructional level for math would be 14–31 digits correct per minute for second and third graders and 24–49 digits correct per minute for fourth and fifth graders (Burns et al., 2006).

Table 5.1 Assessments and instructional level criteria for academic domains

Area	Assessment approaches	Instructional level
Connected text reading	Read passages and books used for instruction for 1 min	<ul style="list-style-type: none"> • 93–97% of words read correctly
Decontextualized reading skills (e.g., sight words and letter sounds)	Word lists, nonsense word measures, letter sound measures, etc.	<ul style="list-style-type: none"> • 90% known
Math computation	Timed probes of single-skill computation (e.g., single-digit multiplication)	<ul style="list-style-type: none"> • 14–31 digits correct per minute for second grade and third graders • 24–49 digits correct per minute for fourth and fifth graders
Writing	<p>Allow students 3 min to write in response to picture-word prompts and count total words written or correct word sequences</p> <p>Have the student copy simple sentences for 3 min and record words spelled correctly or correct word sequences</p>	<p>Picture Word Prompts (3 min)</p> <ul style="list-style-type: none"> • Words written 11–18 • Words spelled correctly 9–14 • Correct word sequences 8–14 <p>Sentence Copy (3 min)</p> <ul style="list-style-type: none"> • Words written 14–19 • Words spelled correctly 11–16 • Correct word sequences 10–16

Decades of research have consistently supported the effects of teaching students with instructional-level material. Having struggling readers read passages in which they could read 93–97% of the words increased their time on task, reading comprehension, and reading fluency (Gickling & Armstrong, 1978; Parker et al., 2015; Treptow et al., 2007). Preteaching words to create an instructional level with difficult material has also increased reading and behavioral outcomes (Beck et al., 2009; Burns et al., 2011), and the correlation between reading growth and the number of times that preteaching created an instruction level among students identified with a learning disability in reading was an astounding $r = .80$ (Burns, 2007).

Learning Hierarchy

The instructional hierarchy (Haring & Eaton, 1978) is the dynamic boundary between instructional activity and student competence (Burns et al., 2006) and can be used to differentiate interventions for students with the most severe learning needs. The learning hierarchy is an intervention heuristic that identifies interventions with a high likelihood for success by matching student skill with one of four phases of student learning, (a) acquisition, (b) fluency, (c) generalization, and (d) adaptation (Haring & Eaton, 1978).

A student's performance at the acquisition stage is characterized by low accuracy and subsequent dysfluency. Appropriate interventions within this phase include high modeling and frequent cuing (VanDerHeyden & Burns, 2005). Thus, acquisition interventions are one in which students have little or no knowledge of the skill and are initially taught or modeled the relevant concepts or procedures. After acquiring the skill, the student exhibits fluency, that is, the student is accurate but still dysfluent, and corresponding interventions should enhance fluency through additional practice, multiple opportunities to respond, and the use of contingent reinforcement. Fluency interventions are those in which the students can accurately complete the skill but need additional practice to become more proficient. Examples of fluency in math would include cover-copy-compare (Skinner et al., 1989), timed math fact trials, and incremental rehearsal (Burns, 2005). Once a student can accurately and fluently exhibit the skill, efforts can focus on the later phases of generalization and adaptation. Most academic deficits involve the first two phases, but students operating in the generalization or adaptation stages may require interventions such as guided application of fluent skills under novel conditions and using learned skills to solve more complex or different tasks. Research has consistently supported the positive effects of matching interventions to the phase of the learning hierarchy (Erion & Hardy, 2019; Szadokierski et al., 2017; Coddling et al., 2011).

Clinical Reasoning Model for Assessment, Prevention, and Intervention

An STI approach to assessment and intervention has a four-step process: (1) select skill-based assessment to assess (2.1) specific domains (2.2) phase of learning (as needed) (3) select intervention based on identified skill deficit (4) continuous progress monitoring (4.1) on grade level (4.2) and at the instructional level. The overarching premise of this approach is appropriately selecting a small group (tier 2), and individual (tier 3) interventions, based on brief pre-intervention measures of achievement. Unlike many approaches to data-based decision making, STI rarely used norm-referenced standardized measures of achievement. STI is not an assessment, and certainly, norm-referenced measures of specific skills (e.g., word attack) can inform intervention decisions, but data interpreted within an STI framework are usually collected with CBA-ID. This quick and widely accessible assessment allows teachers to specifically target the skill a student is struggling with and match it to the skills that an intervention targets, which in turn, allows researchers to better predict the outcome of the interventions (Burns et al., 2010; Szadokierski et al., 2017).

Step 1: Select Skill-Based Assessments

What makes STI an effective approach to assessment and intervention is the use of single-skill mastery measurement (SMM) to help identify both broad domains for remediation and if students are in the process of acquiring information or building their fluency within the specific skills. SMM uses quick probes of smaller domains of reading and math based on predetermined criteria. For reading, assessments should target phonemic awareness, phonics, fluency, vocabulary, comprehension (Table 5.2), and math (Table 5.3) focus more on a broader range of developmental skills. Ideally, these assessments are prescriptive in nature as interventionists and teachers can identify the specific skill domain that has not been mastered through the SMM.

Step 2.1: Specific Domains—Tier 2

The primary problem analysis question at Tier 2 is what is the category of the problem? In other words, Tier 2 interventions should target one primary deficit area for each student, but the target is a broad domain such as phonemic awareness, phonics, and math computation with single digits. The first step in an STI framework is to examine the data to find the most fundamental skill in which the student struggles, and then the intervention would target that skill. In reading, the five domains are assessed in the following sequence, (1) comprehension, (2) fluency, (3) decoding,

Table 5.2 Reading assessments within a skill-by-treatment interaction and accompanying criteria and interventions

Domains	Sample measures	Criterion			Interventions		
		Screening	Acquisition	Proficiency	Tier 2	Acquisition	Proficiency
Comp and vocabulary	STAR Reading EasyCBM Comprehension	<40%tile	<90% correct	>90% correct	Reciprocal Teaching	Modeling how to find main idea and teaching vocabulary	Practice applying strategies with feedback
Fluency	Grade-level oral reading fluency (ORF)	<Benchmark standard	<93% and <benchmark standard	>93% and <benchmark standard	Read naturally	Modeling with error correction (e.g., Duet Reading)	Repeated reading with reward
Decoding	Grade-level ORF; Nonsense word fluency; Decoding Inventory	<93% correct <90% correct <93% correct	<90% correct	>90% correct	Sound Partners REWARDS	Explicit instruction with modeling for decoding skill	Practice reading sounds (e.g., Great Leaps)
Phonemic Awareness (PA)	ISF; PSF; PRESS PAI	<Benchmark Standard	<90% correct	>90% correct	Road to the Code IFA: PA	Model PA with immediate feedback	1 min PA Drills

Notes. *Comp* reading comprehension, *ISF* Initial Sound Fluency, *PSF* Phoneme Sound Fluency, and *PAI* Phonemic Awareness Inventory, *IFA: PA* Interventions for All: Phonological Awareness

Table 5.3 Math assessments within a skill-by-treatment interaction and accompanying criteria and interventions

Domain	Measure	Criterion			Interventions		
		Screening	Acquisition	Proficiency	Tier 2	Acquisition	Proficiency
Word problem solving	STAR Math	<Benchmark standard	<90% accuracy	>90% accuracy	Schema Based Math	Explicit instruction in word problem-solving strategies	Prompts for word problem-solving strategy
Computation	Timed probes of individual math skills	<Instructional level criteria (Table 5.1)	<90% accuracy	>90% accuracy	SpringMath	Incremental Rehearsal; Cover, Copy, Compare	Timed trials; Taped Problems
Conceptual Understanding	MCAP Conceptual Assessment (Fig. 5.1)	<Benchmark standard <90% accuracy	<90% accuracy	>90% accuracy	ST Math	Explicit instruction in concepts with manipulatives CRA	Practice completing problems with manipulatives

Notes. *MCAP* Aimsweb Mathematics Concepts and Applications test, *CRA* Concrete-Representation-Abstract math instruction

and (4) phonemic awareness. The assessment sequence begins with a measure of comprehension (see Table 5.2). If the student demonstrates low comprehension, then the interventionists would examine reading fluency in the manner displayed in Fig. 5.2. Once assessment data are used to identify the most fundamental skill in which the student struggles, then the intervention is selected to match that deficit.

Math assessments at Tier 2 follow a similar framework as reading, but the domains are somewhat more specific. As shown in Table 5.4, an STI framework in math requires a known list of objectives that build on one another. Many math curricula provide a list similar to Table 5.4. Once a list of objectives is located or compiled, interventionists can create a series of short assessments for each. Websites such as <https://www.mathfactcafe.com/> can be used to create free assessment probes. Students can then be given 2–3 min to complete each of the probes, and the data converted to a digits-correct-per-minute metric, which are then compared to instructional level criteria presented in Table 5.1. The lowest skill for which the student demonstrates an instructional level becomes the target for Tier 2 interventions. For example, if a student demonstrates independent-level skill (higher than 31 digits correct per minute) in the first five objectives in Table 5.4 (addition through 20, subtraction through 20, and fact families), but the assessment for two-digit addition without regrouping fell within the instructional level of 14–31 digits correct per minute, then the Tier 2 intervention for the student would be two-digit addition without regrouping.

Step 2.2: Phase of Learning—Tier 3

Most students respond well to targeted Tier 2 interventions as described in the previous section (Burns et al., 2016). However, for those who do not, the learning hierarchy can then be used to interpret additional data to intensify the intervention. When looking at the data, the first question asked was should have the student acquired the information needed for this skill? If they have not, then accuracy will be low within the assessment. Is the student proficient with the knowledge? If they are not, then they would be accurate, but slow in completing the assessment. Tables 5.2 and 5.3 outline specific criteria identified through research in regard to matching assessments based on student's phase within the learning hierarchy.

Step 3: Select the Intervention

Based on information collected through SMM, teachers and interventionists can decide what specific intervention will target the area of need for the student. Tables 5.2 and 5.3 outline specific interventions that can be used for students at Tiers 2 and 3, but there are others that can be effective. Readers can find lists of potential interventions on several websites including the Evidence-Based Intervention Network

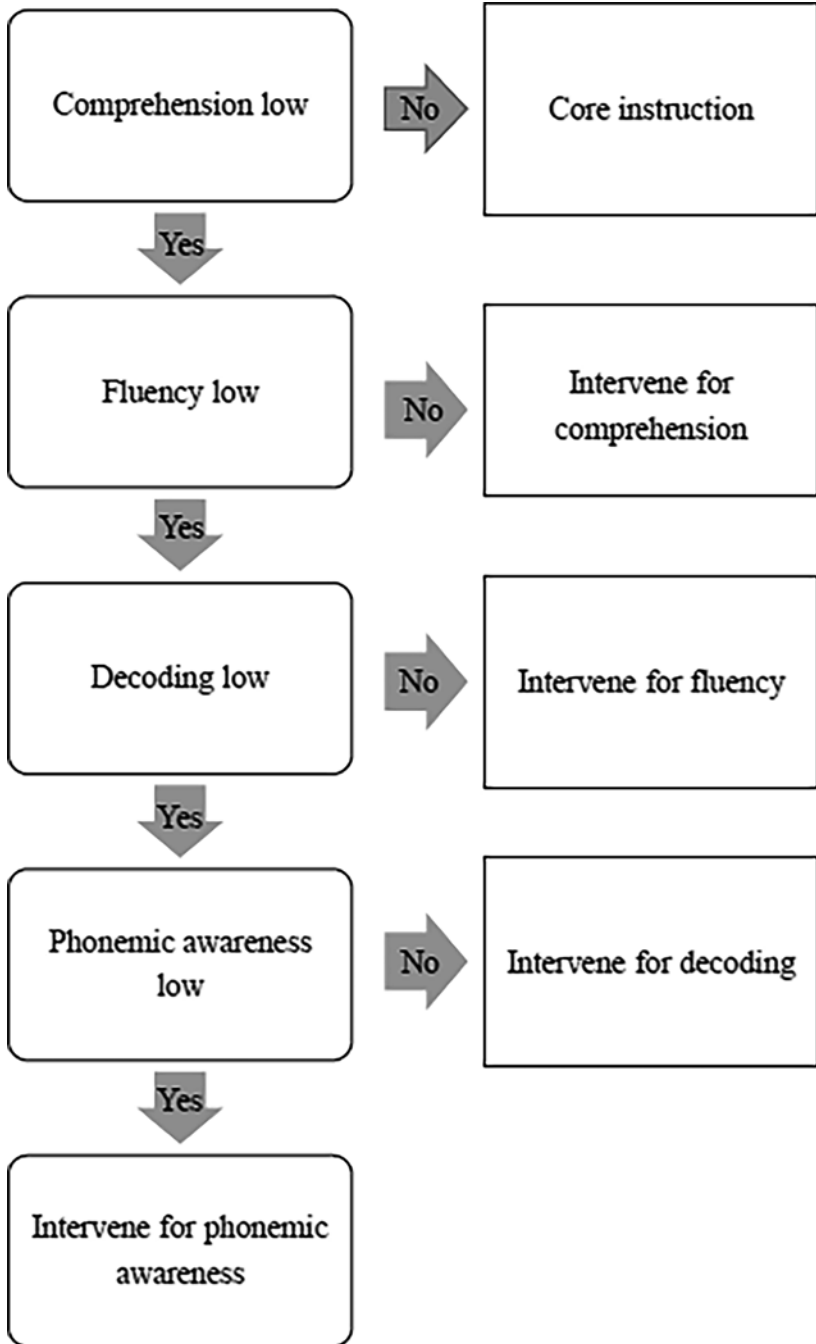


Fig. 5.2 Tier 2 intervention flow chart for reading

Table 5.4 Sample list of math objectives for second grade (based on VanDerHeyden et al., 2019)

1. Addition facts 0–20
2. Subtraction facts 0–9
3. Subtraction facts 0–15
4. Subtraction facts 0–20
5. Fact families addition and subtraction 0–20
6. Two-digit addition without regrouping
7. Two-digit addition with regrouping
8. Two-digit subtraction without regrouping
9. Two-digit subtraction with regrouping
10. Three-digit addition with and without regrouping
11. Three-digit subtraction with and without regrouping

(<https://ebi.missouri.edu/>) and the National Center for Intensive Intervention (<https://charts.intensiveintervention.org/aintervention>). What matters most is that the intervention addresses what the student needs and that it is implemented with fidelity.

At Tier 3, the learning hierarchy is considered to intensify the intervention. If a student is struggling in the acquisition stage of a particular domain of literacy and math, the learning stimuli needs to become easier for the student and focus intensely on the core concepts of the domain. This could look like incorporating visual cues, teaching less each lesson, more modeling, or addressing a skill with which the student has demonstrated success. If a student is struggling within the proficiency stage, then it is important to incorporate repeated exposure and practice within and across lessons. This could be accomplished with independent practice, timed drills, more frequent yet shorter lessons, and frequently asking the students to recall what they had already learned.

Step 4: Continuous Progress Monitoring

Progress monitoring is the process of quantifying rates of improvement and adjusting instructional programs to make them effective and better suited to student needs (National Center on Intensive Intervention, n.d.), and it is critically important to any intervention model (Mellard et al., 2009; Shapiro, 2011; Stecker et al., 2008). An STI approach monitors progress in two ways. First, progress toward broad instructional goals is measured with a general outcome measure (GOM) such as a curriculum-based measure of reading fluency (CBM-R), which is a useful tool to monitor progress for general reading proficiency (Fuchs et al., 2001). However, targeting narrow skills for intervention might reduce the sensitivity of a GOM to show growth (Shapiro, 2011).

Progress monitoring in an STI framework relies on both GOM and SMM data to gauge intervention effects (Ball & Christ, 2012). Previous research has supported

the psychometric adequacy of several early literacy measures as progress monitoring tools (McConnell & Wackerle-Hollman, 2016; Oslund et al., 2012), and the distinctions between growth demonstrated by GOM and SMM data are more pronounced for interventions that target more fundamental skills (e.g., phonemic awareness or early phonics patterns) (Van Norman et al., 2018). Growth for GOM data is based on typical interpretative frameworks such as national norms or comparisons to growth needed to obtain proficiency. Well-established frameworks are needed to evaluate growth with GOM data because those are the data used to allocate resources (e.g., move from tier 2 to tier 3). There are less well-developed interpretative schemes for SMM data, but less specificity is needed because those data are used to supplement GOM data to determine if a student is making sufficient growth, and SMM data would be used to modify an intervention rather than to reallocate resources. For example, consider a student who receives a phonics intervention that focuses on early literacy skills (e.g., letter-sound correspondence). A GOM, such as CBM-R, data might show a growth rate that is less than expected, but an SMM that examines phonics (e.g., nonsense or word list fluency) could suggest that phonics skills are increasing while not yet adequately affecting the GOM scores.

Perspectives and Approaches Relative to School Psychology Assessment

Assessment is fundamental to school psychology practice and is included in every published professional standard for the field (Burns, 2019), but STI fundamentally differs from typical approaches to school psychology assessment. School psychologists spend at least 50% of their time engaged in assessment activities to determine eligibility for special education services (Walcott et al., 2018). The Wechsler Intelligence Scale for Children, 5th Edition (WISC-V; Wechsler, 2014), was reportedly used by 80% of school psychologists who responded to a national survey (Benson et al., 2019). Conversely, only 29.3% of the respondents used CBM-R, and although small numbers of respondents reported use of specific skill measures such as early literacy (26.6%), early numeracy (22.8%), and math concepts and application (27.3%), CBA-ID was not included in the survey (Benson et al., 2019). Not including CBA-ID in the recent survey was surprising given that participants in the Shapiro et al. (2004) survey reported that they used CBA with 80% of the students with whom they worked, and 72% used a model that aligned with CBA-ID and STI.

STI is not an assessment tool, but it is an approach to interpreting the data. Floyd and Kranzler (2019) discuss how STI is different from more typical approaches to assessment in school psychology. First, assessment targets specific skills rather than broad domains of achievement for both assessment and subsequent interventions. Second, STI assessments rarely rely on norm-referenced tools and instead compare student performance to research-based criteria for proficiency/mastery and phase of student learning. Finally, the goal of assessment is to drive intervention rather than

classify students into “fixed educational structures” (p. 413). Thus, STI is a different approach to assessment than what is commonly used in school psychology practice, with a focus on determining interventions rather than identifying disabilities.

Perspectives and Approaches to Prevention and Intervention

As stated earlier, 80% of school psychologists reported using the WISC-IV, and 95% of respondents reported using a measure of cognitive ability (Benson et al., 2019), which is surprising because only one special education disability (intellectual disability) requires an assessment of cognitive functioning, and special education eligibility remains the most common professional activity for school psychologists (Walcott et al., 2018). Why is there such a disparity between regulatory mandates and actual practice? School psychologists administer measures of cognitive functioning because they believe that doing so will lead to improved outcomes for students (Braden & Shaw, 2009). However, meta-analytic research has consistently shown that measures of cognitive ability did not predict student outcomes (Scholin & Burns, 2012; Stuebing et al., 2009) and have limited utility in identifying interventions for reading and math (Burns et al., 2016; Kearns & Fuchs, 2013; Stuebing et al., 2015). Even efforts to target specific cognitive areas such as working memory and executive function did not improve student learning (Jacob & Parkinson, 2015; Melby-Lervåg & Hulme, 2013).

Most school psychologists are trained in the aptitude \times treatment interaction tradition, in which interventions have differential effects based on individual differences in various cognitive skills, despite the lack of an established causal link between measures of cognitive functioning and intervention outcomes (Floyd & Kranzler, 2019). School psychologists would better meet the needs of students if they adopted a prevention framework approach to practice that examined student difficulties through ecological systems theory (Burns, 2011), both of which are consistent with an STI approach to solving problems.

Prevention science is a method to identify and alter targets that will improve important outcomes for children (Herman et al., 2012). The goal of STI is to identify specific skill deficits that are linked to broader skills such as math and reading proficiency (Burns et al., 2010; Szadokierski et al., 2017). Research has consistently found that effective intervention efforts can prevent future learning difficulties (Lembke et al., 2010; VanDerHeyden et al., 2007), and interventions are more effective if they target specific skill deficit (Hall & Burns, 2018). Thus, identifying student deficits and using those data to target intervention efforts is consistent with prevention science and is likely to improve student outcomes.

Perhaps the biggest difference between STI and traditional school psychology is how student failures are interpreted. Ecological Systems Theory (EST) is the study of multiple interconnected environmental systems that influence individual development (Bronfenbrenner, 1977) and provides a theoretical foundation for STI, along with prevention science. In an EST approach, “disturbance is not viewed as a

disease located with the body of the child, but rather a discordance in the system” (p. 89), and dysfunctions occur when there is a mismatch between student skill and the environmental demands (Apter & Conoley, 1984). Given that 95% of school psychologists use a measure of cognitive functioning within their evaluations (Benson et al., 2019), many practitioners view skill deficit as a dysfunction located within the individual child.

Given that the goal of most school psychological assessments is to identify a disability (Floyd & Kranzler, 2019; Walcott et al., 2018), it is not surprising that the current system fosters student-dysfunction thinking. However, outcomes associated with systems that rely on disability labels do not result in academic or mental health improvement (Algraigray & Boyle, 2017; Kavale & Forness, 2000; Sullivan & Field, 2013). STI requires practitioners to examine student failure as a mismatch between skill and expectation in some important academic area, which is exactly the purpose of CBA-ID. For example, a student who reads less than 93% of the words correctly from the material used for reading instruction will experience a multitude of difficulties, and once that mismatch is corrected, academic and behavioral outcomes increase (Gickling & Armstrong, 1978; Burns & Parker, 2014; Treptow et al., 2007). Moreover, using STI to target interventions to match the specific student deficit increases outcomes in reading and math (Burns et al., 2010; Szadokierski et al., 2017).

Case Studies

STI is not a difficult process to implement but requires an in-depth understanding of the data. Next, we provide two examples of STI, one that was implemented at tier 2 and one at tier 3.

Tier 2

AJ was a second-grader who scored below benchmark standards on the STAR Reading test, which was the school’s universal screener for reading. His teacher assessed his instructional level with a commonly used informal reading inventory (IRI), which resulted in a reading level of E. He was placed into a reading group of students with similar reading levels to read books together.

AJ was not making sufficient progress after several weeks of instruction. The school psychologist assessed his reading skills with CBA-ID using E-level books produced by the same publisher as the IRI. The percentage of words read correctly ranged from 78% to 88% correct, which represented a frustration level and suggested that E-level books were too difficult. A reading fluency assessment (ORF) fell below the 20th percentile for his age group. Next, the school psychologist assessed AJ’s decoding skills with a list of low-frequency highly decodable words,

and he correctly identified less than 90% of the sounds correctly. As a result, the school psychologist recommended that AJ be placed into a Tier 2 intervention that used Sound Partners (Vadasy, 2005) because he demonstrated low comprehension, fluency, and decoding and decoding is the most fundamental of the three skills.

AJ's decoding skills were monitored with weekly letter-sound assessments, and grade-level Aimsweb ORF was used as the GOM to also monitor his progress. He quickly obtained the 90% known criterion on three consecutive assessments, after which the focus switched to practicing the use of letter sounds to make words with various blending activities and connected text. His weekly GOM data also continued to increase at a rate that exceeded the typical second-grade readers.

Tier 3

Lonnie was a kindergarten student who experienced significant difficulties learning basic letter sounds. He was participating in a Tier 2 intervention that focused on phonemic awareness while teaching basic letter sounds. His progress was monitored with letter sound fluency, and the data did not suggest an upward trend. The school psychologists examined screening data. Lonnie scored above the proficiency score on measures of first-found fluency and phoneme-segmentation fluency, which are measures of phonemic awareness. Thus, Lonnie demonstrated acceptable phonemic awareness, and continued difficulty learning letter sounds. School personnel decided that his lack of growth indicated that Lonnie required a tier 3 intervention and started teaching him the letter-sound correspondence with Incremental Rehearsal (IR), which is a well-researched intervention (see <https://charts.intensiveintervention.org/intervention> for a description of the research https://www.youtube.com/channel/UC0ad1ei6p_HOHHhc-T-JnZg/videos for video demonstrations of IR). However, Lonnie's scores on letter-sound correspondence did not increase. The school psychologist then observed the intervention and saw that IR was implemented correctly, but at the end of the intervention session, Lonnie did not correctly provide the sound of the letter that he was just successfully taught.

Lonnie's data suggested that he was in the acquisition phase of learning (see Table 5.2) because he knew less than 90% of the letter-sound correspondences and he did not successfully demonstrate the new skill immediately after being taught it. Fortunately, Lonnie had good phonemic awareness but that was also puzzling and suggested that letter-sound correspondence was the correct intervention target. Students in the acquisition phase need intervention stimuli that are more errorless and salient. Thus, the school team decided to continue using IR but to use pictures as knowns and to use a picture cue for the unknowns. For example, the letter h was taught with a picture of a hammer with the letter h at the bottom of the card. Lonnie was asked to say "hammer, /h/, h" every time that he saw the card.

During the first intensified Tier 3 intervention, Lonnie was presented with the letter h and was asked what sound it made. He hesitated for a moment, looked at the interventionist, and said /h/. That was the first time in this young student's

educational experience that he stated the correct letter-sound correspondence after being taught the letter a few moments before. Lonnie quickly learned his letter sounds and moved on to more advanced decoding skills with similar approaches and reached proficiency on kindergarten screening measures by the end of the year.

Conclusion

In 1975, Maynard Reynolds warned that “In today’s context the measurement technologies ought to become integral parts of instruction designed to make a difference in the lives of children and not just a prediction about their lives” (p. 15). School psychologists have sought measures to improve the lives of the children that we serve, but improving measurement technology will not be as effective as improving the decisions made with the data. STI provides a framework to examine data that are based on sound theory, well researched, and practical. The information provided here may be useful to school psychologists interested in better supporting the academic skills of the students that they serve, and researchers may find a conceptual framework to drive future research. Additional research is needed, but given the number of students who struggle with reading and math, and the simplicity of the model presented here, the additional research seems warranted.

References

- Algraigray, H., & Boyle, C. (2017). The SEN label and its effect on special education. *Educational & Child Psychology, 34*(4), 70–79.
- Apter, S. J., & Conoley, J. C. (1984). *Childhood behavior disorders and emotional disturbance: An introduction to teaching troubled children*. Prentice-Hall.
- Ball, C. R., & Christ, T. J. (2012). Supporting valid decision making: Uses and misuses of assessment data within the context of RTI. *Psychology in the Schools, 49*(3), 231–244. <https://doi.org/10.1002/pits.21592>
- Beck, M., Burns, M. K., & Lau, M. (2009). The effect of preteaching reading skills on the on-task behavior of children identified with behavioral disorders. *Behavioral Disorders, 34*(2), 91–99. <https://doi.org/10.1177/019874290903400203>
- Benson, N. F., Floyd, R. G., Kranzler, J. H., Eckert, T. L., Fefer, S. A., & Morgan, G. B. (2019). Test use and assessment practices of school psychologists in the United States: Findings from the 2017 National Survey. *Journal of School Psychology, 72*, 29–48. <https://doi.org/10.1016/j.jsp.2018.12.004>
- Berninger, V. W., Abbott, R. D., Vermeulen, K., & Fulton, C. M. (2006). Paths to reading comprehension in at-risk second-grade readers. *Journal of Learning Disabilities, 39*(4), 334–351. <https://doi.org/10.1177/00222194060390040701>
- Betts, E. A. (1946). *Foundations of reading instruction, with emphasis on differentiated guidance*. American Book Company.
- Braden, J. P., & Shaw, S. R. (2009). Intervention validity of cognitive assessment: Knowns, unknowables, and unknowns. *Assessment for Effective Intervention, 34*(2), 106–115. <https://doi.org/10.1177/1534508407313013>

- Bronfenbrenner, U. (1977). Toward an experimental ecology of human development. *American Psychologist*, 32(7), 513–531. <https://doi.org/10.1037/0003-066X.32.7.513>
- Burns, M. K. (2005). Using incremental rehearsal to increase fluency of single-digit multiplication facts with children identified as learning disabled in mathematics computation. *Education and Treatment of Children*, 28, 237–249.
- Burns, M. K. (2007). Reading at the instructional level with children identified as learning disabled: Potential implications for response-to-intervention. *School Psychology Quarterly*, 22(3), 297–313. <https://doi.org/10.1037/1045-3830.22.3.297>
- Burns, M. K. (2011). Matching math interventions to students' skill deficits: A preliminary investigation of a conceptual and procedural heuristic. *Assessment for Effective Intervention*, 36(4), 210–218. <https://doi.org/10.1177/1534508411413255>
- Burns, M. K. (2019). Introduction to school psychology: Controversies and current practice. In M. K. Burns (Ed.), *Introduction to school psychology: Controversies and current practice* (pp. 1–14). Oxford University Press.
- Burns, M. K., Coddling, R. S., Boice, C. H., & Lukito, G. (2010). Meta-analysis of acquisition and fluency math interventions with instructional and frustration level skills: Evidence for a skill-by-treatment interaction. *School Psychology Review*, 39(1), 69–83. <https://doi.org/10.1080/002796015.2010.12087791>
- Burns, M. K., Hodgson, J., Parker, D. C., & Fremont, K. (2011). Comparison of the effectiveness and efficiency of text previewing and preteaching keywords as small-group reading comprehension strategies with middle-school students. *Literacy Research and Instruction*, 50(3), 241–252. <https://doi.org/10.1080/19388071.2010.519097>
- Burns, M. K., Maki, K. E., Karich, A. C., Hall, M., McComas, J. J., & Helman, L. (2016). Problem analysis at tier 2: Using data to find the category of the problem. In S. Jimerson, M. K. Burns, & A. M. VanDerHeyden (Eds.), *Handbook of response to intervention* (pp. 293–307). Springer.
- Burns, M. K., & Parker, D. C. (2014). *Curriculum-based assessment for instructional design: Using data to individualize instruction*. Guilford.
- Burns, M. K., VanDerHeyden, A. M., & Jiban, C. L. (2006). Assessing the instructional level for mathematics: A comparison of methods. *School Psychology Review*, 35(3), 401–418. <https://doi.org/10.1080/02796015.2006.12087975>
- Burns, M. K., VanDerHeyden, A. M., & Zaslofsky, A. F. (2014). Best practices in delivering intensive academic interventions with a skill-by-treatment interaction. In A. Thomas & P. Harrison (Eds.), *Best practices in school psychology VI* (pp. 129–142). National Association of School Psychologists.
- Burns, M. K., Walick, C., Simonson, G. R., Dominguez, L., Harelstad, L., Kincaid, A., & Nelson, G. S. (2015). Using a conceptual understanding and procedural fluency heuristic to target math interventions with students in early elementary. *Learning Disabilities Research & Practice*, 30(2), 52–60.
- Coddling, R. S., Burns, M. K., & Lukito, G. (2011). Meta-analysis of mathematic basic-fact fluency interventions: A component analysis. *Learning Disabilities Research & Practice*, 26(1), 36–47. <https://doi.org/10.1111/j.1540-5826.2010.00323.x>
- Coulter, W. A. (1988). Curriculum-based assessment: What's in a name? *Communiqué*, 18(3), 13.
- Erion, J., & Hardy, J. (2019). Parent tutoring, instructional hierarchy, and reading: A case study. *Preventing School Failure: Alternative Education for Children and Youth*, 63(4), 382–392.
- Floyd, R. G., & Kranzler, J. H. (2019). Remediating student learning problems: Aptitude-by-treatment interaction versus skill-by-treatment interaction. In M. K. Burns (Ed.), *Introduction to school psychology: Controversies and current practice* (pp. 413–434). Oxford University Press.
- Fuchs, L. S., Fuchs, D., Hosp, M. K., & Jenkins, J. R. (2001). Oral reading fluency as an indicator of reading competence: A theoretical, empirical, and historical analysis. *Scientific Studies of Reading*, 5(3), 239–256. https://doi.org/10.1207/S1532799XSSR0503_3
- Geary, D. C., Hoard, M. K., Byrd-Craven, J., Nugent, L., & Numtee, C. (2007). Cognitive mechanisms underlying achievement deficits in children with mathematical learning disability. *Child Development*, 78(4), 1343–1359. <https://doi.org/10.1111/j.1467-8624.2007.01069.x>

- Gickling, E. E., & Armstrong, D. L. (1978). Levels of instructional difficulty as related to on-task behavior, task completion, and comprehension. *Journal of Learning Disabilities, 11*(9), 559–566. <https://doi.org/10.1177/002221947801100905>
- Gickling, E. E., & Havertape, S. (1981). *Curriculum-based assessment (CBA)*. School Psychology Inservice Training Network.
- Gickling, E. E., Shane, R. L., & Croskery, K. M. (1989). Developing math skills in low achieving high school students through curriculum-based assessment. *School Psychology Review, 18*, 344–356. <https://doi.org/10.1080/02796015.1989.12085431>
- Gickling, E., & Thompson, V. (1985). A personal view of curriculum-based assessment. *Exceptional Children, 52*, 205–218. <https://doi.org/10.1177/001440298505200302>
- Gravois, T. A., & Gickling, E. E. (2008). Best practices in instructional assessment. In A. Thomas & J. Grimes (Eds.), *Best practices in school psychology V* (pp. 503–518). National Association of School Psychologists.
- Hall, M. S., & Burns, M. K. (2018). Meta-analysis of targeted small-group reading interventions. *Journal of School Psychology, 66*, 54–66. <https://doi.org/10.1016/j.jsp.2017.11.002>
- Haring, N. G., & Eaton, M. D. (1978). Systematic instructional technology: An instructional hierarchy. In N. G. Haring, T. C. Lovitt, M. D. Eaton, & C. L. Hansen (Eds.), *The fourth R: Research in the classroom* (pp. 23–40). Merrill.
- Herman, K. C., Riley-Tillman, T. C., & Reinke, W. M. (2012). The role of assessment in a prevention science framework. *School Psychology Review, 41*(3), 306–314. <https://doi.org/10.1080/002796015.2012.12087511>
- Hiebert, J., & Lefevre, P. (1986). Conceptual and procedural knowledge for teaching on student achievement. In J. Hiebert (Ed.), *Conceptual and procedural knowledge: The case of mathematics* (pp. 1–27). Erlbaum.
- Hoover, W. A., & Gough, P. B. (1990). The simple view of reading. *Reading and Writing, 2*(2), 127–160.
- Jacob, R., & Parkinson, J. (2015). The potential for school-based interventions that target executive function to improve academic achievement: A review. *Review of Educational Research, 85*(4), 512–552. <https://doi.org/10.3102/0034654314561338>
- Kavale, K. A., & Forness, S. R. (2000). Policy decisions in special education: The role of meta-analysis. In R. Gersten, E. P. Schiller, & S. R. Vaughn (Eds.), *Contemporary special education research: Synthesis of the knowledge base on critical instructional issues* (pp. 281–326). Routledge.
- Kearns, D. M., & Fuchs, D. (2013). Does cognitively focused instruction improve the academic performance of low-achieving students? *Exceptional Children, 79*(3), 263–290. <https://doi.org/10.1177/001440291307900200>
- Lembke, E. S., McMaster, K. L., & Stecker, P. M. (2010). The prevention science of reading research within a Response-to-Intervention model. *Psychology in the Schools, 47*(1), 22–35. <https://doi.org/10.1002/pits.20449>
- McCarthy, A. M., & Christ, T. J. (2010). Test Review: Beaver, J. M., & Carter, M. A. (2006). *The developmental reading assessment—second edition (DRA2)*. Upper Saddle River, NJ: Pearson. *Assessment for Effective Intervention, 35*(3), 182–185. <https://doi.org/10.1177/1534508410363127>
- McConnell, S., & Wackerle-Hollman, A. (2016). Can we measure the transition to reading? General outcome measures and early literacy development from preschool to early elementary grades. *AERA Open, 2*, 1–15. <https://doi.org/10.1177/2332858416653756>
- Melby-Lervåg, M., & Hulme, C. (2013). Is working memory training effective? A meta-analytic review. *Developmental Psychology, 49*(2), 270–291. <https://doi.org/10.1037/a0028228>
- Mellard, D. F., McKnight, M., & Woods, K. (2009). Response to intervention screening and progress-monitoring practices in 41 local schools. *Learning Disabilities Research & Practice, 24*(4), 186–195. <https://doi.org/10.1111/j.1540-5826.2009.00292.x>
- National Assessment of Educational Progress. (2019). *NAEP report card: 2019*.
- National Center on Intensive Intervention (n.d.). *Progress monitoring*. Available online at <https://intensiveintervention.org/data-based-individualization/progress-monitoring>

- National Council of Teachers of Mathematics. (2000). *Principles and standards for school mathematics*.
- National Mathematics Advisory Panel. (2008). *Foundations for success: The final report of the National Mathematics Advisory Panel*. U.S. Department of Education.
- National Reading Panel. (2000). *Report of the National Reading Panel: Teaching children to read: An evidence-based assessment of the scientific research literature on reading and its implications for reading instruction: Reports of the subgroups*. National Institute of Child Health and Human Development, National Institutes of Health.
- Olund, E. L., Habun-Burke, S., Taylor, A. B., Simmons, D. C., Simmons, L., Kwok, O., et al. (2012). Predicting kindergarteners' response to early reading intervention: An examination of progress-monitoring measures. *Reading Psychology, 33*, 78–103. <https://doi.org/10.1080/002702711.2012.630611>
- Parker, D. C., Zaslofsky, A. F., Burns, M. K., Kanive, R., Hodgson, J., Scholin, S. E., & Klingbeil, D. A. (2015). A brief report of the diagnostic accuracy of oral reading fluency and reading inventory levels for reading failure risk among second-and third-grade students. *Reading & Writing Quarterly, 31*(1), 56–67. <https://doi.org/10.1080/10573569.2013.857970>
- Rittle-Johnson, B., Siegler, R. S., & Alibali, M. W. (2001). Developing conceptual understanding and procedural skill in mathematics: An iterative process. *Journal of Educational Psychology, 93*(2), 346–362. <https://doi.org/10.1037/0022-0663.93.2.346>
- Scholin, S., & Burns, M. K. (2012). Relationship between pre-intervention data and post-intervention reading fluency and growth: A meta-analysis of assessment data for individual students. *Psychology in the Schools, 49*, 385–398. <https://doi.org/10.1002/pits.21599>
- Shapiro, E. S. (2011). *Academic skills problems: Direct assessment and intervention*. Guilford.
- Shapiro, E. S., Angello, L. M., & Eckert, T. L. (2004). Has curriculum-based assessment become a staple of school psychology practice? An update and extension of knowledge, use, and attitudes from 1990 to 2000. *School Psychology Review, 33*(2), 249–257. <https://doi.org/10.1080/002796015.2004.12086246>
- Skinner, C. H., Beatty, K. L., Turco, T. L., & Rasavage, C. (1989). Cover, copy, and compare: A method for increasing multiplication performance. *School Psychology Review, 18*(3), 412–420. <https://doi.org/10.1080/02796015.1989.12085436>
- Stecker, P. M., Fuchs, D., & Fuchs, L. S. (2008). Progress monitoring as essential practice within response to intervention. *Rural Special Education Quarterly, 27*(4), 10–17.
- Stuebing, K. K., Barth, A. E., Molfese, P. J., Weiss, B., & Fletcher, J. M. (2009). IQ is not strongly related to response to reading instruction: A meta-analytic interpretation. *Exceptional Children, 76*(1), 31–51. <https://doi.org/10.1177/001440290907600102>
- Stuebing, K. K., Barth, A. E., Trahan, L. H., Reddy, R. R., Miciak, J., & Fletcher, J. M. (2015). Are child cognitive characteristics strong predictors of responses to intervention? A metaanalysis. *Review of Educational Research, 85*(3), 395–429. <https://doi.org/10.3102/0034654314555996>
- Suggate, S. P. (2010). Why what we teach depends on when: Grade and reading intervention modality moderate effect size. *Developmental Psychology, 46*(6), 1556–1579. <https://doi.org/10.1037/a0020612>
- Sullivan, A. L., & Field, S. (2013). Do preschool special education services make a difference in kindergarten reading and mathematics skills? A propensity score weighting analysis. *Journal of School Psychology, 51*(2), 243–260. <https://doi.org/10.1016/j.jsp.2012.12.004>
- Szadokierski, I., Burns, M. K., & McComas, J. J. (2017). Predicting intervention effectiveness from reading accuracy and rate measures through the instructional hierarchy: Evidence for a skill-by-treatment interaction. *School Psychology Review, 46*(2), 190–200. <https://doi.org/10.17105/SPR-2017-0013.V46-2>
- Therrien, W. J. (2004). Fluency and comprehension gains as a result of repeated reading: A meta-analysis. *Remedial and Special Education, 25*(4), 252–261. <https://doi.org/10.1177/07419325040250040801>
- Treptow, M. A., Burns, M. K., & McComas, J. J. (2007). Reading at the frustration, instructional, and independent levels: The effects on students' reading comprehension and time on task. *School Psychology Review, 36*(1), 159–166. <https://doi.org/10.1080/02796015.2007.12087958>

- Vadasy, P. F. (2005). *Sound partners: A supplementary one-to-one tutoring program in phonics-based early reading skills*. Voyager Sopris Learning.
- Vadasy, P. F., & Sanders, E. A. (2009). Supplemental fluency intervention and determinants of reading outcomes. *Scientific Studies of Reading, 13*(5), 383–425. <https://doi.org/10.1080/10888430903162894>
- Van Norman, E. R., Maki, K. E., Burns, M. K., McComas, J. J., & Helman, L. (2018). Comparison of progress monitoring data from general outcome measures and specific subskill mastery measures for reading. *Journal of School Psychology, 67*, 179–189. <https://doi.org/10.1016/j.jsp.2018.02.002>
- VanDerHeyden, A. M., Broussard, C., & Burns, M. K. (2019). Classification agreement for gated screening in mathematics: Subskill mastery measurement and classwide intervention. *Assessment for Effective Intervention, 46*, 1534508419882484.
- VanDerHeyden, A. M., & Burns, M. K. (2005). Using curriculum-based assessment and curriculum-based measurement to guide elementary mathematics instruction: Effect on individual and group accountability scores. *Assessment for Effective Intervention, 30*(3), 15–31. <https://doi.org/10.1177/073724770503000302>
- VanDerHeyden, A. M., Witt, J. C., & Gilbertson, D. (2007). A multi-year evaluation of the effects of a response to intervention (RTI) model on identification of children for special education. *Journal of School Psychology, 45*(2), 225–256. <https://doi.org/10.1016/j.jsp.2006.11.004>
- Vygotsky, L. S. (1978). *Mind in Society: The development of higher mental processes*. Harvard University Press.
- Walcott, C. M., Hyson, D., McNamara, K., & Charvat, J. L. (2018). Results from the NASP 2015 membership survey, part one: Demographics and employment conditions. *NASP Research Reports, 3*(1), 1–17.
- Wechsler, D. (2014). *Wechsler intelligence scale for children* (5th ed.). NCS Pearson.

Chapter 6

Clinical Reasoning for Psychological Assessment of Culturally and Linguistically Diverse Children and Adolescents



Judith Wiener

Abstract This chapter describes the author’s clinical reasoning regarding psychological assessments of culturally and linguistically diverse children and adolescents. The guiding framework integrates aspects of the developmental systems approach and risk and resilience theory. Assessments of mental health of children and adolescents from culturally and linguistically diverse backgrounds involve gaining an understanding of their thoughts, feelings, behaviors, and their personal characteristics. It is also important to consider family and school risk and protective factors. The research underlying the framework is reviewed and case studies are used to illustrate the clinical reasoning process.

During the fall of 1971, when I first began working as a school psychologist in Montreal, I assessed a 13-year-old boy who had just immigrated to Canada from a tropical Caribbean Island. Although English was his first language, his formal education had been sporadic. When I asked the question “What are the four seasons of the year?”, he looked at me with wide eyes and emphatically responded: “There aren’t four seasons, there are only two seasons—rainy and dry”. Had this adolescent given the same response a few months later after experiencing a Canadian winter, I would have been concerned. Instead, I reflected on the influence of education and culture on performance on standardized psychological tests and the importance of using clinical judgment.

During the 50 years since I first administered the original *Wechsler Intelligence Scale for Children* (Wechsler, 1949), I have developed a clinical reasoning framework that is based on the developmental systems approach (Mash & Hunsley, 2007),

J. Wiener (✉)

Department of Applied Psychology and Human Development, School and Clinical Child Psychology, OISE/University of Toronto, Toronto, ON, Canada
e-mail: judy.wiener@utoronto.ca

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risk and resilience theory (e.g., Garmezy, 1974; Rutter, 2012, 2013), and Zigmond's (1983) approach to educational assessment and instructional intervention. I also became convinced that the fields of school psychology and clinical psychology have significant overlap and that the integration of the two fields would benefit assessment and intervention (Geva et al., 2004). I have had to change my practice because of research evidence that supported the use of different methods and different interpretations of assessment findings. Although most of my research career was focused on the social and emotional functioning and social relationships of children and adolescents with learning disabilities and ADHD, I also conducted studies that investigated questions that arose in my clinical practice and teaching of clinical courses. In addition to the results of studies conducted by other researchers, this research informed my clinical reasoning.

In this chapter, I focus on clinical reasoning in the assessment of culturally and linguistically diverse children and adolescents for four reasons. First, our professional ethics as psychologists requires us to provide equitable services that meet the needs of all children, adolescents, and families including immigrants and refugees and Indigenous peoples (Canadian Psychological Association, 2017). To provide services that are equitable, we often need to adapt them so that the individuals we assess benefit from them. Second, I live and work in Toronto, a city where approximately 140 languages are spoken and where more than 30% of the population speak a language other than English or French (the two official languages of Canada). A high level of migration to several other countries who are members of the Organization for Economic Cooperation and Development (OECD) <https://www.oecd.org/els/mig/keystat.htm> has also been common during the past 10 years. Third, along with my colleague, Esther Geva, I taught a course where we supervise graduate students in school and clinical child psychology conducting assessments and interventions with culturally and linguistically diverse children and adolescents and wrote a book on the psychological assessment of these children and youth (Geva & Wiener, 2015). Finally, the challenging issues and questions that arise in these assessments inform my clinical reasoning approach for all children and adolescents. The conceptual framework I describe, the research I review, and the examples I provide all pertain to children and adolescents who are first- or second-generation immigrants. Although my approach may also be applicable to the assessment of Indigenous peoples I do not specifically discuss the assessment of Indigenous children and adolescents because I believe that an Indigenous clinician and scholar might provide a more authentic perspective.

I use the following terms and acronyms in this chapter: CLD refers to culturally and linguistically diverse children, adolescents, and families; L1 refers to the individual's first language and the language they speak at home and in their country of origin, and L2 to their second (or sometimes third or fourth) language and the dominant language of the host country. The term Basic Interpersonal Conversational Skills (BICS) refers to the language skills needed for everyday communication (e.g., buying groceries, playing active games) and Cognitive Academic Linguistic Proficiency (CALP) refers to the vocabulary and other language skills necessary for academic work in subjects such as science and social studies. I use the word parents

to refer to parents and other caregivers, children to refer to school-age students in elementary school, adolescents to refer to students in middle school and secondary school, and students to refer to both children and adolescents. Finally, in the context of this chapter, I use the term mental health to refer to students' social, emotional, and behavioral functioning.

I begin this chapter with a discussion of the conceptual frameworks that guide my clinical reasoning. I then discuss my clinical reasoning in the context of the objectives of a psychological assessment, and the methods I use to conduct assessments, including adaptations I make for CLD children, adolescents, and families. As I believe that mental health is often linked to academic engagement and academic achievement, my assessments involve the integration of mental health and cognitive factors. I address mental health prevention and intervention in the context of assessments because one of the main goals of an assessment is to determine appropriate interventions for students. I conclude with a de-identified case study that illustrates my clinical reasoning guiding framework.

Guiding Framework/Theoretical Approach for Mental Health Assessment

Several of the basic tenets of the Developmental Systems Approach (DSA; Mash & Hunsley, 2007) are aligned with the methods I use when engaging in clinical reasoning. Consistent with the DSA, I believe that the key goal of assessments is to inform intervention by acquiring an understanding of students' thoughts, feelings, and behaviors in context as opposed to general personality traits. Although norms are often helpful, I also emphasize the influence of context on mental health and cognitive and academic functioning. Consistent with the DSA, I use multiple methods and sources to collect assessment data. There are, however, two limitations to the DSA that need to be considered.

First, although not inconsistent with the DSA, students experiencing mental health problems often have learning difficulties (Wiener & Timmermanis, 2012). Consequently, I thoroughly examine reading, writing, and mathematics skills using formal tests and dynamic assessments (Fletcher et al., 2019; Geva & Wiener, 2015). I also find it helpful to examine the linguistic and cognitive processes that are associated with academic difficulties as these may affect intervention decisions (Geary et al., 2012; Geva & Wiener, 2015; Swanson & Zheng, 2013). For this purpose, I use the educational assessment methods described by Zigmond (1983). She suggested instructionally based assessments that involve testing down the skills hierarchy. In a book I wrote with my colleague, Esther Geva, we illustrate this hierarchical approach to assessment and clinical reasoning in terms of assessment of L2 reading comprehension (Geva & Wiener, 2015).

Second, the DSA focuses on mental health regarding emotional, social, and behavioral problems or disorders. Risk factors are emphasized with minimal attention given to protective factors. Although students who are not experiencing

difficulties are typically not referred to psychologists, understanding the protective factors that help those who are referred adapt to their difficulties may be useful when considering intervention options. Consequently, my clinical reasoning approach is partially based on risk and resilience theory (e.g., Garmez, 1974; Rutter, 2012, 2013).

Below I provide a detailed discussion of how I apply the DSA and Suárez-Orozco et al.'s (2018) model and research on risk and resilience of immigrant children and youth to my clinical reasoning in relation to psychological assessments of the mental health of CLD students. I also use these frameworks for making decisions about directions for school-based mental health intervention.

Goals of Psychological Assessment

Consistent with the Developmental Systems Approach, my goals for psychological assessment include (1) understanding students' thoughts, feelings, and behaviors in context and (2) developing recommendations for intervention. I add a third goal that is not explicitly discussed by Mash and Hunsley (2007): communication of assessment results with key stakeholders including the students themselves, parents, educators, and health professionals. I strongly believe that children, adolescents, parents, and educators should be partners in the assessment process to validate the data that are collected and ensure that the recommendations for intervention are consistent with their values and resources in addition to being supported by research.

Understanding Students' Thoughts, Feelings, and Behaviors in Context

Students are typically referred for a psychological assessment because they experience some mental health or learning difficulties that impair their functioning in at least one context (e.g., home and school). Consequently, a key aspect of understanding students is to identify these difficulties and their impact on their functioning. Psychologists who adopt the medical model focus on these difficulties and provide a formulation that usually includes a taxonomic diagnosis (Mash & Hunsley, 2007) using manuals such as the *Diagnostic and Statistical Manual of Mental Disorders—5th Edition* (DSM-5; American Psychiatric Association, 2013). I also provide diagnoses when that is appropriate because diagnoses may inform treatment and understanding of prognosis. Consistent with risk and resilience theory, however, I also strive to identify students' strengths and adaptive skills. This is important because students and the individuals who care about them may be focused on difficulties, because engaging in activities that involve areas of strength may enhance well-being, because identifying strengths has important implications for course choices and career directions, and because adaptive skills are crucial to

functioning in the environment (Meltzer, 2004; Margalit, 2004; Wong, 2003). To generate appropriate directions for intervention; however, it is also important to describe environmental factors that facilitate and impede learning and adjustment.

Suárez-Orozco et al. (2018) provide a model that integrates the research on risk and resilience of immigrant children and youth and that documents the issues that I have considered over many years when assessing CLD students. The developmental outcomes they discuss are the extent to which CLD students acquire self-regulation and responsibility, have positive family and peer relationships, achieve academically, have a secure sense of identity, participate in the civic environment of the host country, and as older youth, participate in the labor market. Suárez-Orozco et al. (2018) also consider psychological adjustment (self-esteem, sense of well-being, and mental health), acculturative flexibility (L2 acquisition, learning and maintaining both the home culture and the culture of the host country), and being able to bridge cultures (e.g., having inter-ethnic friendships). In accordance with the developmental systems approach, they consider student individual and developmental factors, the family and school microsystems, and macrosystem factors such as the quality of the neighborhood and immigration policy.

Some of the individual and developmental factors that affect students' mental health and academic achievement are common to all students regardless of immigration status (Suárez-Orozco et al., 2018). These include biological (e.g., health, physical disability, athletic skill, physical appearance) and cognitive (intellectual ability, cognitive processes associated with reading, writing, and math such as phonological processing and working memory) resources, social and emotional competence, and temperament. CLD students who are older at the time of immigration are at higher risk. Although there are gender differences in achievement and psychological adjustment, the patterns are complex depending on cultural attitudes. In some contexts, adolescent girls outperform boys academically, possibly because they are not permitted to go outside of the home independently, whereas boys are able to engage in independent social interaction that occasionally leads to deviant behavior. In other cultures, there is immense pressure on boys to achieve whereas girls are responsible for household tasks and care of younger siblings. Sometimes the pressure to achieve may be associated with mental health difficulties.

There are several risk factors that I consider regarding the family that are also included in the Suárez-Orozco et al. (2018) model. Some of these risk factors such as poverty, low level of parent education, dysfunctional family interactions, and family violence pertain to families irrespective of immigration and culture. With regard to students who are immigrants and refugees, those whose parents do not speak the dominant language of the society are at higher risk (Prevoe et al., 2016). First-generation immigrant students, however, may have the advantage of bilingualism, whereas some second-generation immigrant students are at higher risk if they do not speak their parents' L1 fluently. Students who experience a lengthy separation from a parent who immigrates earlier are at higher risk, possibly because of insecure attachment. Similarly, secondary school students who come to the host country to study without their parents are at risk of mental health and social difficulties (Mak, 2020).

Table 6.1 Social supports

	Family and friends	School and child care	Other/professional
Frequency of contact			
Nature of communication			
Instrumental support			
Emotional support			
Criticism			
Reciprocity			

As discussed by Geva and Wiener (2015), social support from immediate and extended family and friends, school and childcare settings, and other professionals is very important. As shown in Table 6.1, social support may be instrumental (e.g., translation from the L1 to the L2) and emotional (listening to them when they are upset). It is adaptive when parents have frequent contact with the people who provide support, and they are able to communicate positively with them. Immediate and extended family, however, are not always supportive. In some instances, extended family members may be critical of parents of students with disabilities or behavioral difficulties. Parents may also feel guilty when they rely too heavily on their support system, and they may be more accepting of support when they can reciprocate.

Cultural differences include the extent to which the culture is individualistic versus collectivistic, the extent to which members of that culture express their emotions openly, attitudes regarding time and punctuality, and family values such as gender roles, the importance of immediate versus extended family, and the acceptance of diversity (Geva & Wiener, 2015). Immigrant adolescents who are bilingual and bicultural often have specific responsibilities that may be challenging for some of them. They may need to translate for their parents who do not speak the dominant language, work to support their families, and be the spokesperson and decision maker. When the teens assume these roles, it may also cause concern for their parents who may feel inadequate because their parental role has been usurped (Suárez-Orozco et al., 2018).

I also consider the extent of culture change, role conflicts, and acculturation stress in families of students whom I assess. Acculturation is both a risk and a protective factor (Suárez-Orozco et al., 2018). According to Rivera (2008, p. 76), acculturation is “a dynamic process of change and adaptation that individuals undergo as a result of contact with members of different cultures.” Although acculturation is a continuum, it should be conceptualized across two dimensions: (a) the extent to which the individual prefers to maintain the attitudes, beliefs, values, affect, and behaviors of their culture of origin and (b) the extent to which the individual prefers to integrate into the dominant culture of the country to which they immigrate. The resultant four acculturation patterns are assimilation into the new culture, rejection of the new culture (which is often accompanied by having few, if any cross-cultural friendships), integration or biculturalism, and deculturation or marginalization. The integration pattern tends to be most adaptive; bicultural individuals often speak both their L1 and the dominant language of the society; they have higher scores on

measures of academic achievement and educational attainment, employment, and health (Suárez-Orozco et al., 2018). There is research evidence that second-generation immigrant adolescents who neither identify with their culture of origin nor the dominant culture of the society (marginalization) are vulnerable to mental health challenges including substance use and suicide (Suárez-Orozco et al., 2018). Acculturation conflict occurs when adolescents and parents have different acculturation patterns and the parents do not accept the adolescents' adoption or rejection of the dominant culture. For example: in a study of Chinese immigrants to Canada, the interpersonal conflict between mothers and adolescents was higher when the adolescent and mother differed in their acculturation pattern (Tardif & Geva, 2006). Consequently, I consider acculturation conflict when working with CLD adolescents and their families.

Parents' attitudes regarding academic achievement and disabilities are important to consider. If they attribute low academic achievement to insufficient effort on the part of their children, then they may express anger and use controlling strategies such as pressure and punishment. These parental behaviors may negatively affect the mental health of their children who may be more likely to exhibit internalizing and externalizing behaviors. If parents attribute the problem to a learning disability, intellectual disability, or a mental disorder, they may feel shame, and may not disclose the problem to family and friends and, as a result, obtain little support. If parents attribute the problem to poor instruction, claiming that the school system in their home country was more effective, they may berate teachers and hire tutors (Yaghoub-Zadeh et al., 2008). As is true of students born in the host country, CLD students may have disorders such as intellectual disabilities and autism spectrum disorders. The severe manifestations of these problems may have more impact on families who do not have the resources or cultural capital to obtain the supports they need. Some parents may feel the stigma of these disorders acutely; they may believe that their entire family is tainted.

School and classroom risk and protective factors are also important to consider (Geva & Wiener, 2015; Suárez-Orozco et al., 2018). Immigrant and refugee students may flourish when they have understanding and supportive teachers who use strategies that have been found to predict mental health and academic achievement. These include a positive school climate, teacher modeling acceptance of diversity, proactive behavior management plans, systematic instruction in literacy and numeracy, teaching within the student's zone of proximal development, and high levels of academic engaged time (Doll et al., 2009; Ducharme & Shecter, 2011; Mikami & Mercer, 2017; Parsons et al., 2018). New immigrant students who do not speak the L2 typically benefit from second-language instruction to acquire basic skills for part of each school day (Padilla & Gonzalez, 2001). Both teacher modeling of acceptance of diverse peers and enhanced CLD student L2 skills may facilitate the development of positive peer relationships. CLD students are more likely to have positive mental health outcomes when teachers endeavor to develop a positive and trusting relationship with them (Suárez-Orozco et al., 2018). Teacher beliefs are predictive of their practices in inclusive settings. Their acceptance of CLD and racialized students and their expectations that these students will achieve are especially important

(e.g., Chang & Demyan, 2007; Mahatmya et al., 2016). Teachers who believe that students' mental health and academic challenges are an interaction between student characteristics and the classroom environment, that adapting instruction is an important part of their role, and that they should collaborate with parents are more likely to engage in these effective teaching practices (e.g., Elik et al., 2010; Stanovich & Jordan, 1998).

The macrosystem factors identified by Suárez-Orozco et al. (2018) include immigration policies and societal attitudes. For example, in countries where policies favor immigrants with high levels of education and skills and in communities that have positive attitudes toward diversity, CLD students tend to adapt well. On the other hand, students from families who are not in the host country legally or who are waiting for refugee claims to be settled may experience high levels of stress. Some immigrant or refugee youth need to cope with xenophobia and racism. The reasons for immigration may also affect mental health. Families who immigrate to improve their economic condition and their children's education are not typically at risk, whereas those escaping war and violence or environmental catastrophes may have experienced trauma. Neighborhood factors may also contribute to risk and resilience. Children of immigrants and refugees who live in neighborhoods where many families experience poverty, and where there are high levels of crime and poor social cohesion and supports are at risk for poor academic achievement, health, and mental health, whereas those who live in neighborhoods that are diverse in terms of socioeconomic opportunities and provide high levels of social support are more likely to achieve and be psychologically adjusted. These neighborhood issues spill over to the schools.

Providing Recommendations for Academic and Mental Health Prevention and Intervention

Parents and educators who refer students for a psychological assessment typically do so because the strategies they tried are not working, they desire more intensive support than the students are receiving, and because they want to access the psychologist's expertise regarding other possible strategies and treatments. Consequently, a major goal of a psychological assessment is to provide recommendations regarding parenting, supports at school, and directions for therapeutic intervention. When students experience learning difficulties, psychologists make recommendations regarding special education placement and supports, remedial programming, teaching of learning strategies, and instructional (e.g., text to speech technology), environmental (e.g., seating), and assessment (e.g., extra time on examinations) accommodations. When students are experiencing mental health challenges, psychologists make recommendations regarding methods to enhance adaptive and social skills at home and school, accommodations for internalizing behaviors such as anxiety and depression, parenting strategies, and classroom

behavior management strategies for decreasing maladaptive behaviors such as inattention, hyperactivity, impulsivity, and aggression and increasing on-task behavior, emotion regulation, and compliance. Further assessment and treatment are often recommended.

Consistent with research on school-based mental health interventions (see Šouláková et al., 2019 for review), I believe that school psychologists play a role in consulting with teachers and school administrators regarding mental health prevention and intervention, and in providing targeted interventions to students with mental health challenges and their families that are supported by research. These include conjoint behavioral consultation (Sheridan et al., 2012), mindfulness interventions, social and emotional learning, and cognitive behavior therapy (Šouláková et al., 2019). As discussed by Durlak (2009), when implementing school-based mental health interventions, in addition to considering the needs of specific students, it is important to consider the system factors that are likely to facilitate or inhibit program implementation (e.g., school leadership and resources), and the extent to which the intervention methods and content will address the students' needs.

There are specific issues and strategies that should be considered regarding adapting school-based mental health interventions for CLD students. It is important to ensure that these interventions are consistent with family cultural values and if they involve parents, they have the resources to participate. For example: In their review of the research, Sullivan and Simonson (2016) found that social and emotional learning, mindfulness, trauma-focused CBT, and creative expression (writing, drama, and art) interventions are helpful for students who are refugees. Music therapy was not found to be efficacious. In my experience, however, involvement in music programs is especially helpful for Roma students from Hungary and Romania in terms of enhancing school engagement and self-esteem. This might be the case because music is so central to their culture.

There are also some specific interventions that may be helpful in addressing the learning difficulties and family circumstances of some CLD students. It is sometimes appropriate to recommend that students or parents receive intensive instruction in the dominant language of the society in a second-language program. Psychologists should recognize, however, that some parents cannot access these programs due to their own challenges with work and childcare. In addition, asking parents to speak to their children in their L2 may be counterproductive; the research suggests that children benefit more from good language models in their L1 than poor language models in their L2 (Geva & Wiener, 2015). I also refer adolescents and parents to settlement workers or social workers who may help them access instrumental supports such as food banks, second-hand clothing, and community supports. In some cases, parents may be more likely to seek support from religious and other community leaders. I have found that some CLD adolescents with learning disabilities benefit from support from a volunteer university undergraduate student. In addition to academic tutoring, undergraduate students may mentor the CLD adolescent about the adaptive skills needed for effective interactions in their new country.

Communication of Assessment Results with Key Stakeholders

If assessment results and recommendations for intervention are not communicated to key stakeholders, then the student's situation will not be changed. Typically, key stakeholders are the students themselves, their parents, their teachers and school principals, and other professionals who work with them such as physicians, speech and language pathologists, and settlement workers. Assessment results are typically communicated in feedback interviews and psychological reports. Adaptations of typical practice may be needed due to language challenges and cultural differences (Geva & Wiener, 2015). These adaptations are discussed in the context of the assessment methods I use.

Strategies for Assessing Academic and Mental Health Challenges

Interviews to Obtain a Developmental, Educational, and Health History

Interviews with older children, adolescents, parents, and teachers are important to obtain a developmental, educational, and health history and to learn about parents' perspectives regarding their children's strengths, adaptive skills, and difficulties and the environmental factors that facilitate and impede learning and mental health. I typically begin interviews with older children, teens, and parents by giving them the message that they are partners in the assessment process, and indicating that the assessment team includes them, and when appropriate teachers and other professionals.

Several issues may arise when interviewing CLD parents. The most obvious issue is that the parent has limited skills regarding communicating in the dominant language of the country—their L2. Clearly, an interpreter is needed when they are completely unable to communicate in the L2. Sometimes parents claim that they do speak the L2 when they have BICS because they are able to do everyday tasks such as grocery shopping and making appointments. The problem is that they may not have the CALP that would enable them to understand the vocabulary used when taking a history or describing their concerns. An interpreter may also be helpful in that situation. Geva and Wiener (2015) discuss the issues that psychologists should consider when hiring and working with an interpreter including the reasons to avoid putting a sibling or other member of the family in that role.

In addition to the typical issues involved in taking a history, there are issues that may be pertinent to the case formulation that should be considered in relation to CLD families. Prior to meeting with the family, I familiarize myself with specific cultural practices that could affect our interactions, and with political circumstances (e.g., discrimination, war) that may have prompted immigration using websites

such as Wikipedia. During the interview I find out whether families are first, second, or third-generation immigrants and, if they are first-generation immigrants, try to determine the reason for immigration (e.g., education, more prosperous life for their children, fleeing war and persecution) as these experiences may affect their wellbeing. I avoid assuming that racialized individuals are immigrants or not acculturated to the dominant culture. I also find it useful to understand the post-immigration experience, especially in relation to social supports (Table 6.1; Geva & Wiener, 2015).

It is sometimes important to consider whether the member of the family who is the primary caregiver comes to the interview when determining the trustworthiness of the data. Although in most cultures the mother is the primary caregiver, in some cultures, grandparents or other extended family members are more knowledgeable about the student and his/her functioning. In some cultures, it is exclusively the father's role to communicate with people outside of the family; however, he may not be the primary caregiver and he may not be able to answer some of the psychologist's questions about the student. The mother may also have responsibilities for caring for young children and may find it difficult to come to an office for an interview. In that situation, I do a phone interview with the mother or a second interview in person while providing childcare. If the family has Internet access and an appropriate device, I sometimes do a video interview using a virtual platform with good privacy protections.

In some cultures, it is typical to request support for mental health difficulties from a member of the clergy or a community elder. Consequently, parents from these cultural groups may not be aware of the role of a psychologist. Explaining the reason for the assessment and the procedures may often allay anxiety. In some cases, describing the nature of psychologists' professional training may assist in establishing legitimacy. Furthermore, it is not uncommon for learning, mental health, and behavioral difficulties to be highly stigmatized. Parents may therefore be reluctant to discuss these challenges. I therefore take the time to establish trust by listening to the parents' concerns and empathizing with them. Some parents respond well to detailed explanations of procedures to ensure confidentiality. They may prefer to go to university clinics that are not close to their homes; entering a university building may be more acceptable to them than being seen by their community members entering a hospital or mental health clinic.

Parents may also differ in terms of style of questioning that is most likely to elicit a clear history. Although there are individual differences within cultural groups, in some cultures, parents may respond to a close-ended question (e.g., at what age did your child learn to talk) with a narrative. Interpreting their stories may at times be challenging. In those situations, consulting with a person who identifies with that cultural group may be helpful. Many CLD people who are refugees have experienced trauma due to persecution and being victims of or witnessing violence (Bronstein & Montgomery, 2011). When asking about immigration history, psychologists should be aware that these parents and children may become upset and that empathy and sensitivity are required. Their stories may only emerge when parents and students have developed a trusting relationship with the psychologist.

Assessment of Cognitive Abilities and Academic Achievement

I use a combination of observation, formal standardized tests, informal tasks, and dynamic assessment to assess cognitive abilities and academic skills. Dynamic assessment involves a combination of pressing the limits and response to intervention (Fletcher et al., 2019; Geva & Wiener, 2015). When I am working with CLD students, I observe whether they often require instructions to be repeated and whether they respond better when instructions are presented orally versus in writing. As recommended by Zigmond (1983), if they have difficulty generating their own responses, I move down the response hierarchy to determine whether they know the answer when given multiple choice or true/false questions or can point to the right answer. I examine whether they are more likely to respond correctly when concepts and skills are tested through a game, activity, or computer task than by formal tests. I systematically investigate whether they compensate for their challenges by using adaptive strategies such as the rehearsal, mnemonics, imagery, or drawing a diagram. I also observe the extent to which they attend to task, plan and self-monitor, respond slowly or impulsively, or require frequent feedback or reinforcement.

Formal standardized tests that measure cognitive ability and academic achievement are essentially refined observational instruments. They provide a standard set of tasks that survey abilities and skills that are associated with adaptive functioning and functional impairment. Most of the commonly used published formal tests have strong psychometric properties; they are reliable, have solid construct and concurrent validity, and are normed on a large population (e.g., Sattler, 2020). These tests, and the resultant scores, however, should be used cautiously with CLD students because their ethnic group might not have been included in the norming sample, and the tests are either not available or not given in their dominant language. Even tests of fluid and visual-spatial reasoning often have instructions that use complex language (Cormier et al., 2016). There sometimes are problems when tests are given in the students' L1. Although they may have BICS in their L1, if they have not used their L1 at school for several years, they may not have acquired CALP in that language (Geva & Wiener, 2015). Finally, formal standardized tests are static—they do not show progress over time. For these reasons, I think deeply about whether it is necessary to administer an intelligence test, which test to give, and when to administer it. I often delay that administration until a strong rapport is achieved.

I typically administer standardized achievement tests to CLD students referred for learning difficulties because these tests provide a snapshot of how they are functioning in comparison with the students in their classrooms. I choose the tests based on referral information, and language and cultural loading. I also try to be parsimonious by testing down skill hierarchies (Geva & Wiener, 2015; Zigmond, 1983). For example, if a student has average or above-average word and pseudoword reading and spelling skills, I do not need to assess phonological processing but if their vocabulary development is below expected levels given their time in the immigrant-receiving country, I would administer a non-word repetition test, as abilities in that

area are predictive of vocabulary development in the L1 (Farnia & Geva, 2011). When interpreting the results, I consider the findings from research on academic achievement in second language learners, and I do careful error analysis. Table 6.2 summarizes the relevant research findings and the implications of these findings for the assessment of CLD students.

Regarding oral language proficiency, reading, and written language in the L2, longitudinal research by Geva and her colleagues has shown that children who are initially exposed to a new language in the first grade quickly acquire reading decoding skills; by the end of the second grade, their skills are commensurate with their L1 peers. Their vocabulary and reading comprehension scores, however, still lag behind their L1 peers 6 years or more after being exposed to English (Geva & Wiener, 2015). Consequently, after 2 years of exposure to the dominant language, when these children obtain below-average scores in reading decoding, phonological processing, and spelling, I hypothesize that they might have a learning disability. If they have low average or below average scores on vocabulary, reading comprehension, and written expression tests, I examine the data carefully to determine whether this is due to English being their second language or whether they may have a language disorder. Similarly, I consider the extent of language load on subtests of IQ tests (Cormier et al., 2016). As discussed below, error analysis and dynamic assessment are important methods to make this decision.

The diagnostic issues are more complicated in relation to students who only begin instruction in their L2 in the fourth grade or beyond. Pasquarella et al. (2012) found that students in ninth and tenth grade who had lived in Canada between 2 months and 6 years (mean = 2.36 years) obtained lower scores on English word reading and nonword decoding, vocabulary, and reading comprehension. The L1 of approximately 60% of their participants, however, was a language that did not use the English alphabet (e.g., Arabic, Mandarin). It is therefore possible that, in addition to the age of exposure to the L2 and time in the immigrant-receiving country, delays in acquiring English decoding skills might have included the requirement of learning to read the opaque English orthography.

As discussed by Geva and Wiener (2015), interpreting scores on math tests is also challenging in relation to older CLD students. They often have difficulty with comprehension of word problems that are grammatically and lexically complex (Martiniello, 2009). It is also important to consider the quality of math instruction in the L1. First-generation immigrant students who come from countries where math achievement scores on the Programme for International Student Assessment (PISA) test are higher than that of students in the host country may have higher levels of math proficiency than students who had all of their schooling in the host country (Guglielmi, 2012; Volante et al., 2017). Students who have received instruction in computation in the country of immigration may use different symbols when doing computation. They may be more competent than students from the United States in metric measurement and be unfamiliar with imperial measurement.

As recommended by Geva and Wiener (2015), I typically press the limits and use error analysis to determine the extent to which difficulties on some tasks are associated with the tasks not being in the student's L1. I consider whether the student

Table 6.2 Implications for assessment of research findings on language and literacy of L2 children and adolescents (Geva & Wiener, 2015)

Findings	Implications for assessment
CLD children in the primary grades quickly develop word-level reading skills in the L2	Psychologists should consider a diagnosis of LD in CLD children who have had two or more years of L2 reading instruction and have below-average word-level reading and spelling skills
Although CLD children acquire BICS in their L2 rapidly, they experience difficulties with CALP even after 6 years in school in the immigrant-receiving country	<ul style="list-style-type: none"> • Examine the types of errors that students make on language and reading comprehension tests • Compare the functioning of the referred student with siblings or peers who are from the same context • Assess language in the student's L1 when appropriate and applicable
The cognitive processes underlying poor word-level reading skills are the same for L1 and L2 reading	Assess cognitive processes including phonological processing and RAN
Non-word repetition abilities predict acquisition of language and literacy skills	Administer tests such as the Non-Word Repetition subtest of the CTOPP-II
Depending on features of their home language, different types of positive and negative transfer occur when acquiring the L2. For example students may use cognates (i.e., words that are similar) to understand the L2, but they may also apply grammatical structures that are correct in their L1 to their L2 when that is not appropriate	Consider transfer effects when doing error analyses
Most commonly used IQ tests, including the tests that purport to be nonverbal, have some verbal and cultural loading, and the verbal and cultural loading varies among tests and subtests (Cormier et al., 2016)	<ul style="list-style-type: none"> • Carefully consider whether it is necessary to administer an IQ test and the timing of administration • Use a nonverbal test when appropriate • Ensure that the individual understands the directions on nonverbal tasks • Use clinical judgment when interpreting scores (e.g., use a flexible criterion for the average range) • Consider the verbal and cultural loading of the test and subtests • Examine scores on component scales and subtests for indications of average ability • Use response to intervention and dynamic assessment strategies

understands the instructions or whether they need to be repeated slowly or different vocabulary. In analyzing responses, I attempt to determine whether they involve positive transfer (e.g., students use words similar to their L1 to understand the L2) or negative transfer (e.g., they pronounce a word similar to the pronunciation in their L1 or incorrectly apply grammatical structures that are correct in the L1 to the

L2). They may also have a specific difficulty with symbolic language such as metaphors. I consider whether they use symbols, procedures, or terminology in math that might be taught in their country of origin.

In addition to formal tests, I use a variety of informal tasks to assess oral language proficiency and academic achievement that is described by Geva and Wiener (2015) and provided in their book. I often tape a language sample and analyze the recording using a checklist. I assess knowledge of commonly used words using flashcards or games. With adolescents, I conduct an interview to examine the strategies they use to cope with classroom demands, read a textbook chapter, take notes, study, write essays and research reports, and write tests and examinations. Consistent with the principles of dynamic assessment, I teach a word, concept, or skill to determine whether they master it quickly and retain it and whether they respond to a particular type of teaching. This trial teaching is especially important with CLD students who have low levels of oral language proficiency in their L2.

Assessment of Mental Health: Social, Emotional, and Behavioral Functioning

Psychologists typically use self-report, parent-report, and teacher-report rating scales such as the *Behavior Assessment System for Children (BASC-3; Reynolds et al., 2015)* and structured diagnostic interviews such as the *Kiddie-Schedule for Affective Disorders and Schizophrenia for School-Age Children—Present and Lifetime Version (K-SADS—PL DSM-5; 2016)* to assess social, emotional and behavioral functioning of children and adolescents. There are problems that sometimes emerge when using these methods in assessments of CLD students (Geva & Wiener, 2015). First, some parents may not have the language proficiency necessary to understand the items on commonly used rating scales. This problem can be obviated by using the *Strengths and Difficulties Questionnaire (SDQ)*, a screening instrument that is currently available in 86 languages (Goodman, 1997; <http://www.sdqinfo.com/>). The SDQ has norms for several European countries, the United States, Brazil, Taiwan, and Japan and the norms, reliability, and validity of the measure in these countries are strong (Husky et al., 2020; Liu et al., 2013; Moriwaki & Kamio, 2014; Saur & Loureiro, 2012). The quality of the translations and the validity of the instrument in various African languages, however, are unclear (Hoosen et al., 2018). Second, there may be cultural differences in parents' interpretations of items on questionnaires and Likert-type scales. For example, obedience is highly valued in some cultures to the extent that parents may view their children as oppositional when they are behaving like their peers in the host country. Third, due to challenging behaviors being stigmatized in some cultures, parents may underreport the extent of their children's problems. Fourth, in many structured diagnostic interviews, psychologists list symptoms and ask parents to indicate whether they are present in their children. Some parents may view these closed questions about

negative characteristics to be like interrogations by immigration officials and refugee boards, and find the experience to be distressing, if not traumatic (Bronstein & Montgomery, 2011). For all these reasons, assessments of the mental health of CLD students should be multi-method and multisource.

I often supplement or replace parent-report standardized rating scales or structured diagnostic interviews with semi-structured interviews such as the *Parent Interview for Child Symptoms (PICS.-7.1)*; The Hospital for Sick Children, 2013). When I interview them, I ask parents to describe their children's behavior in different situations such as playing outdoors and indoors, doing homework or chores, and sitting at the dinner table and I rate whether symptoms of common disorders are present and how severe they are. Although not specifically part of the formal interview, I sometimes ask them how they deal with inappropriate behaviors. These interviews often form the basis of my recommendations for parenting strategies.

I routinely ask teachers to complete a standardized rating scale when I assess children in elementary and middle school and then follow-up with an interview. School psychologists are in a good position to conduct these interviews face-to-face. Psychologists who are not working in the school system may do a phone interview or use a virtual video platform. These interviews include teacher perceptions of the students' behavior in the classroom and playground, their attributions as to why the students are behaving the way they do, how they feel about it, and the methods they use to support them. This is often important for CLD students because teachers may correctly or incorrectly attribute their students' negative behavior to cultural differences or the home environment and believe that they are unable to support them (Elik et al., 2010; Stanovich & Jordan, 1998). When an interview does not provide the necessary data, and if I have parental and teacher consent, I observe in the classroom of students in elementary school. In addition to examining the children's behavior in context, I consider the aspects of the classroom environment and teacher practices that predict academic achievement and mental health (Doll et al., 2009; Ducharme & Shecter, 2011; Parsons et al., 2018). These include the use of positive and proactive behavior management practices, systematic and explicit instruction in basic skills, scaffolding instruction, teaching in the child's zone of proximal development, and high levels of academic engaged time.

It is often challenging to obtain valid teacher reports for adolescents in secondary school because they typically have several teachers and the interrater agreement between teachers is low (Evans et al., 2005; Schultz & Evans, 2012). In addition, most adolescents are reluctant to have psychologists observe in their classrooms. During adolescence, however, self-reports are typically valid once a trusting relationship is established (e.g., Colomer et al., 2020).

When assessing the mental health of CLD students, it is important to learn about their perspectives. Like their parents, CLD students may have difficulty communicating their perspectives due to problems with oral language proficiency and literacy, cultural views of mental health, and stigma. The same issues that I discussed regarding parent-report scales apply to adolescents who are new immigrants. In addition, as discussed earlier, there are specific issues to consider with CLD adolescents including acculturation and their role in the family. There are several

self-report instruments that assess adolescents' perceptions of their symptoms. The SDQ has a self-report version for children and adolescents who are between the ages of 11 and 16. The Dominic is an instrument that has pictures of a child or adolescent named Dominic/Dominique who engages in behaviors that are reflective of DSM-IV symptoms (Bergeron et al., 2010; Valla et al., 2000; <https://psycentre.apps01.yorku.ca/wp/dominic-interactive-dominic-adolescent/>) and requires a yes or no response. Although the pictures and simple response format are often advantageous, the pictures depict a Caucasian child or teen with whom a racialized student might not identify.

Assessment of symptoms of mental disorders does not constitute a complete assessment of mental health. Among other issues, students' perspectives regarding their competence in key areas (e.g., academic, social, athletic abilities, physical appearance), their self-esteem, family relationships, and peer relationships are important (Suárez-Orozco et al., 2018; Wiener, 2020). As described in Geva and Wiener (2015), I use a number of informal projective techniques to obtain this information including Kinetic Family Drawings, asking them to say or write ten words that tell about them, checklists of problems they might experience, incomplete sentence tasks, and a friendship interview. With children who are hesitant to express their feelings, I also incorporate these tasks into a board game.

Feedback Interviews

I usually do feedback interviews prior to writing the final draft of reports because issues that arise in those interviews sometimes influence my interpretation of the findings. Most of the issues and adaptations outlined above regarding intake interviews are also pertinent to feedback interviews. I use the intake interview to informally assess parents' language skills in the dominant language, the extent to which they have sufficient education to comprehend psychological concepts and test scores, and their attributions regarding their children's difficulties. I do not assume, however, that parents who have limited skills in their L2 would not comprehend psychological terms and concepts such as normal curve and percentiles. A parent who does not have CALP in his or her L2 and has a job as a taxi driver, for example, may be a qualified physician in his or her country of origin and be conversant with these concepts in his or her L1. In this case, other than engaging an interpreter, psychologists might be able to use the procedures they typically use in feedback interviews with highly educated parents.

I begin feedback interviews by reminding participants that they are partners in the assessment process and that they are welcome to ask questions and provide new information and alternate opinions. I have developed several strategies to communicate assessment results for parents with limited literacy and numeracy skills. As described by Geva and Wiener (2015), for these parents I strive to keep the message simple by confining myself to giving the key information they need. I bring samples of the tasks the students did during the assessment sessions and work samples to

illustrate my findings. I also use various visual displays and graphics to explain concepts; these are included in Geva and Wiener (2015).

Unless they have severe intellectual disabilities, I communicate the results to students before I meet with their parents. For young children, and lower functioning children and adolescents, I typically describe their strengths and frame their deficits as needs that can be addressed. I generally include older children and adolescents in the interview with their parents after communicating the results to them. I inform them that I am obligated to communicate the test results to their parents, but that I do not have to tell their parents something that they told me in confidence (unless the confidential information involves issues indicated previously as requirements for breaching confidentiality). Some students confide that they would like their parents to know something about them but are concerned about worrying their parents. I ask them whether they would like me to help them with this communication.

When appropriate, I communicate a diagnosis to the parents and students. Although some may find it hard to accept the diagnosis, having a diagnosis may lead to services, and knowing the term may help with access to resources. I endeavor to provide them with resources and links to websites in their L1 when that is helpful. I then include the handouts and weblinks in the psychological report they receive.

Psychological Reports

Psychological reports are a form of communication and are typically the final step in an assessment. As reviewed by Wiener and Costaris (2012), psychologists who write reports that facilitate parents' and teachers' comprehension consider the readers' existing knowledge, which typically involves using few technical terms or explaining those terms. Their reports are organized by the functional domain (e.g., academic achievement, intellectual ability, social and emotional functioning) as opposed to the source of information (observations, interviews, test results). One effective way of doing this is to list a set of questions that guided the assessment at the beginning of the report, and systematically address each one. They describe specific strengths and skill deficits and qualitative features of the student's functioning by giving examples of errors and behaviors. Specific suggestions regarding interventions are provided along with web links or handouts that explain them in more detail.

Detailed and comprehensive reports are needed for the education system and health professionals. I believe, however, that it is important that adolescents and the parents of both children and adolescents receive a report that they find helpful even if they have basic literacy skills in their L1 or L2. I often create a one-page simple report that they can read and comprehend. If that is helpful and feasible, I get this report translated into the L1. A sample of a simple report is provided in Geva and Wiener (2015).

As described earlier, my assessments of CLD students are multi-method and multi-source. They involve the students, their parents, and teachers and include

observation, interviewing, formal standardized tests, informal tasks to address questions raised by the other methods, and trial teaching. Putting this together into a coherent formulation is sometimes challenging. Below I illustrate the process with a case study.

Clinical Formulation: Putting it All Together

Geva and Wiener (2015) described a framework that is helpful for hypothesis testing and interpreting assessment data during the diagnostic process and that is consistent with the developmental systems approach (Mash & Hunsley, 2007) and research on risk and resilience of CLD students (Suárez-Orozco et al., 2018) (see Table 6.3). The framework first involves considering the impact of general risk factors that predispose students to negative outcomes such as genetic and neurological conditions (e.g., Down Syndrome, cerebral palsy), cognitive and behavioral problems (e.g., low intellectual ability, low academic achievement, emotion regulation difficulties), socio/cultural and immigration factors (e.g., refugee, minimal language skills in the dominant language of the country, few social supports), familial factors (e.g., poverty, single parent, problematic parenting skills) and school/classroom factors (e.g., inadequate or interrupted education). Psychologists also should consider critical incidents or trauma (e.g., acquired brain injury, witnessing violence or war, being a subject of family violence or victim of bullying, death in the family, and restrictions due to a pandemic) that might precipitate the onset of difficulties. Resilience factors are also important. The student may have outstanding abilities (e.g., intellectual, athletic, artistic), a positive immigration experience with support from extended family and the community, parents who are educated and speak the L2 in addition to their L1, and schools with excellent teachers who have strong behavior management skills, and who provide evidence-based instruction and emotional support. The formulation generated by this framework assists with decisions regarding targeted interventions for the student. I illustrate my clinical reasoning within this framework with a case study.

Case Study: Ali, Age 11

Ali was referred to a university clinic in Toronto by his teacher and the principal of his school due to challenges with language and math, and to social difficulties with peers. He moved to Canada from Egypt 2 years prior to the assessment. Ali, however, was born in the United States and lived there with both of his parents and his older sister until he was 5 years of age. At that time, his parents separated, and his mother, Ali, and his sister moved back to Egypt. Ali attended a school in Egypt

Table 6.3 Framework for interpreting assessment data—Ali (age 11)

	Neurological genetic	Cognitive/behavioral	Socio-cultural/immigration	Familial	School/classroom
General risk factors		<ul style="list-style-type: none"> • Low average oral and written expression • Visual memory • Below average math • Emotion regulation • Inattentive, fidgety, impulsive • “Friends” • Sad and hopeless 	<ul style="list-style-type: none"> • Refugee status • Religious differences 	<ul style="list-style-type: none"> • Maternal inattention • Harsh/inconsistent discipline • Mother’s anxiety • Mother’s English skills • Parental separation and divorce 	<ul style="list-style-type: none"> • No information about quality of instruction in early grades prior to arrival in Canada
Critical incidents/trauma			<ul style="list-style-type: none"> • Two major relocations • Father lives in U.S. 	<ul style="list-style-type: none"> • Possible emotional abuse by father toward mother • Ali unable to see his father 	<ul style="list-style-type: none"> • Attended one school in the United States, two in Egypt and two in Canada
Resilience factors		<ul style="list-style-type: none"> • Average nonverbal IQ • Reading decoding and spelling • Computer skills • Good sense of humor 		<ul style="list-style-type: none"> • Sister speaks fluent English, achieving in school • Mother’s progress in acquiring English 	<ul style="list-style-type: none"> • Caring and proactive teacher and principal who referred Ali, were partners in the assessment process and implemented intervention recommendations

where instruction was provided in both Arabic and English for 3 years. His father and oldest brother continued to live in the United States. Ali, his mother, and his 16-year-old sister moved to Toronto when Ali was 9; his mother claimed refugee status. The assessment, which was conducted by a doctoral student under my close supervision, included interviewing Ali's mother (with the aid of an Arabic interpreter), regular education and resource room teacher; administering standardized tests and teacher rating scales; doing informal projective tests with Ali using a game format; observing Ali in the clinic and at school; examining his response to intervention in math; and providing social skills training and examining his response to this treatment.

Table 6.3 outlines the data we used for our formulation. There were no biological factors that needed to be considered and Ali had average nonverbal ability as measured by the *Kaufman Assessment Battery for Children (KABC-II)*; Kaufman & Kaufman, 2017). Ali, however, had significant difficulties with oral and written expression, and mathematics (especially math fluency) even though he received high-quality math instruction in Egypt. We postulated that his math difficulties were associated with a verbal retrieval problem and poor visual memory. He had above-average word reading, pseudo-word reading and spelling skills, average word reading skills, and average verbal memory. Consistent with the research described above that shows delays in vocabulary development and reading comprehension in CLD children for 6 years or more, we attributed Ali's low average scores on receptive vocabulary and reading comprehension tests to Ali's irregular exposure to English. We diagnosed Ali with a learning disability in mathematics and written expression. The report that Ali's sister, whose immigration experiences were similar to those of Ali, was obtaining good grades in an academic high school program supported the learning disability diagnosis for Ali.

In the initial interview with Ali's mother, when we asked her about her primary concerns, she used the English word "friends" and in Arabic indicated that Ali was friendless, and that he had conflictual relationships with peers. Both Ali and his teacher confirmed this. When my doctoral student clinician observed him on the school playground, she saw that other students excluded him. Ali's mother attributed the problem to frequent changes in school. His teachers, however, believed that the main issue was Ali's poor social skills and problems with emotion regulation. They described him as having difficulty with taking the perspective of others and being flexible when solving a social problem. They also indicated that he frequently engaged in verbal arguments and was sometimes physically aggressive when provoked by others. We assessed these issues and provided treatment simultaneously using a social skills training program based on cognitive behavior therapy principles (Wiener & Harris, 1997).

As Ali's social difficulties were like those of children with ADHD (Marton et al., 2009; McQuade & Hoza, 2015), and we observed that he was fidgety and inattentive in assessment sessions, we explored whether that diagnosis might be appropriate. It was challenging to do a diagnostic interview with his mother because, instead of answering our questions, she frequently changed topics. As this is not typical of individuals from her culture, we wondered whether she might also have

ADHD. Nevertheless, she confirmed that unless he was engaging in preferred tasks such as playing computer games, he had a short attention span and was fidgety. Not surprisingly, his teacher rated his inattentive and hyperactive/impulsive symptoms in the clinical range on a standardized rating scale.

Once rapport was achieved, Ali confided that he often felt very sad and that he thought that any change in his situation was hopeless. Furthermore, his symptoms of depression were in the clinical range on a self-report scale. When we prompted him to elaborate on why he felt sad, he corroborated his mother's observations that the transitions and relocations were hard. He also said that he was distressed due to academic challenges at school, difficulty regulating his emotions, peer rejection, and his mother's harsh discipline (e.g., she banned him from using his computer for 3 months for an aggressive incident). He was especially sad that he could not see his father or communicate with him regularly.

There were several family issues that we considered in our formulation. Although identifying as Muslim, Ali's mother wore fashionable clothing that, while appropriate, would not be viewed as modest by most people from Arabic cultures. She had lived in the United States for 6 years but spoke minimal English when we first met her. Her English, however, improved considerably during the 3 months between the intake and feedback interviews. When we commended her for that, she indicated that her ex-spouse did not allow her to leave the house except to go to the mosque and that during the time she lived in the United States she was not able to interact with other people who spoke English. She proudly asserted that she was now enrolled in English as a second language course. The fact that Ali's father was not permitted to visit, and that Ali was discouraged from communicating with him suggested that there might have been family violence or emotional abuse.

Our formulation included the taxonomic diagnoses of learning disability according to the criteria specified in the guidelines accepted in Ontario (Ontario Psychological Association, 2020) and specific learning disorders according to DSM-5 criteria (American Psychological Association, 2013). We also concluded that Ali had ADHD (combined presentation) and that he was at risk for a mood disorder. The clinical reasoning framework we used, however, generated recommendations for intervention that went well beyond what might have been suggested had we confined ourselves to these diagnoses. Due to our use of response to intervention strategies, we provided detailed recommendations for remediation (e.g., teaching math facts using a specific computer game, graphic organizers for writing), and classroom accommodations (e.g., assistive technology for writing) that we knew were associated with Ali's academic progress. In addition to consultation regarding medication for ADHD, we suggested ongoing social skills training and psychotherapy to address peer relationship problems and depressive symptoms. To accomplish this, we referred Ali to a government-funded children's mental health center that provides an evidence-based mindfulness program that addresses emotion regulation and social skills of children with learning disabilities and ADHD (Haydicky et al., 2012). We referred his mother for treatment with a therapist who spoke Arabic who could provide her with support for dealing with the possible trauma she experienced and provide specific parenting suggestions. In addition to

the full assessment report sent to the school and the children's mental health center, we provided a one-page simple report in English and Arabic for Ali and his mother.

Conclusion

My clinical reasoning approach, which has evolved over many years of practice, teaching, and research, is innovative in several ways. Geva and colleagues (2000) discuss the specific types of attitudes, knowledge, and skills that psychologists should have to ensure that their assessments and interventions are effective. Regarding attitudes, I believe that students, parents, and educators should be partners in the assessment process. Developing a trusting relationship with them and listening to their point of view enhances the quality of the information I get and my formulation. I believe that it is extremely important that students, parents, and educators understand the results of the assessment and recommendations for intervention. Consequently, I adapt feedback sessions and reports to ensure that they do. Regarding knowledge, my clinical reasoning is informed by a background in developmental and cross-cultural psychology, developmental psychopathology, and interventions for learning and mental health difficulties. This enables me to combine the developmental systems approach and risk and resilience theory in my formulations and recommendations for intervention. I also believe that it is extremely important to learn about students' language and culture by engaging in library and internet research and by listening to the perspective of individuals from those cultures. Lastly, in terms of skills, in addition to psychological testing, it is important to have highly developed observation, interviewing, and communication skills. These skills are required to gain the trust of students and families and to help them understand assessment results and recommendations for intervention. I consider tests to be refined observational instruments, but I do not consider test scores to always be more valid than my informal observations, and the information provided by students, parents, and educators during interviews.

As recommended by Youngstrom and Prinstein (2020), the methods I use for assessments and my clinical reasoning are informed by research evidence and I strongly believe in evidence-informed practice. Although psychological research over the past 20 years has been informative regarding the development of language and reading skills of young L2 children (Geva & Wiener, 2015), and risk and resilience factors predicting functional impairment and adaptation of immigrant children and youth (Suárez-Orozco et al., 2018), there are also many critical gaps in the research. I have not been able to find many longitudinal studies that examine the language and literacy development of students who are initially exposed to the L2 in the upper grades of elementary school, middle school, and secondary school. There is considerable research on effective classrooms and schools; however, the research on teacher beliefs and practices that promote the achievement and mental health of CLD students is limited. As a psychologist, when I engage in clinical reasoning I attempt to compensate for these gaps in knowledge that would inform our

assessments by thinking deeply about developmental and systems factors, and by being sensitive to the direct and indirect cues provided by students, parents, and educators.

References

- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders (DSM-5™)*. American Psychiatric Association.
- Bergeron, L., Smolla, N., Valla, J. P., St-Georges, M., Berthiaume, C., Piché, G., & Barbe, C. (2010). Psychometric properties of a pictorial instrument for assessing psychopathology in youth aged 12 to 15 years: The Dominic Interactive for Adolescents. *The Canadian Journal of Psychiatry*, 55(4), 211–221. <https://doi.org/10.1177/070674371005500404>. Retrieved from <https://psycentre.apps01.yorku.ca/wp/dominic-interactive-dominic-adolescent/>
- Bronstein, I., & Montgomery, P. (2011). Psychological distress in refugee children: A systematic review. *Clinical Child and Family Psychology Review*, 14(1), 44–56. <https://doi.org/10.1007/s10567-010-0081-0>
- Canadian Psychological Association. (2017). *Canadian code of ethics for psychologists*. Retrieved from https://cpa.ca/docs/File/Ethics/CPA_Code_2017_4thEd.pdf
- Chang, D. F., & Demyan, A. L. (2007). Teachers' stereotypes of Asian, Black, and White students. *School Psychology Quarterly*, 22(2), 91–114. <https://doi.org/10.1037/1045-3830.22.2.91>
- Colomer, C., Wiener, J., & Varma, A. (2020). Do adolescents with ADHD have a self-perception bias for their ADHD symptoms and impairment? *Canadian Journal of School Psychology*, 35(4), 238–251. <https://doi.org/10.1177/0829573520936457>
- Cormier, D. C., Wang, K., & Kennedy, K. E. (2016). Linguistic demands of the oral directions for administering the WISC-IV and WISC-V. *Canadian Journal of School Psychology*, 31(4), 1–15. <https://doi.org/10.1177/0829573516643314>
- Doll, B., Leclair, C., & Kurien, S. (2009). Effective classrooms: Classroom learning environments that foster school success. In T. B. Gutkin & C. R. Reynolds (Eds.), *The handbook of school psychology* (4th ed., pp. 791–807). Wiley.
- Ducharme, J. M., & Shecter, C. (2011). Bridging the gap between clinical and classroom intervention: Keystone approaches for students with challenging behavior. *School Psychology Review*, 40(2), 257–274. <https://doi.org/10.1080/02796015.2011.12087716>
- Durlak, J. A. (2009). Prevention programs. In T. B. Gutkin & C. R. Reynolds (Eds.), *The handbook of school psychology* (4th ed., pp. 905–920). Wiley.
- Elik, N., Wiener, J., & Corkum, P. (2010). Preservice teachers' open-minded thinking dispositions, readiness to learn, and attitudes toward learning and behavioural difficulties in students. *European Journal of Teacher Education*, 33(2), 127–146. <https://doi.org/10.1080/02619760903524658>
- Evans, S. W., Allen, J., Moore, S., & Strauss, V. (2005). Measuring symptoms and functioning of youth with ADHD in middle schools. *Journal of Abnormal Child Psychology*, 33(6), 695–706. <https://doi.org/10.1007/s10802-005-7648-0>
- Farnia, F., & Geva, E. (2011). Cognitive correlates of vocabulary growth in English language learners. *Applied PsychoLinguistics*, 32(4), 711–738. <https://doi.org/10.1017/S0142716411000038>
- Fletcher, J. M., Lyon, G. R., Fuchs, L. S., & Barnes, M. A. (2019). *Learning disabilities: From identification to intervention* (2nd ed.). The Guilford Press.
- Garnezy, N. (1974). The study of competence in children at risk for severe psychopathology. In E. J. Anthony & C. Koupernik (Eds.), *The child in his family: Children at psychiatric risk*. Wiley.
- Geary, D. C., Hoard, M. K., Nugent, L., & Bailey, D. H. (2012). Mathematical cognition deficits in children with learning disabilities and persistent low achievement: A five-year prospective study. *Journal of Educational Psychology*, 104(1), 206–223. <https://doi.org/10.1037/a0025398>

- Geva, E., Barsky, A., & Westernoff, F. (2000). Interprofessional and diversity informed practice. In E. Geva, A. Barsky, & F. Westernoff (Eds.), *Interprofessional practice with diverse populations*. Auburn House.
- Geva, E., & Wiener, J. (2015). *Psychological assessment of culturally and linguistically diverse children and adolescents: A practitioner's guide*. Springer Publishing Company.
- Geva, E., Wiener, J., Peterson-Badali, M., & Link, N. (2004). Integrating school and clinical child psychology: An innovative model for training school psychologists. In E. Cole (Ed.), *Effective consultation in school psychology* (2nd ed., pp. 107–128). Hogrefe.
- Goodman, R. (1997). The strengths and difficulties questionnaire: A research note. *Journal of Child Psychology and Psychiatry and Allied Disciplines*, 38(5), 581–586. <https://doi.org/10.1111/j.1469-7610.1997.tb01545.x>
- Guglielmi, R. S. (2012). Math and science achievement in English language learners: Multivariate latent growth modeling of predictors, mediators, and moderators. *Journal of Educational Psychology*, 104(3), 580–602. <https://doi.org/10.1037/a0027378>
- Haydicky, J., Wiener, J., Badali, P., Milligan, K., & Ducharme, J. M. (2012). Evaluation of a mindfulness-based intervention for adolescents with learning disabilities and co-occurring ADHD and anxiety. *Mindfulness*, 3(2), 151–164. <https://doi.org/10.1007/s12671-012-0089-2>
- Hoosen, N., Davids, E. L., Vries, P. J., & Shung-King, M. (2018). The Strengths and Difficulties Questionnaire (SDQ) in Africa: A scoping review of its application and validation. *Child and Adolescent Psychiatry and Mental Health*, 12. <https://doi.org/10.1186/s13034-017-0212-1>
- Husky, M. M., Otten, R., Boyd, A., Pez, O., Bitfoi, A., Carta, M. G., Goelitz, D., Koç, C., Lesinskiene, S., Mihova, Z., & Kovess-Masfety, V. (2020). Psychometric properties of the Strengths and Difficulties Questionnaire in children aged 5–12 years across seven European countries. *European Journal of Psychological Assessment*, 36(1), 65–76. <https://doi.org/10.1027/1015-5759/a000489>
- Kaufman, A. S., & Kaufman, N. L. (2017). *Kaufman assessment battery for children-second edition normative update*. Pearson.
- Kiddie-Schedule for Affective Disorders and Schizophrenia for School-Age Children—Present and Lifetime Version (K-SADS—PL DSM-5; 2016). (2016). Retrieved from <https://www.kennedykrieger.org/ksads-comp>
- Liu, S., Chien, Y., Shang, C., Lin, C., Liu, Y., & Gau, S. S. (2013). Psychometric properties of the Chinese version of Strength and Difficulties Questionnaire. *Comprehensive Psychiatry*, 54(6), 720–730. <https://doi.org/10.1016/j.comppsy.2013.01.002>
- Mahatmya, D., Lohman, B. J., Brown, E. L., & Conway-Turner, J. (2016). The role of race and teachers' cultural awareness in predicting low-income, Black and Hispanic students' perceptions of educational attainment. *Social Psychology of Education: An International Journal*, 19(2), 427–449. <https://doi.org/10.1007/s11218-016-9334-1>
- Mak, J. Y. L. (2020). *Friendship across cultures. Supporting unaccompanied international high school students with intercultural friendships* [Unpublished doctoral dissertation]. University of Toronto.
- Margalit, M. (2004). Second-generation research on resilience: Social-emotional aspects of children with learning disabilities. *Learning Disabilities Research & Practice*, 19(1), 45–48. <https://doi.org/10.1111/j.1540-5826.2004.00088.x>
- Martiniello, M. (2009). Linguistic complexity, schematic representations, and differential item functioning for English language learners in math tests. *Educational Assessment*, 14(3–4), 160–179. <https://doi.org/10.1080/10627190903422906>
- Marton, I., Wiener, J., Rogers, M., Moore, C., & Tannock, R. (2009). Empathy and social perspective taking in children with attention-deficit/hyperactivity disorder. *Journal of Abnormal Child Psychology*, 37, 107–118. <https://doi.org/10.1007/s10802-008-9262-4>
- Mash, E. J., & Hunsley, J. (2007). Assessment of child and family disturbance: A developmental systems approach. In E. J. Mash & R. Barkley (Eds.), *Assessment of childhood disorders* (pp. 3–50). The Guilford Press.
- McQuade, J. D., & Hoza, B. (2015). Peer relationships of children with ADHD. In R. Barkley (Ed.), *Attention-deficit/hyperactivity disorder: A handbook for diagnosis and treatment* (4th ed., pp. 210–222). The Guilford Press.

- Meltzer, L. (2004). Resilience and learning disabilities: Research on internal and external protective dynamics. *Learning Disabilities Research & Practice, 19*(1), 1–2. <https://doi.org/10.1111/j.1540-5826.2004.00083.x>
- Mikami, A. Y., & Mercer, S. H. (2017). Teacher behaviors toward children with attention-deficit/hyperactivity disorder predict peers' initial liking and disliking impressions in a summer camp setting. *Journal of Social and Clinical Psychology, 36*(6), 506–534. <https://doi.org/10.1521/jscp.2017.36.6.506>
- Moriwaki, A., & Kamio, Y. (2014). Normative data and psychometric properties of the Strengths and Difficulties Questionnaire among Japanese school-aged children. *Child and Adolescent Psychiatry and Mental Health, 8*(1), 1–12. <https://doi.org/10.1186/1753-2000-8-1>
- Ontario Psychological Association. (2020). *Guidelines for diagnosis and assessment of children, adolescents, and adults with learning disabilities: Consensus statement and supporting documents*. Retrieved from <http://www.psych.on.ca/OPA/media/Members/Guidelines/OPA-Guidelines-for-Diagnosis-and-Assessment-of-Learning-Disabilities-03-2020.pdf?ext=.pdf>
- Padilla, A. M., & Gonzalez, R. (2001). Academic performance of immigrant and U.S.-born Mexican heritage students: Effects of schooling in Mexico and bilingual/English language instruction. *American Educational Research Journal, 38*(3), 727–742. <https://doi.org/10.3102/00028312038003727>
- Parsons, S. A., Vaughn, M., Scales, R. Q., Gallagher, M. A., Parsons, A. W., Davis, S. G., et al. (2018). Teachers' instructional adaptations: A research synthesis. *Review of Educational Research, 88*(2), 205–242. <https://doi.org/10.3102/0034654317743198>
- Pasquarella, A., Gottardo, A., & Grant, A. (2012). Comparing factors related to reading comprehension in adolescents who speak English as a first (L1) or second (L2) language. *Scientific Studies of Reading, 16*, 475–503. <https://doi.org/10.1080/10888438.2011.593066>
- Prevo, M. J. L., Malda, M., Mesman, J., & van IJzendoorn, M. H. (2016). Within- and cross-language relations between oral language proficiency and school outcomes in bilingual children with an immigrant background: A meta-analytical study. *Review of Educational Research, 86*(1), 237–276. <https://doi.org/10.3102/0034654315584685>
- Reynolds, C., Kamphaus, R., & Vannest, K. (2015). *BASC3: Behavior assessment system for children*. Pearson.
- Rivera, L. M. (2008). Acculturation and multicultural assessment: Issues, trends, and practice. In L. A. Suzuki & J. G. Ponterotto (Eds.), *Handbook of multicultural assessment: Clinical, psychological, and educational applications* (pp. 73–91). Jossey-Bass/Wiley.
- Rutter, M. (2012). Resilience as a dynamic concept. *Development and Psychopathology, 24*(2), 335–344. <https://doi.org/10.1017/S0954579412000028>
- Rutter, M. (2013). Annual research review: Resilience—Clinical implications. *Journal of Child Psychology and Psychiatry, 54*(4), 474–487. <https://doi.org/10.1111/j.1469-7610.2012.02615.x>
- Sattler, J. M. (2020). *Assessment of children: Cognitive foundations and applications* (Revised 6th ed.). Jerome M. Sattler Publisher.
- Saur, A. M., & Loureiro, S. R. (2012). Qualidades psicométricas do Questionário de Capacidades e Dificuldades: Revisão da literatura. *Estudos de Psicologia, 29*(4), 619–629. <https://doi.org/10.1590/S0103-166X2012000400016>
- Schultz, B., & Evans, S. (2012). Sources of bias in teacher ratings of adolescents with ADHD. *Journal of Educational and Developmental Psychology, 2*(1), 151–162. <https://doi.org/10.5539/jedp.v2n1p151>
- Sheridan, S. M., Bovaird, J. A., Glover, T. A., Garbacz, S. A., Witte, A., & Kwon, K. (2012). A randomized trial examining the effects of conjoint behavioral consultation and the mediating role of the parent-teacher relationship. *School Psychology Review, 41*(1), 23–46.
- Šouláková, B., Kasal, A., Butzer, B., & Winkler, P. (2019). Meta-review on the effectiveness of classroom-based psychological interventions aimed at improving student mental health and well-being and preventing mental illness. *The Journal of Primary Prevention, 40*(3), 255–278. <https://doi.org/10.1007/s10935-019-00552-5>
- Stanovich, P. J., & Jordan, A. (1998). Canadian teachers' and principals' beliefs about inclusive education as predictors of effective teaching in heterogeneous classrooms. *The Elementary School Journal, 98*(3), 221–238. <https://doi.org/10.1086/461892>

- Suárez-Orozco, C., Motti-Stefanidi, F., Marks, A., & Katsiaficas, D. (2018). An integrative risk and resilience model for understanding the adaptation of immigrant-origin children and youth. *American Psychologist*, 73(6), 781–796. <https://doi.org/10.1037/amp0000265>
- Sullivan, A. L., & Simonson, G. R. (2016). A systematic review of school-based social-emotional interventions for refugee and war-traumatized youth. *Review of Educational Research*, 86(2), 503–530. <https://doi.org/10.3102/0034654315609419>
- Swanson, H. L., & Zheng, X. (2013). Memory difficulties in children and adults with learning disabilities. In H. L. Swanson, K. Harris, & S. Graham (Eds.), *Handbook of learning disabilities* (2nd ed., pp. 214–238). The Guilford Press.
- Tardif, C. Y., & Geva, E. (2006). The Link between acculturation disparity and conflict among Chinese Canadian immigrant mother-adolescent dyads. *Journal of Cross-Cultural Psychology*, 37(2), 191–211. <https://doi.org/10.1177/0022022105284496>
- The Hospital for Sick Children, Department of Psychiatry. (2013). *Parent interview for child symptoms 7 (PICS-7.1)*. Retrieved from <https://lab.research.sickkids.ca/schachar/resources-and-tools/>
- Valla, J. P., Bergeron, L., & Smolla, N. (2000). The Dominic-R: A pictorial interview for 6- to 11-year-old children. *Journal of the American Academy of Child & Adolescent Psychiatry*, 39(1), 85–93. <https://doi.org/10.1097/00004583-200001000-00020>
- Volante, L., Klinger, D., Bilgili, Ö., & Siegel, M. (2017). Making sense of the performance (dis) advantage for immigrant students across Canada. *Canadian Journal of Education/Revue Canadienne De L'éducation*, 40(3), 329–361. <https://doi.org/10.2307/90014781>
- Wechsler, D. (1949). *Wechsler intelligence scale for children*. Psychological Corporation.
- Wiener, J. (2020). The role of school psychologists in supporting adolescents with ADHD. *Canadian Journal of School Psychology*, 35(4), 299–310. <https://doi.org/10.1177/0829573520923536>
- Wiener, J., & Costaris, L. (2012). Teaching psychological report writing: Content and process. *Canadian Journal of School Psychology*, 29(2), 119–135. <https://doi.org/10.1177/0829573511418484>
- Wiener, J., & Harris, P. J. (1997). Evaluation of an individualized, context-based social skills training program for children with learning disabilities. *Learning Disabilities Research and Practice*, 12(1), 40–53.
- Wiener, J., & Timmermanis, V. (2012). Social relationships of children and youth with learning disabilities: The 4th R. In B. Y. L. Wong & D. L. Butler (Eds.), *Learning about learning disabilities* (pp. 89–140). Elsevier.
- Wong, B. Y. L. (2003). General and specific issues for researchers' consideration in applying the risk and resilience framework to the social domain of learning disabilities. *Learning Disabilities Research & Practice*, 18(2), 68–76. <https://doi.org/10.1111/1540-5826.00060>
- Yaghoub-Zadeh, Z., Geva, E., & Rogers, M. (2008). The impact of acculturation on the perception of academic achievement by immigrant mothers and their children. *School Psychology International*, 29(1), 39–70. <https://doi.org/10.1177/0143034307088503>
- Youngstrom, E. A., & Prinstein, M. J. (2020). Introduction to evidence-based assessment: A recipe for success. In E. A. Youngstrom, M. J. Prinstein, E. J. Mash, & R. A. Barkley (Eds.), *Assessment of disorders in childhood and adolescence* (5th ed., pp. 3–29). The Guilford Press.
- Zigmond, N. (1983). *Assessment for instructional planning in special education*. Prentice Hall.

Chapter 7

Thematic Integration of Child and Youth Mental Health Practice in School Psychology



Steven R. Shaw

Abstract The school psychology section of this book introduces profession-specific approaches to mental health assessment, prevention, and intervention. There are several aspects of mental health service delivery that differ from clinical and counseling psychology. Among these aspects are the cultural diversity of students, the possibility of early intervention and prevention based on effective universal screening, the role of academic performance as a factor in mental health, and the variety of service delivery challenges. School psychologists demonstrate a diversity of practice that goes beyond the setting of the school. School psychology is developmental, preventative, social justice-focused, integrated with teaching and learning, and community-centered. As such school psychologists are often the first line of service delivery for children and youth with mental health issues.

Guiding Framework/Theoretical Approach for Mental Health Assessment, Prevention, and Intervention

School psychologists share much with clinical and counseling psychology regarding their approach to clinical reasoning to promote and intervene in the mental health of children and youth due in part because of the common combined training programs of the school and clinical or school and counseling programs across North America. However, despite the shared set of assumptions and similar training, the professions have significant differences as well. The most obvious difference is the location of services. School psychologists often provide services through schools, where more than 80% of children and youth with mental health issues are first identified and where they receive intervention services (Deighton et al., 2018). School-based mental health services are frequently the first line of diagnosis and intervention (Duong et al., 2021). Yet, school psychology is a profession and not a location.

S. R. Shaw (✉)
McGill University, Montreal, QC, Canada
e-mail: steven.shaw@mcgill.ca

School psychologists are also employed in hospitals, independent practice, community mental health, and other environments (Bramlett et al., 2002).

Clinical Reasoning Model for Mental Health Assessment, Prevention, and Intervention

There are three primary unique components that define and influence school psychology training, service delivery, and clinical reasoning. These three components are access and equity, systems focus, and emphasis on the development of skill and function.

Access and equity are unique to school psychology because nearly all children and youth in North America have experience with school systems (Larson et al., 2017). With every child entering schooling at Kindergarten or Grade 1, there are opportunities for prevention, screening, and early intervention with respect to mental health issues. Schools, like most organizations within society, have not distributed services equitably or focused efficiently on providing services to those with the greatest needs (Duke, 2020). The profession has evolved toward an inclusive and social justice model of mental health that strongly considers the effects of the distribution of privilege in how clinical reasoning is applied. As such, school psychology tends to be an optimistic profession that assists children and youth to develop the skills required for resilience and the prevention of mental health problems. Creating school inclusive and supportive climates that lead to success for children and youth at risk for mental health problems is a mindset and assumption of successful mental health practice of school psychologists.

Consistent with emphases on access and equity is a systems model of mental health service delivery. Mental health interventions do not often focus heavily on individual or group therapy sessions in school psychology. Individual or group therapies are unlikely to be effective if the child or youth spends many hours in a system that does not serve them well. School psychologists partner with teachers, school counselors, peers, parents, nurses, social workers, and other educators to create an effective and stable environment. In many situations, schools are the most stable system in a child's life. Working as a team and community is second nature to school psychologists as they work to create a preventative, resilience-focus, and inclusive school environment (Baak et al., 2020).

Schools emphasize the development of skill and function. Schools teach literacy and numeracy skills at the most elementary level. They also provide a social ladder to teach reasoning skills, community engagement skills, and prepare youth for the workplace or higher education. More than 50% of referrals for school psychological services are for difficulties with reading and reading comprehension (Benson et al., 2020). Students with difficulty acquiring reading skills in Grade 1 are twice as likely to have a later mental health problem than readers at the 50th percentile (Deighton et al., 2018). Academic interventions assist in the skill development necessary for

success and have a profound impact on mental health (Fang, 2020). Academic and mental health decision-making are not different functions with different clinical reasoning processes (Cvencek et al., 2018). Academic interventions are mental health interventions (Berkowitz et al., 2017). The rise of social and emotional learning as part of the school curriculum that is often led by school psychologists makes the link explicit. The goal of social and emotional learning is to develop resilience skills while assisting children and youth to improve academic outcomes (Werlen et al., 2020). Development of skill and functions, including academics, is part of the inclusive component of clinical decision-making that is central to the profession. Understanding the influence that the development of academic skills has on the development of mental health and social-emotional learning is a basic assumption of school psychology.

These three unique components of school psychology plus skills shared with counseling and clinical psychology such as assessment, diagnosis, consultation, research, interventions, and program evaluation create diverse forms of clinical reasoning. The profession of school psychology has evolved to meet the changing needs of the mental health of children and youth. At one time, the exclusive role of school psychology was to assess to determine eligibility for special education services for children with disabilities. The role of schools in building resilience, meeting specific academic skills, social and emotional learning, inclusive education, integration of ethnically and linguistically minoritized populations, improving school climate, supporting supportive school climate, screening and early identification of mental health issues, and other societal factors have led to a profession that is far more responsive to the mental health needs of children and youth than in the past.

Perspectives and Approaches Relative to Mental Health Assessment

School psychology is a profession that is diverse in the forms of service delivery, professional priorities, and clinical reasoning. Specific activities vary due to state and provincial law and regulation, licensing and registration differences, unique needs of specific communities, and influence of local training programs (e.g., Tulli et al., 2020). For example, a school psychologist serving a largely Indigenous community in rural northern Canada will require a different set of skills and practice priorities than a school psychologist serving an urban area of southern Texas in the US. Within this section of the book, five chapters present different forms and contexts of clinical reasoning and decision making that support child and youth mental health by way of school psychology.

Don Sakloske provided the legacy chapter. Dr. Sakloske has been a leader in Canadian and International school psychology for nearly 50 years. He has been influential in establishing school psychology training programs across multiple

universities. His work and influence have shaped every aspect of the profession of school psychology in Canada. He describes the continuous interaction between clinical service delivery and research. His chapter provides numerous useful examples of how clinical work led to inspiration to investigate new ideas through research and how research informed improved psychological service delivery to children. Stradling science and practice throughout his career provides an exemplar of the true scientist-practitioner. The data-based and theoretical approach to clinical decision making, along with sensitivity to the unique needs of the children, and empathy; creates an enviable legacy to school psychology.

Judith Wiener provided the chapter that focused on the assessment of culturally and linguistically diverse children and adolescents. Professor Wiener is Professor Emerita from the University of Toronto/Ontario Institute for Studies in Education. Dr. Wiener has been extraordinarily influential in many areas, but especially in the evolution of school psychology in meeting the mental health and educational needs of immigrant and refugee populations, English-language learners, and Indigenous populations. In her chapter, she provided an assessment and clinical reasoning framework that integrates aspects of the developmental systems approach, and risk and resilience theory. She asserts and reminds us that assessments of the mental health of children and adolescents from culturally and linguistically diverse backgrounds involve gaining an understanding of their thoughts, feelings, behaviors, and their personal characteristics. It is also important to consider family and school risk and protective factors. The research underlying the framework is reviewed and case studies were used to illustrate the clinical reasoning process.

Matthew K. Burns, McKinzie D. Duesenberg, and Monica Romero provided the chapter focused on a way to facilitate the success of students in reading and math. Dr. Burns is Professor of Special Education and Director of the Center for Collaborative Solutions for Kids, Practice, and Policy (SKiPP). His work is an ideal example of promoting, remediating, and accommodating for academic skill development as a foundation for addressing child and youth mental health. This chapter in the book highlighted how individualized academic skill acquisition can meet the individual needs of children and youth. In this regard, the chapter presented a skill-by-treatment interaction (STI) framework of clinical reasoning for directing academic interventions, which uses preintervention data relative to the particular skill to identify skill deficits and select interventions with the highest likelihood of success. This form of clinical reasoning provides an empirically supported approach to efficient, inclusive, and effective service delivery. The chapter summarized relevant research and outlined specific guidelines to select interventions for reading and math. The chapter concluded with case studies demonstrating the process in action. This chapter exemplifies unique characteristics of the profession of school psychology by underscoring that academic skill deficits are the primary reason for teacher and parent referral to school psychologists; academic skill and performance deficits are significantly related to future mental health problems; and that early and effective intervention of complex academic difficulties is critical, and often ignored, component of preventative mental health service delivery.

Doris Paez provided a chapter that focused on creating solutions for children who do not fit into majority society. Dr. Paez is a bilingual school psychologist at

the Regional Medical Center, Orangeburg, South Carolina. She has extensive experience over the last 30 years as a researcher, instructor, supervisor, and clinician. Dr. Paez's clinical reasoning approach centers on how to provide mental health services to children and youth who do not fit neatly into the educational, social, and mental health systems that have been created. She provides a practical approach to guide the creation of solutions to the contemporary mental health, culture, and schooling needs of children who are culturally, linguistically, economically, or behaviorally divergent from any dominant societal group (e.g., mainstream, majority, majority-minority, growing minority, marginalized, normative groups). Clinical reasoning from a micro and macroecological systems lens frequently attends to the sameness more than the differences of children from their systems and the equations of all the variables in their lives, as well as to community and school mismatches. The impact of diverse children's fit with instructional settings, intervention strategies, and important adults (e.g., teachers, therapists, medical personnel, guardians, parents, family members, coaches) on their mental health and academic achievement are explored within her chapter. Case studies, highlighting culturally attentive modifications to typical psychological prevention, evaluation, and intervention strategies for children who do not fit, including those who are multiple language learners, racially and ethnically diverse, have severe mental health issues, and have diverse gender identities were interactively reviewed. A framework of clinical reasoning is supplied to serve as information and inspiration for how psychologists can adapt their current practices to simultaneously serve as diagnosis detectives, intervention consultants, teachers, and advocates; all in the pursuit of children's well-being and socially just mental health treatment.

Shannon Stewart provided a chapter that focused on an integrated assessment-to-intervention approach to enhance integrated care. Dr. Stewart is Professor and Clinical Training Director of the School and Applied Child Psychology Program at Western University in London, Ontario. Dr. Stewart is influential in collective efforts to link assessment to clinical intervention. This approach to mental health affects student well-being, academic performance, and resource allocation within schools. The ability to properly identify the needs of students while providing improved prioritization, triaging, and access to services is essential in a service delivery model. The development of screening, follow-up assessment, and then rapid-response early intervention is an approach to clinical reasoning that is unique to school settings.

Conclusion

Clinical reasoning is a complex and idiosyncratic process that is shaped by personal experiences, research, theoretical orientation, local needs, regulatory issues, and the culture and history of the specific profession. The contributing scholars and clinicians within this school psychology section of the book provided an excellent sampling of the clinical reasoning process in the profession of school psychology. The

common ground is the mindful and strategic approach to clinical decision-making. Each new clinical case, research finding, administrative issue, demographic change, and political and funding change result in researchers and clinicians reconsidering how their clinical reasoning process evolves and rises to meet the needs of children and youth. Clinical reasoning is more than a lens to view mental health issues, but a lens to change and improve action and clinical practices. The abovementioned chapters convert clinical reasoning into clinical action.

References

- Baak, M., Miller, E., Ziersch, A., Due, C., Masocha, S., & Ziaian, T. (2020). The role of schools in identifying and referring refugee background young people who are experiencing mental health issues. *Journal of School Health, 90*(3), 172–181. <https://doi.org/10.1111/josh.12862>
- Benson, N. F., Maki, K. E., Floyd, R. G., Eckert, T. L., Kranzler, J. H., & Fefer, S. A. (2020). A national survey of school psychologists' practices in identifying specific learning disabilities. *School Psychology, 35*(2), 146–157. <https://doi.org/10.1037/spq0000344>
- Berkowitz, R., Moore, H., Astor, R. A., & Benbenishty, R. (2017). A research synthesis of the associations between socioeconomic background, inequality, school climate, and academic achievement. *Review of Educational Research, 87*(2), 425–469. <https://doi.org/10.3102/0034654316669821>
- Bramlett, R. K., Murphy, J. J., Johnson, J., Wallingsford, L., & Hall, J. D. (2002). Contemporary practices in school psychology: A national survey of roles and referral problems. *Psychology in the Schools, 39*(3), 327–335. <https://doi.org/10.1002/pits.10022>
- Cvencek, D., Fryberg, S. A., Covarrubias, R., & Meltzoff, A. N. (2018). Self-concepts, self-esteem, and academic achievement of minority and majority North American elementary school children. *Child Development, 89*(4), 1099–1109. <https://doi.org/10.1111/cdev.12802>
- Deighton, J., Humphrey, N., Belsky, J., Boehnke, J., Vostanis, P., & Patalay, P. (2018). Longitudinal pathways between mental health difficulties and academic performance during middle childhood and early adolescence. *British Journal of Developmental Psychology, 36*(1), 110–126. <https://doi.org/10.1111/bjdp.12218>
- Duke, N. N. (2020). Adolescent adversity, school attendance and academic achievement: School connection and the potential for mitigating risk. *Journal of School Health, 90*(8), 618–629. <https://doi.org/10.1111/josh.12910>
- Duong, M. T., Bruns, E. J., Lee, K., Cox, S., Coifman, J., Mayworm, A., & Lyon, A. R. (2021). Rates of mental health service utilization by children and adolescents in schools and other common service settings: A systematic review and meta-analysis. *Administration and Policy in Mental Health and Mental Health Services Research, 48*(3), 420–439. <https://doi.org/10.1007/s10488-020-01080-9>
- Fang, L. (2020). Acculturation and academic achievement of rural to urban migrant youth: The role of school satisfaction and family closeness. *International Journal of Intercultural Relations, 74*, 149–160. <https://doi.org/10.1016/j.ijintrel.2019.11.006>
- Larson, S., Chapman, S., Spetz, J., & Brindis, C. D. (2017). Chronic childhood trauma, mental health, academic achievement, and school-based health center mental health services. *Journal of School Health, 87*(9), 675–686. <https://doi.org/10.1111/josh.12541>
- Tulli, M., Salami, B., Begashaw, L., Meherali, S., Yohani, S., & Hegadoren, K. (2020). Immigrant mothers' perspectives of barriers and facilitators in accessing mental health care for their children. *Journal of Transcultural Nursing, 31*(6), 598–605. <https://doi.org/10.1177/1043659620902812>
- Werlen, L., Gjukaj, D., Mohler-Kuo, M., & Puhon, M. A. (2020). Interventions to improve children's access to mental health care: A systematic review and meta-analysis. *Epidemiology and Psychiatric Sciences, 29*, e58. <https://doi.org/10.1017/S2045796019000544>

Part II
Clinical Psychology: Mental Health
Assessment, Prevention and Intervention:
Promoting Child and Youth Well-Being

Chapter 8

Factors Within Families and Their Ecological Contexts That Shape Their Health and Well-Being: A Legacy Chapter



Catherine L. Costigan

Abstract This chapter provides a narrative of the early training experiences that shaped my career as well as an accounting of how my thinking about research and clinical practice has evolved over the years. I share examples from my research focused on family and ecological influences on mental health, concentrating in particular on research with families who have immigrant and refugee backgrounds and the interventions we have developed based on this research. I attempt to illustrate how my research has grown to become increasingly community-engaged, increasingly focused on building strengths in addition to understanding challenges, and increasingly framed within a social justice lens. I also discuss my clinical perspective on working with children and adolescents, which is grounded in family systems and developmental psychopathology models. My perspectives on assessment and intervention include the importance of self-reflection, striving for cultural safety and humility, identifying the implicit assumptions we make about mental health, and bringing an understanding of structural inequities into case conceptualizations and treatment plans. These developments in my thinking mirror changes in the field of clinical psychology more broadly. Finally, I share some future directions and lessons learned over the years that transcend specific research or clinical activities.

It is an honor to have been asked to write this chapter, but it is also quite intimidating. I am learning something new every single day, and definitely feel like my work is “in progress.” My identity as a researcher and practitioner has evolved over the years, in many ways that parallel development in the profession of clinical psychology. Therefore, my professional journey reflects shifts in the field.

Much of my work as a clinical psychologist, both research and practice, has centered on children, youth, and families. One thread through my research is the identification of risk and protective factors within families and their ecological contexts that shape trajectories of health and well-being. My primary research focus has

C. L. Costigan (✉)
University of Victoria, Victoria, BC, Canada
e-mail: costigan@uvic.ca

been on families who are new to Canada (immigrant and refugee families). In this work, I have sought to understand how families navigate adversity and harness strengths to support the mental health of all family members. As I have grown as a scholar, I have increasingly incorporated social inequities and oppressive attitudes that create barriers for newcomer families, in addition to individual and family psychological processes. In what follows, I discuss a bit of the journey I have taken in my career.

My Beginnings as a Researcher and Scholar

I grew up in a fairly homogenous suburb of Chicago, Illinois. I had the support of my parents to consider universities on the east coast of the United States, where they were from, and I ended up at Cornell University. I enjoyed math and science in high school at a time when females were first being encouraged to enter the sciences, and therefore, I actually started university as an engineering student. After 1 year, I was clear that this was not the right fit for me. I wanted to work with people more than equations, and I switched my major to psychology. Cornell University consists of both private and public colleges, and the student body was quite diverse. There were many students from all over the world, giving me my first window into the cultural basis of beliefs, identity, and relationship expectations. Moreover, being in a space that included people with enormous privilege, and those with very little, was one of my first direct experiences with the uneven distribution of advantages in society.

My undergraduate university did not have a clinical psychology graduate program, but I was still certain that clinical psychology was the area of psychology I wanted to pursue. I was quite naïve about the science aspect of clinical psychology but knew enough to seek out the opportunity to complete an honor's thesis. I also sought experience working with "clinical" populations, such as volunteering at a community home for adults experiencing severe mental illness. One spring term, my dad sent me torn-out yellow pages from the phone book so that I could contact organizations near my hometown for a summer job. I ended up working in a residential home for youth who had been designated with severe behavior problems. The absence of their families in the treatment plans was striking to me, having been most drawn to undergraduate courses that focused on families and mental health, and I sought out graduate programs that included a family focus.

I completed my graduate training at Michigan State University in the Child and Family stream of the Clinical Psychology program. The program trained from a scientist-practitioner model and I benefited from equal attention to research and clinical training. From day 1, the child and family stream emphasized the importance of relationships and broader contexts for understanding child and adolescent mental health. My graduate research training solidified my grounding in family theories that highlight parent-child relationships as one of the most proximal social contexts for youth development, mediating the influence of a host of potential risk factors. I was fortunate to work with a great mentor, Dr. Frank Floyd, as part of his

larger program of research on families raising children with intellectual disabilities. Our research examined the interrelations among marital quality, parenting experiences, family interactions, and child development within these families, aiming to understand well-being of all family members. My clinical training developed in parallel, focusing on family systems conceptualizations and approaches to assessment and intervention.

Toward the end of graduate school, my supervisor took a position at the University of North Carolina, and I followed him there to continue my doctoral research. I had never been to the southern United States before, and this opportunity provided me with unanticipated insights into a cultural identity based on geography, and to some extent, religion. I would go on to immigrate to Canada later but in some ways felt like more of a foreigner in North Carolina than in an actual foreign country.

I completed my predoctoral internship training at the Institute for Juvenile Research (IJR), which is part of the University of Illinois Chicago. At IJR, I continued to develop my child and family assessment and intervention skills, but now working within high-poverty urban communities. As a middle-class, White, cis-gendered female, this year required me to examine my own privilege more than any previous time (although I did not have that language at the time). I had had some training in cultural competence, but my real knowledge of working with children and families across ethnic, racial, and socioeconomic differences grew enormously during this year. My work at IJR also provided ample opportunity to grapple with thorny ethical dilemmas (e.g., upholding mandated reporting obligations while maintaining therapeutic trust in a relationship with a family that had been continually let down by White helpers in positions of power). My experiences at IJR underscored the importance of broad case conceptualizations over specific diagnoses, the central role of trauma in the lives of children and their caregivers, the value of close collaborations with schools and other relevant systems, and the ways in which societal structures (welfare, disability, child protection) create additional challenges to families they are intended to support. I appreciated the strong focus on evidence-based practice at IJR but also noticed the ways in which standard models of treatment were a poor fit for some of the children and their families.

I knew I wanted to learn more about race and ethnicity and mental health, and I was still undecided about whether to pursue a predominantly practice career or an academic career. I was fortunate to be selected for a postdoctoral fellowship with the National Institute for Mental Health's (NIMH) Family Research Consortium. The theme of the consortium was on race and ethnicity and I was privileged to work with Dr. Ana Mari Cauce at the University of Washington in Seattle. During these postdoctoral years, I published on topics such as the cultural equivalence of behavioral ratings of observed mother–daughter interactions in Asian American families and the developmental course of the conflict in African American mother–daughter relationships from early to mid-adolescence. In a variety of ways, our research examined how good, effective parenting and parent–child relationships varied across cultures, and we considered how our theories and methods for studying families and mental health primarily reflected how middle-class White families functioned.

My Research and Scholarship Journey

Following 2 years of postdoctoral training, I accepted a faculty position in the Clinical Psychology program at the University of Victoria. I knew that I wanted to keep a focus on families, on determinants of mental health, and on race and ethnicity. I also wanted to be responsive to my new community, which led me to focus on Chinese families. As a large percentage of Chinese-origin families in the province were immigrants, I added the dimensions of immigration and acculturation to my research framework as well.

My early work consisted mostly of passive longitudinal quantitative studies. These involved the study of whole families, collecting data from mothers, fathers, and adolescents within the same family to understand family-level risk and protective factors related to the mental health of both adolescents and parents. This research was a collaborative effort with community partners who were trusted in the community and with multicultural and multilingual research assistants who could complete rigorous translation and back-translation of measures, communicate with research participants in their heritage languages, and serve as cultural brokers in interpreting findings.

In the second half of my career at the University of Victoria, my work has shifted in several significant ways. For one, my work has a much stronger community engagement component than earlier in my career. Although I previously collaborated with community members in conducting my research, and in sharing findings, I would not consider this early work community-engaged. Previously, the central questions and methods of my research were generated by me and my research team in response to gaps in the literature and/or clinical needs that we perceived. Today, my research questions are developed more fully from the ground up in collaboration with community partners and in response to requests from the community. Responding to community requests has led to an expansion of my research to include families with refugee backgrounds as well as to a new line of research regarding community treatment of individuals with severe mental illness. These evolutions have also led to the incorporation of qualitative methods of inquiry to ensure we are capturing lived experiences and true priorities of participants. Because I have expanded my skills to include mixed-method research approaches, I am increasingly able to be thoughtful and intentional about the methods I adopt, selecting those that are most appropriate at different stages of research.

I have also considered in much greater depth my own positionality relative to the research I conduct, reflecting on my own lived experience related to the topics and exploring the biases and blind spots that I bring to the research. Contrary to what I was taught when I was a student, I now realize that there is no objective and universal scholarship; all research is subjective and local. Although I am an immigrant myself, I know that my life experiences have been quite different from most of my participants and that I enjoy considerable privilege in the community as a university professor, native English speaker, and White person. Nonetheless, I have some touchpoints with aspects of the migration experience, such as navigating a bicultural identity, which surely influences some of my thinking.

I also increasingly incorporate a social justice lens to the framing of my research projects. Previously, my research had *implications* for psychological practice and/or public policy, but I now explicitly aim to frame research questions from the beginning in a way that directly contributes to advancing equity.

Theoretical and Empirical Insights from My Work

While not a comprehensive summary in any way, I can highlight a few sample insights to which I think my research has contributed. First, in a variety of ways, my research with all sorts of families has confirmed the fundamental tenant of family systems theory, that individuals are influenced by the relationship systems they are in as much (or more) than by internal factors. My research with families who are raising children with intellectual disabilities reflected these complex interrelationships. For example, marital quality affects changes in parenting confidence and parent–child interactions over time, and parents’ ability to work together as a parenting team consistently relates to the quality of parenting and to parents’ own mental health. No one part of the family system is independent; the well-being of one family member, or one dyadic relationship, reverberates throughout the family.

My longitudinal research on immigrant family adaptation has also nuanced our understanding of the acculturation process (e.g., Costigan & Dokis, 2006a; Quan et al., 2022). For instance, our research contributed to the insight that remaining engaged with one’s heritage culture is a benefit to integration into Canadian culture, not a barrier. We have consistently found that continued involvement in the ethnic Chinese culture does not impede participation in the Canadian culture, and in fact, may facilitate integration. Similarly, operating skillfully in the dominant Canadian culture does not demand a loss of ethnic traditions, identity, or values. The extent to which this biculturalism is possible, however, depends to some extent on family members’ requirements and occasions to operate regularly in Canadian society (e.g., through work and school), which may afford them more opportunity to learn to move between cultures without sacrificing a sense of being Chinese. Biculturalism is also dependent on the support in the community to maintain one’s heritage culture, both in terms of practical support (e.g., depending on the size of the co-ethnic community, the availability of heritage resources) and attitudinal support for biculturalism.

Our work has also added nuance to our understanding of the effects of acculturation gaps within families (e.g., Chance et al., 2013; Costigan, 2010; Costigan & Dokis, 2006b). It is often assumed that children in immigrant families adapt to the new culture more quickly than their parents, and that parents are more likely to maintain traditional values and ethnic traditions that are at odds with children’s experiences in the new culture. Differences between parents and children in their acculturation are expected to create conflict (e.g., over children’s freedom to choose

their own peers) and personal distress. A clash of cultural orientations and values is often presumed to be inevitable and disruptive in immigrant families. However, we have found that parent–child differences in orientation to *Canadian* culture are largely unrelated to psychological well-being. Instead, parent–child differences orientation to the *heritage* culture, although smaller than differences in orientation to Canadian culture, is more predictive of strained relationships (e.g., more intense parent–child conflict) and personal distress (e.g., more depressive symptoms among adolescents). This tells a more complex story.

Our research has also shed light on other risks as well, including discrimination experiences and child language brokering, which occurs when a child provides translation and interpretation services for a parent. For example, as others have found, perceived discrimination is a clear risk for poorer mental health for parents and youth alike. Perceived discrimination also predicts lower relationship quality between parents and children, potentially compounding the negative effects of discrimination by weakening an avenue of support within the family. In addition, our research has shown that providing interpretation for parents is a source of stress for adolescents, especially for those adolescents who strongly value fulfilling family obligations, perhaps because they feel extra pressure to do a good job (e.g., Hua & Costigan, 2012, 2017). Risks to immigrant parents' psychological well-being include parents' acculturation stress, which is associated with greater family conflict, and parents' acculturation (Miao et al., 2018). Parents who are less involved with Canadian culture, for example, report lower parenting confidence, lower self-esteem, and greater depression.

We have also contributed to understanding the protective role of ethnic identity in the lives of immigrant adolescents (e.g., Costigan et al., 2009, 2010). A strong sense of belonging to and understanding one's heritage buffers the negative effects of adversity (such as discrimination) and fosters a sense of purpose and access to social support.

One of my current projects addresses social cohesion at a community level with the goal of identifying how to build social connections in the community that meaningfully and reciprocally includes individuals with refugee backgrounds as equals (e.g., Costigan et al., 2021). The research question originated in the community and the project's qualitative methods and data interpretation were co-constructed with community partners. The findings provide broad guidelines for how to build community-based programs, such as promoting the full participation of refugees as equals, recognizing the contributions newcomers add to the community, and fostering communication among different sectors (e.g., immigrant settlement and parks and recreation). Several human rights principles featured strongly, such as respecting individuals by listening to them and valuing their contributions; promoting autonomy, participation, and inclusion; preventing discrimination; and ensuring the appropriateness of services for different gender and cultural backgrounds (Patel, 2019).

Deliberate strength-based efforts to focus on what newcomers bring, and not only on what they need, can help disrupt the narrative surrounding newcomers as vulnerable and fragile. Themes from this research remind us that newcomers

arrive with a vast array of skills and experiences (such as skills in cooking, culture, science, art, weaving, storytelling, etc.) and that social engagement should include explicit efforts to magnify and share newcomer's agency, resources, and strengths. Equally important is the recognition of what receiving communities gain from welcoming newcomers. Recognizing the skills and contributions of newcomers highlights ways the receiving community can grow and change from incorporating newcomers, rather than only focusing on how newcomers will join and integrate into the existing culture. Overall, rather than construing a program to promote social cohesion as a social service that is generously provided to newcomers, our work argues for the importance of creating programs for which the whole community is responsible and from which the whole community benefits.

Significant Learnings and Developments from My Work

One theme in my research has been the importance of understanding within-group diversity. There is no one generalization that can be made about families who are raising children with cognitive limitations or one story to be told about families who have immigrated from one culture to another. In the area of immigration, for example, I have preferred a within-group approach rather than a comparative approach (e.g., in which immigrants are compared to nonimmigrants or one immigrant group is compared to another). This allows us to explore the range of experiences, rather than assume homogeneity, with an immigrant community. A within-group approach also avoids positioning nonimmigrant families as a gold standard against which immigrants are compared and instead allows us to challenge common assumptions about immigrant family dynamics. As mentioned above, for example, our findings have contributed to the emerging conclusion that acculturation gaps between parents and children are not always problematic, that more rigorous methods are needed to measure and analyze acculturation discrepancies, and that more sophisticated models are needed to theorize when acculturation gaps create vulnerability and when they do not. There is so much diversity within immigrant families, even those from the same heritage, reflected in a variety of hybrid and intersectional identities and a range of personal goals with respect to holding on to the heritage culture and adopting Canadian ways. We must not forget that newcomers to Canada possess the same range of personality characteristics and preferences as any other group. Even within individuals themselves, identities are dynamic and situational. There is no singular story to be told.

My research also highlights the importance of including fathers in family research, because much of what we know about parenting is more about "mothering." Repeatedly I have found, the context of raising children with cognitive limitations and the context of immigration, that fathers play distinct roles in supporting the development and mental health of their children, and their own well-being is affected by a different set of factors than mothers.

I am increasingly attuned to how language and framing of questions affect what we learn and what conclusions are drawn. The populations I have studied—children with intellectual disabilities, families with immigrant and refugee backgrounds, individuals with several mental illness—are all “vulnerable” in their own ways. But the exclusive framing of these groups as vulnerable is limiting. It fails to capture the ways in which people exercise autonomy and agency, even in the face of substantial obstacles. By changing the fundamental questions, we are more likely to conduct research that reveals stories of strength and resilience, and we are more likely to understand the potential policy and practice implications through a lens of human rights and equity rather than benevolent assistance.

Across the years, I have come to appreciate the value of having both insider and outsider perspectives engaged in a research project. Issues related to family relationships, culture, and mental health are complex and benefit from multiple vantage points. Of course, no one person is ever fully an insider or an outsider, as two people may share one dominant identity (e.g., ethnicity) yet differ on a host of other salient identities (e.g., gender, education, etc.). Yet some people are clearly closer to the lived experience of the subject matter than are others. Those perspectives are essential. But even “insiders” come with their own biases and assumptions that might limit their perspective; “outsider” perspectives can be helpful in bringing a different lens to the table. Meaningful engagement and discussion among different perspectives are valuable.

Practical Applications from My Research and Scholarship

The most direct translation of my research has been in the context of workshops we have designed with our community partners in the settlement sector. For example, our research on the interrelations among acculturation processes, parent–child relationship quality, and psychological adjustment within immigrant families had served as the foundation for evidence-based and culturally responsive community workshops that we have developed and delivered in concert with community partners.

One series of workshops has focused on parenting in the Canadian context for parents who are new to Canada. Our goal for these workshops is to support immigrant and refugee parents in their efforts to maintain strong ties with their children despite the rapid cultural change. Migration introduces many threats to strong parent–child relationships (e.g., role reversals between parents and children; social and economic structures that perpetuate inequities) and the workshops are designed to protect against the development of conflict and emotional disconnection between parents and children in the face of these risks. We do this by building on existing strengths within family relationships. The workshops include culturally adapted evidence-based strategies for teaching communication and cultural perspective-taking skills that increase the ability to understand and empathize with other family members’ perspectives and to tackle challenges together.

Our preliminary evaluation of these workshops suggests that parents improve their ability to guide their children's development and the children benefit from enhanced parental support. Parents report less conflict in their relationships with their children and more confidence in their ability to parent in the Canadian context (e.g., supporting their children through social isolation and communicating their fears about drug use). Often trauma, anxiety, and isolation are elevated among newcomer parents, and these workshops are intended to improve psychological well-being by helping parents continue to successfully guide their children's development, even as their children are increasingly exposed to norms and expectation in Canadian society, and connect with other parents.

We have also applied some of our research to the development of strengths-based approaches to support well-being within refugee families specifically during the settlement process. Drawing on our research regarding biculturalism, these workshops bring together multiple families at once to explore together as family units how families can balance values and traditions from the heritage country with those that are prevalent in Canada to meet family goals. By discussing as a family how to honor the heritage culture while living in Canada, each family members' perspectives can be understood, and negative feelings about differences in cultural preferences among family members can be avoided. The workshops also provide a space for families to identify their resilience strategies as a family unit. Families discuss ways of continuing to embrace their heritage culture while being open to Canadian culture. By developing patterns of talking about cultural differences within the family, families may avoid the increasing disconnection and conflict that can occur in newcomer families. In addition, families develop a community of support among themselves, decreasing further their isolation in the new community.

Insights About Clinical Reasoning, Assessment, Prevention, Intervention, and Mental Health

My conceptualization and approach to mental health assessment, prevention, and intervention for promoting child and youth well-being have also evolved over time. Since my training was in a child and family context, I have always brought a systems lens to thinking about children and adolescents' mental health. I have always appreciated the sentiment that "every person is like all other people, some other people, and no other person" and look for the unique and shared dynamics of each child, adolescent, or family.

I continue to use a developmental psychopathology lens for understanding how risk and protective factors unfold over time to contribute to overall functioning. A developmental psychopathology perspective also provides a framework for understanding the impact of risk and protective factors in the context of the normative challenges that are presented in each developmental stage. At the foundation of my clinical reasoning is the belief that children and adolescents want to do well and be well. Behavior that appears on its surface to be angry, aggressive, attention-seeking,

and so on is best reframed to understand how the concerning behavior is an effort to get one's needs met. In addition, children and adolescents cannot be understood separate from their environments, and therefore it is essential to understand relational, contextual, and structural opportunities and constraints, in addition to biological and psychological perspectives. With children and adolescents, it is important to ask "whose problem is it?," as often the difficulty lies with the expectations of others (parents, schools), or in the relationships, the child has with others, rather than in the child themselves. Furthermore, symptoms of distress exist on a continuum; sharp and universal dividing lines between "normal" and "abnormal" do not exist, and we always need to make judgments relative to a child's specific context (e.g., age, gender, culture, social class, etc.). By identifying difficulties early, it may be possible to prevent future distress and maximize a child's period of healthy development. When intervention is delayed, there is a greater disruption to a child's fundamental emotional, social, and cognitive development.

These general principles have been a consistent thread throughout my clinical work over the years. I tend to emphasize conditions of risk (e.g., trauma, disrupted attachment, maladaptive thinking patterns) and protection (e.g., supported identity exploration, healthy family communication patterns, alignment in co-parenting) over specific diagnoses. Addressing these shared risk and protective factors is relevant to the treatment of a whole host of psychological conditions in childhood and adolescence. The field has excellent protocols for treating conditions such as anxiety, depression, OCD, and anger, and I am excited about the movement toward trans-diagnostic approaches to intervention, such as the Unified Protocols for the Transdiagnostic Treatment of Emotional Disorders in Children and Adolescents (Ehrenreich-May et al., 2017). These efforts address the reality that most children and adolescents who are seeking treatment experience multiple problems that are not confined to one diagnostic category. It is also increasingly clear that there is substantial overlap in effective intervention strategies across diagnostic categories, due to shared risk factors for the development of different psychological disorders and/or shared processes that maintain the conditions.

The ways in which we think about children, adolescents, and mental health is as important as the specific skills we develop (e.g., assessment instruments, intervention techniques), since these overarching perspectives transcend different content areas of practice. In that spirit, I present here some of the principles that increasingly guide me in my clinical practice.

The Centrality of Culture and Self-Reflection

As others have written more eloquently and in greater depth (e.g., Dadlani et al., 2012) understanding the cultural worldview of our clients, and of ourselves, is critical to effective clinical practice. "Culture" is something that everyone possesses with respect to multiple social identities related to race, age, gender, sexual orientation, ability, social class, religion, and so on. Some of these identities are central to

one's self-understanding, some are central to how others see us, and all have the opportunity to be privileged or oppressed in the larger society. Knowing ourselves is vital to understanding the beliefs, biases, assumptions, and blind spots we might have about children, youth, and families. A deep and personal reflection on where one has enjoyed privilege in life, where one has experienced oppression, and how the intersection of these identities affects our case formulations and communication styles is critical.

Self-reflection on our own social identities should include reflection on our power as psychologists (e.g., to diagnose a child, or not), and on any implicit beliefs that we bring about what it means to be healthy and well. Contemporary theory and practice have built-in assumptions about mental health, and the closer we are as individuals to the Euro-centric, cis-gendered, heterosexual, middle-class origins of the profession, the more work we need to do to make these assumptions visible. The ADDRESSING model (Hays, 2008) is an example of a useful tool for reflecting on your background, identity, and worldview, and associated biases or assumptions that this personal lens might introduce. Reflecting on the various identities represented in the ADDRESSING model (e.g., age, disability, religion, ethnicity, etc.) can help alert the psychologist to areas in which they have experienced power, powerlessness, or a mixture (Sandeem et al., 2018). This reflection is the first step in becoming sensitized to how one's own experiences might affect one's work with specific clients (or supervisees) who hold different or similar identities.

Self-reflection on our own social identities sets the stage for a rich consideration of the multiple identities that our clients hold as well. Routinely asking about children and adolescents' social identities, and understanding how they are experienced holistically in their lives communicates our interest in understanding individuals in the full context of their social environment (e.g., Ratts et al., 2015). There are useful tools to help clinicians understand the cultural worldview of clients, such as the DSM-5's Cultural Formulation Interview (CFI; Lewis-Fernández et al., 2016). The CFI provides guidelines for gathering the information needed to integrate cultural issues into case conceptualizations and inform treatment planning, such as information related to clients' cultural definitions of the problem; cultural perceptions of causes, context, and support related to the problem; and cultural factors affecting self-coping and past and current help-seeking. Supplementary modules tailor this interview for special populations, such as school-age children and adolescents and immigrants and refugees (e.g., Rousseau & Guzder, 2016).

From Cultural Competency to Cultural Safety, Anti-oppression, and Social Justice

I was trained to be aware of cultural differences, to respect these differences, and to strive for cultural competence when working with people from different cultural backgrounds. Absent from this training, however, was an explicit consideration of

the role of power, oppression, and social structures—of attention to how society differentially limits access to opportunities and resources (Wilson, 1897). My approach over the years has grown to incorporate more fully the importance of working within an anti-oppressive, anti-racist framework. This includes recognizing the trauma of racism and the ways in which devaluation, lack of respect, suspicion, and scapegoating harms individuals and can be internalized (e.g., Malott & Schaeffe, 2015) and the ways in which race intersects with gender, class, and other identities. I continue to learn about the risk of reinforcing societal power structures through my psychological practice and about strategies for working with each client to advance equity in ways that are meaningful to them (e.g., uplifting the voice of an immigrant parent at a school).

These goals are achieved, in part, by practicing with cultural humility and striving for cultural safety. I first became familiar with these concepts following the Truth and Reconciliation Commission report in 2015. When I was in training, forming an effective therapeutic alliance was paramount, and understanding each person as a unique individual deserving of respect. But this was done in the context of the psychologist being an expert, able to guide clients to better health and well-being. Today, I continue to believe that relationships are at the foundation of effective clinical encounters, but now understand more fully the value of being in a state of “not knowing,” centering my clients’ worldviews, and always checking my understanding of the client’s experience. When working with families, I see families as the experts on themselves; I bring some knowledge of strategies that have worked for other families in the past, and collaboratively we create a vision of how the family might move forward towards their goals. What does the family consider as needing attention and what do they believe will help? Expressing humility, and inviting dialogue and collaboration, are important parts of creating safety for each client. Understanding clients’ preferences, their theories of distress and health, and their history (individual and collective) are all part of creating a safe working relationship.

These goals are also advanced by training our ability to see and understand structural levels of influence. Clinical Psychology as a field has much work to do to integrate power and structural analyses into clinical reasoning. As argued in Critical Race Theory, we need to recognize how systems uphold and reinforce power structures that benefit some people and disadvantage others (Salter & Adams, 2013). Without accounting for the systems within which people live, it is too easy to identify the causes of psychological distress within an individual’s beliefs, cognitions, emotions, and behaviors. Greater recognition is needed of the structure of society: inequities in access to quality education and housing, safe environments, employment opportunities, and so on, as well as inequities in access to power and decision-making at all levels. If psychologists do not appreciate how these realities constrain individual opportunities, we will mistakenly assign sole responsibility for difficulties to the individual (e.g., their thoughts and emotions), perhaps contributing to their internalization of blame. Equity in health will not be achieved without developing this “structural competency” (Svetaz et al., 2019), and Clinical Psychology should integrate this competency into the training curriculum, on par with other core competencies.

Unpacking Implicit Assumptions and Understanding Social Forces Is Empowering

My experience is that effective case conceptualizations, assessments, and treatments recognize the implicit assumptions embedded in mental health theory, appreciate how broader systems shape opportunity structures, and help clients to understand the same. For example, our society places great value on being “self-made” and “independent” which can implicitly devalue ways of being that are collaborative, interdependent, or grounded in community or ancestors. With respect to families, for example, our society has a normative expectation that parents are in leadership positions in the family, children should not cross a boundary of parental authority, and children separate emotionally and physically from parents as they move through adolescence. Families from many cultural backgrounds, however, do not embrace these assumptions. Without understanding cultural variations in family functioning, we run the risk of pathologizing family dynamics that are otherwise healthy with labels such as “parentified child” and “enmeshed” parent–child relationships.

These principles extend to many identities beyond race and ethnicity, including the hidden assumptions rooted in ableism, sexism, fatphobia, heteronormativity, classism, transphobia, and so on. For example, a teenage girl with social anxiety may benefit from understanding societal beliefs about gender roles, and a child with an ADHD diagnosis may benefit from understanding their challenges as a mismatch between their abilities and the requirements of the classroom (e.g., the definitions of “doing well” in a school environment). Without a critical lens, we risk reinforcing a child’s internalized sense of inferiority or “otherness” by labeling them as the problem. Or we risk helping children adapt to a painful environment, not recognizing that their behavior or emotions are a natural response to the stress they are experiencing. Teaching children emotion regulation skills is an important part of many child interventions, for example, but it is important to be alert to justified anger and to guard against only helping children cope with harmful environments, without attention to risks in the environment itself.

Children and adolescents’ experiences are complex, and in assessment, it is important to consider regularly whether it would be more helpful to focus on case conceptualization than diagnosis. Mental health stigma can be very powerful, and we need to operate in full awareness of the benefits and harms that a diagnostic label may confer, and always try to serve the best interests of the child. Diagnoses can open up important avenues for intervention, but they can also reinforce the perception that the child is the problem and result in self-fulfilling prophecies. These negative consequences of mental health diagnoses may be particularly likely among children and adolescents who already experience marginalization due to race/ethnicity, immigrant status, and so on, particularly when trauma experiences are misunderstood as an externalizing or neurodevelopmental disorder.

Ideally, assessments include a consideration of the goals and viewpoints of the client, and the results provide new perspectives on the child’s strength and

resilience. So many aspects of functioning are interrelated—how a child is functioning socially, for example, can affect their concentration at school, or expressions of anger at home. Identifying and building on an area of strength for the child can sometimes help remediate other areas of difficulty as effectively as addressing the area of weakness directly. We also need to be careful about assigning too many diagnoses when a child or adolescent is in a crisis situation, as many of the areas that appear to be dysfunctional may resolve as stability is regained. In addition, interventions that help children and adolescents navigate an unjust society, recognize and label racism, sexism, etcetera, and advocate for oneself are all-powerful strategies for alleviating suffering and achieving mental health. An important goal of assessment and intervention is sometimes helping children and adolescents resist internalizing negative messages and to tell instead a strength-based story about themselves.

Expand the Vision of Psychological Practice

Conceptualizing children's well-being within all the nested layers of their ecosystem provides additional opportunities for intervention, some of which fall within the traditional clinical psychology scope of practice and some which require stepping beyond the traditional boundaries of the field to address the whole person and the societal structures that affect them. If we take seriously the importance of including structural and systemic factors in our conceptualization and of collaborating with clients as partners and centering their beliefs and perspectives on mental health, then we need to expand our prevention and intervention toolkits. This may mean advocating with a family regarding other needs that are creating precarity or stress in the family. Or it may mean collaborating with others in the family's community that reflect their implicit theories of healing. Or it might be stepping beyond the bounds of traditional psychological practice to be more active in removing barriers to access to treatment and lobbying for change in systems that contribute to health disparities.

Expanding the scope of psychology's practice does not mean abandoning core values related to adopting evidence-based practice. But it does mean expanding our vision of what counts as evidence and how best practices are defined. Evidence based on randomized control trials is important, but it is not the only evidence that should be valued, as we are often applying evidence-based interventions in contexts quite different from the original validation group (e.g., in terms of language, socioeconomic status, the existence of comorbidities, etc.; Castro et al., 2010). Adaptations of evidence-based interventions are needed—transformative adaptations based on meaningful engagement with relevant communities to understand how to apply core change principles in diverse contexts and in conjunction with additional healing elements.

My Current Perspectives and Future Research and Scholarship Plans

I think that future clinical psychology research and practice, including my own, needs to do a better job of integrating an understanding of the systemic and institutional process that create barriers and limit access to resources and power, all of which affects mental health. In the area of migration, for example, structures and systems such as the accessibility of language instruction, foreign credential recognition, discrimination in hiring practices, the availability of adequate housing, and inclusive educational practices all impact more proximal family processes and individual mental health. Individual and microsystem functioning cannot be understood separately from the larger systems that shape and constrain families' experiences.

I have also embraced a broader vision of scholarship in recent years, seeing traditional academic publications and scholarly presentations as just one of many avenues for knowledge translation. I strive to work closely with community partners and people with lived experience on steering committees and advisory boards in all of my research, which has added new dimensions to the impact of my work. I have also developed strong research ties with colleagues from other disciplines, such as nursing, theater, and counseling psychology, which has also increased the scope of my work. Finally, my current scholarship includes a lot of engagement in networks aimed at addressing anti-oppressive and anti-racist goals in professional psychology training, as well as advocacy for human rights and social justice within health care systems (e.g., the availability of language interpretation services).

In the future, I plan to continue developing and evaluating the workshops described earlier for newcomer parents. I consider this work a cultural adaptation of an evidence-based intervention. That is, key evidence-based strategies for family change (e.g., communication and problem solving) form the core of the workshops, with the content and delivery being locally developed, informed by the community itself to meet community needs. We are near the end of our feasibility/formative research stage and plan to begin with summative research studies to assess the effectiveness of these groups relative to other approaches. I also plan to evaluate the possibility of training community members to facilitate these groups.

I am at the beginning of thinking about how my work with immigrant and refugee communities, and my desire to advance equity and human rights in this area, can be situated alongside the important work being done on reconciliation. Newcomers, like long-term residents, are settlers on this land, and work toward reconciliation must include all groups in society. When I immigrated to Canada, I learned little about Indigenous Peoples, and nothing about the history of colonialism and attempts at cultural destruction. This was a missed opportunity. Working toward equity and human rights for some groups without adopting these goals for all of society is incomplete. Therefore, in my future work, I want to learn from scholars, activists, and community members in the area of decolonization and explore how the shared goals for a more just and equitable society can be advanced in concert.

Conclusion

As I reflect on lessons learned over the years, the most important lessons for me transcend my roles as researcher and clinician. One foundational principle, for example, is the importance of knowing my personal identity and appreciating the social intersections of identity. Far from being a neutral or objective observer, my identities influence the lenses that I bring to my research and clinical work and my relationships with others in both of these spaces. Another guiding principle is the importance of meaningful power-sharing and attention to equity among people. In both community-engaged research and clinical relationships, for example, creating safety and facilitating honest dialogue are essential parts of collaborations that truly advance mental health. Finally, impactful research and effective clinical practice require a critical examination of implicit assumptions, an understanding of cultural and structural levels of influence on individual and family functioning, and an ability to integrate this complexity in ways that meet children and adolescents' unique needs. None of this is easy, but it is rewarding. I hope this chapter has communicated the underlying value I place on continually evolving in my thinking in research and clinical practice. This is some discomfort in being in a state of perpetual learning, but I am pretty sure the opposite—not changing and growing—would feel worse. I hope and expect my thinking will continue to evolve well into the future.

References

- Castro, F.G., Barrera Jr., M. and Steiker, L.K.H. (2010) Issues and challenges in the design of culturally adapted evidence-based interventions. *Annual Review of Clinical Psychology*, 6, 213-239. <https://doi.org/10.1146/annurev-clinpsy-033109-132032>.
- Chance, L. J., Costigan, C. L., & Leadbeater, B. J. (2013). Co-parenting in immigrant Chinese Canadian families: The role of discrepancies in acculturation and expectations for adolescent assistance. *Journal of Family Psychology*, 27, 905–914.
- Costigan, C. L. (2010). Embracing complexity in the study of acculturation gaps: Directions for future research. *Human Development*, 53, 341–349.
- Costigan, C. L., & Dokis, D. P. (2006a). Similarities and differences in acculturation among mothers, fathers, and children in immigrant Chinese families. *Journal of Cross-Cultural Psychology*, 37, 723–741.
- Costigan, C. L., & Dokis, D. P. (2006b). The relations between parent-child acculturation differences and adjustment within immigrant Chinese families. *Child Development*, 77, 1252–1267.
- Costigan, C. L., Koryzma, C. M., Hua, J. M., & Chance, L. J. (2010). Ethnic identity, achievement, and psychological adjustment: Examining risk and resilience among youth from immigrant Chinese families in Canada. *Cultural Diversity and Ethnic Minority Psychology*, 16, 264–278.
- Costigan, C. L., Su, T. F., & Hua, J. M. (2009). Ethnic identity among Chinese Canadian youth: A review of the Canadian literature. *Canadian Psychology*, 50, 261–272.
- Costigan, C. L., Taknint, J. T., Mudryk, E., & Al Qudayri, B. (2021). Building community: Connecting refugee and Canadian families. *Cultural Diversity and Ethnic Minority Psychology*. Advance online publication. <https://doi.org/10.1037/cdp0000428>
- Dadlani, M. B., Overtree, C., & Perry-Jenkins, M. (2012). *Professional Psychology: Research and Practice*, 43, 175–182.

- Ehrenreich-May, J., Kennedy, S. M., Sherman, J. A., Bilek, E. L., Buzzella, B. A., Bennett, S. M., & Barlow, D. H. (2017). *Unified protocols for transdiagnostic treatment of emotional disorders in children and adolescents: Therapist guide*. Oxford University Press. <https://doi.org/10.1093/med-psych/9780199340989.001.0001>
- Hays, P. A. (2008). *Addressing cultural complexities in practice: Assessment, diagnosis, and therapy* (2nd ed.). American Psychological Association. Retrieved from <https://doi-org.authenticatelib.library.duq.edu/10.1037/11650-000>
- Hua, J. M., & Costigan, C. L. (2012). The familial context of adolescent language brokering within immigrant Chinese families in Canada. *Journal of Youth and Adolescence, 41*, 894–906.
- Hua, J., & Costigan, C. L. (2017). Adolescent language brokering for immigrant Chinese parents in Canada. In R. S. Weisskirch (Ed.), *Language brokering in immigrant families: Theories and contexts* (pp. 137–160). Routledge/Psychology Press/Taylor and Francis Publishers.
- Lewis-Fernández, R., Aggarwal, N. K., Hinton, L., Hinton, D. E., & Kirmayer, L. J. (Eds.). (2016). *DSM-5® handbook on the cultural formulation interview*. American Psychiatric Publishing, Inc.
- Malott, K. M., & Schaeffle, S. (2015). Addressing clients' experiences of racism: A model for clinical practice. *Journal of Counseling & Development, 93*(3), 361–369. <https://doi.org/10.1002/jcad.12034>
- Miao, S. W., Costigan, C. L., & MacDonald, S. W. S. (2018). Spillover of stress to Chinese Canadian immigrants' parenting: Impact of acculturation and parent–child stressors. *Asian American Journal of Psychology, 9*(3), 190–199.
- Patel, N. (2019). Human rights-based approach to applied psychology. *European Psychologist, 24*, 113–124. <https://doi.org/10.1027/1016-9040/a000371>
- Quan, C., Costigan, C. L., & Kobayashi, K. (2022). Ethnic and national identity development processes: The role of cultural behaviors and gender. *Cultural Diversity and Ethnic Minority Psychology, 28*(1), 1–12.
- Ratts, M. J., Singh, A. A., Nassar-McMillan, S., Butler, S. K., & McCullough, J. R. (2015). Multicultural and social justice counseling competences: Guidelines for the counseling profession. *Journal of Multicultural Counseling and Development, 44*, 28–48.
- Rousseau, C., & Guzder, J. (2016). Supplementary Module 9: School-age children and adolescents. In R. Lewis-Fernández, N. K. Aggarwal, L. Hinton, D. E. Hinton, & L. Kirmayer (Eds.), *DSM-5® handbook on the cultural formulation interview* (pp. 156–164). American Psychiatric Publishing, Inc.
- Salter, P. and Adams, G. (2013). Toward a critical race psychology. *Social and Personality Psychology Compass, 7*, 781–793. <https://doi.org/10.1111/spc3.12068>
- Sandeen, E., Moore, K. M., & Swanda, R. M. (2018). Reflective local practice: A pragmatic framework for improving culturally competent practice in psychology. *Professional Psychology: Research and Practice, 49*, 142–150. <http://dx.doi.org/10.1037/pro0000183>
- Svetaz, M. V., Bring, S., & Barkley, L. (2019). Chapter 15: A clinical practice model to promote health equity for adolescents and young adults. In L. Barkley et al. (Eds.), *Promoting health equity among racially and ethnically diverse adolescents*. https://doi.org/10.1007/978-3-319-97205-3_15
- Wilson, W. J. (1897). *The truly disadvantaged: The inner city, the underclass, and public policy* (2nd ed.). The University of Chicago Press.

Chapter 9

Best Mental Health Practices in Clinical Psychology: Does the Doctor Really Know What's Best?



Martin Drapeau, Catherine Hébert, Gabrielle Ciquier,
and Constantina Stamoulos

Abstract Clinical practice guidelines (CPGs) have been around for decades in medicine and have more recently made their way into the field of psychology and social sciences. They are designed to provide clinicians with up-to-date scientific evidence on various practices and offer recommendations that are grounded in science to guide clinical practices and increase the likelihood that clients and patients receive optimal services. Research has shown that there is great value in developing and using CPGs. CPGs predicated on evidence from strong study designs can facilitate and improve the process of providing optimal care. It has also been shown that CPGs can establish consistency in the care provided to service users for various clinical conditions which is of substantial value in light of the enormous variability in clinical practices as a function of geographic location, training of the clinician, and, oftentimes, of conflictual beliefs and recommendations by health care experts. Furthermore, other studies suggest that CPGs may also improve treatment and intervention outcomes. Despite the potential benefits of CPGs, many clinicians are either not aware of their existence or they do not use them in their practice. On the other hand, other clinicians confuse CPGs with standards of practice and promote strict adherence to the CPGs that are available. In this chapter, we present a guiding framework for practitioners and the use of CPGs, focusing on the value of CPGs to practitioners, service users, and the public in general. We then address the clinical reasoning that supports the use of CPGs, in particular as they relate to implementing evidence-based practice. Key implications are also examined, including how CPGs are developed, and the effect of the methods used to design CPGs on their quality and later use by practitioners. We then focus on how CPGs can be found and used to inform mental health assessment, prevention and intervention, and illustrate, using a case study, how they can guide clinical reasoning.

M. Drapeau (✉) · C. Hébert · G. Ciquier · C. Stamoulos
McGill University, Montreal, QC, Canada
e-mail: martin.drapeau@mcgill.ca

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Guiding Framework

The push for practitioners to consider research when delivering clinical services, generally referred to as *evidence-based practice (EBP)*, began primarily in the medical field. The history of EBP in the medical profession is complex, marked by significant advancements and setbacks over numerous decades, and with important contributions made by many scientists and practitioners. The movement, which was more widely promoted in the 1980s and in the decades that followed, was in large part supported by demands, by policy makers, third-party payers, and patients, for greater accountability and efficacious and cost-effective clinical services. It was also driven by the practitioners' need to have access to synthesized empirical findings and evidence-based recommendations to inform their clinical practice (Gray et al., 2009; Hollon et al., 2014; Oxman, Lavis, Lewin, & Fretheim, 2009; Spring, 2007).

Over the years, EBP also made its way into psychology and the social sciences. In the 1990s, it borrowed heavily from the medical field, including from research in pharmacology, and took on the form of *empirically validated treatments*, later becoming *empirically supported treatments*,¹ where the focus was on identifying treatments that work for various conditions. Like evidence-based practice in medicine, it continued to evolve, gradually giving greater consideration to patient characteristics, over and above the patient's diagnosis, and eventually leading to the creation of an APA (American Psychological Association) Presidential Taskforce on Evidence-based Practice. Much like the definition proposed by the Institute of Medicine (2001), the APA Presidential Taskforce (2005) defined EBP as "the integration of the best available research with clinical expertise in the context of patient characteristics, culture, and preferences" (p. 5).

More recently, the Canadian Psychological Association (CPA) published a more comprehensive definition of EBP that is germane to psychology, defining it as "the conscientious, explicit, and judicious use of the best available research evidence to inform each stage of clinical decision-making and service delivery, [which] requires that psychologists apply their knowledge of the best available research in the context of specific client characteristics, cultural backgrounds, and treatment preferences" (Dozois et al., 2014, p. 155). The CPA Presidential Taskforce that produced the report also outlined the importance of continuous progress tracking and outcome monitoring and proposed a hierarchy of evidence that practitioners ought to consider. More specifically, the Taskforce suggested that when considering various

¹Today, most scholars make a clear distinction between empirically supported treatments (EST) and evidence-based practice (EBP), and rightfully so. A practice that relies on ESTs involves selecting a treatment that has been shown to be helpful for a specific patient condition or diagnosis. EBP, on the other hand, is a far more complex process that involves choosing a treatment for a condition based not only on outcome research, as in an EST approach, but also on other types of research, including process research and basic research. It also involves considering patient preferences and various patient characteristics, including culture, in choosing a treatment, and requires that clinicians use their clinical judgment, expertise and experience to make an informed decision. Put simply, while ESTs can be said to be a component of EBP, EBP is not limited to ESTs.

types of evidence, psychologists should give more weight to systematic knowledge syntheses combining high internal and external validity, including high-quality practice guidelines, followed by primary research studies that collectively have high internal and external validity, followed by studies that have limited internal and external validity, and then expert consensus based on formal procedures. Unpublished data and personal opinion were at the bottom of this hierarchy, with the least credibility, hence representing a weaker type of evidence.

This CPA report, as well as the APA report that preceded it, was crucially needed, as research had repeatedly shown that practitioners do not sufficiently consider research when delivering clinical services (Becker et al., 2004; Ionita & Fitzpatrick, 2014; Lilienfeld et al., 2013; Stewart & Chambless, 2007; Stewart et al., 2012, 2018). It was also needed because the reputation of psychology, like that of many other clinical professions, was at stake. A report released in 2008 by Baker and colleagues (Baker et al., 2008) concluded at the time that the state of psychology was not unlike medicine as practiced close to a century ago, “at a point in history when its practitioners were operating in a largely prescientific manner” (p. 77). The core message of the report, which is that psychologists unashamedly disregard science, was widely disseminated and made its way into the broader scientific literature (e.g., see the October 21, 2009 issue of *Science* and the October 15, 2009 issue of *Nature*) and the popular press (e.g., Begley, 2010; Mestel, 2009; see Drapeau & Hunsley, 2014). The debate that ensued these publications did not resolve the issue, leading some to conclude that ultimately, “the “evidence” in EBP, and the “science” that is referred to in all codes of ethics of psychologists, can frequently be little more than empty shells, devoid of any real meaning” (Drapeau & Hunsley, 2014, p. 146). This important gap between science and practice is not a problem that should be taken lightly; many patients still do not receive effective and adequate healthcare services (McGlynn et al., 2003) and treatments and interventions offered to patients have been found to be seldom based on the best empirical evidence (Lilienfeld et al., 2013; McGlynn et al., 2003; Straus et al., 2009).

One question, of course, is *who is responsible for this?* Perhaps, as some seem to argue (see Baker et al., 2008), certain universities who provide initial training to psychologists do not sufficiently emphasize the importance of science and how it should inform clinical practice (see also, Beidas & Kendall, 2010; Karekla et al., 2004). Perhaps, also, researchers simply do not write *for* practitioners, or in ways that are useful to them (e.g., Stewart et al., 2012, 2018). Another explanation is that clinicians are reluctant to use science or simply do not have the time to do so properly. Research has indeed shown that it is challenging for clinicians to keep pace with emerging scientific knowledge, which in turn may lead to the delivery of sub-optimal services to the population (Chambless & Ollendick, 2001; Graham et al., 2011; Grimshaw et al., 2012; Higgins & Green, 2011; McGlynn et al., 2003; Straus & Haynes, 2009; Wolf et al., 2011).

But can we blame them? Just how reasonable is it to expect clinicians, in the few minutes they have between patients and clients, to retrieve, read, and critically assess the scientific literature, then establish a hierarchy of evidence in order to choose an intervention? This is where clinical practice guidelines (CPG) come into play.

Clinical Reasoning Approach

According to the CPA statement on evidence-based practice (Dozois et al., 2014), practitioners should consider systematic knowledge syntheses as the highest level of evidence. While clinical practice guidelines (CPGs) are generally considered to be a form of knowledge synthesis, they are also different from most other types of systematic reviews (Bennett et al., 2018). Much like the latter, CPGs critically and empirically assess, or synthesize, a body of scientific knowledge; however, unlike systematic reviews, they also provide clinical recommendations for practitioners, based on a critical appraisal of the literature. There are three well-known definitions of CPGs in the medical and social science literature. In medicine, CPGs are defined as: “Systematically developed statements to assist practitioners and patient decisions about appropriate health care for specific circumstances” (Field & Lohr, 1992, p. 2). Similarly, the Institute of Medicine (IOM) defines CPGs as “Statements that include recommendations, intended to optimize patient care, that are informed by a systematic review of evidence and an assessment of the benefits and harms of alternative care options” (Graham et al., 2011). The National Institute of Excellence in Health and Social Services (*Institut National d’Excellence en Santé et en Services Sociaux* [INESSS]) in Quebec more recently proposed a definition of CPGs that is in many ways better suited for the social sciences. According to INESSS, CPGs are defined as:

Recommendations developed systematically and transparently by and for the stakeholders concerned with a specific intervention (...). These recommendations are founded on robust scientific data supported by exhaustive contextual data, experiential data and expert knowledge, particularly that of researchers, managers, social care practitioners and social care users. They are presented in a clear and concise manner. (Beauchamp et al., 2012, p. 52)

Over the past three decades, the social sciences have seen a significant proliferation in the production of CPGs, which are now considered to be a fundamental part of knowledge translation and dissemination (Girlanda et al., 2013; Grimshaw et al., 2012). Although professional organizations and other healthcare entities have been developing and disseminating CPGs for a long time, the more recent increase in the production and dissemination of guidelines has been influenced by the push toward evidence-based practices (Reed et al., 2002). Indeed, CPGs are a sophisticated and effective way of informing healthcare services and of helping clinicians implement a practice that is congruent with EBP, with the aim of providing optimal services and improving patient outcomes.

Research has indeed shown that the use of CPGs can have a generally positive effect on service delivery and intervention outcomes in the social sciences as well as in the medical professions (e.g., Burgers et al., 2003a, 2003b; Gordon & Cooper, 2010; Grimshaw & Russell, 1993; Woolf et al., 1999; Geyman, 2000; Hepner et al., 2007; Vasconcelos et al., 2019; Rutten et al., 2016; Golec & Valier, 2018). High-quality CPGs have been shown to benefit service users in many ways. First, they can inform patients and clients about expectations regarding interventions and discount exaggerated claims or expectations regarding the effects of an intervention (Beauchamp et al., 2015). This is of significant value because, as stated by Halfond

and colleagues (2020), it is often challenging for patients and their families to find a reliable source of information regarding their condition and the potential benefits and harms of a treatment or intervention. Furthermore, CPGs align with the movement toward shared decision-making. By providing practitioners and patients with a common source of reliable information, CPGs encourage both parties to reach an informed and shared decision concerning the patient's care while also considering the patient's culture, values, characteristics, and preferences, and the practitioner's own expertise (Halfond et al., 2020). As stated by Parry (2000), by giving patients easy access to the appropriate information regarding their condition or intervention options, patients are granted more power. This is important in mental health services, where service users often feel disempowered. Parry (2000) further explains that having clear public statements on optimal treatment provides patients with a tool that can directly influence the quality of the services they receive. This is especially true if service users have been involved in the actual development of the CPG, which should be the case for high-quality CPGs, as recommended by the Appraisal of Guidelines for Research and Evaluation (AGREE) Collaboration, an international group of researchers and experts who promote best practice in guideline development (see also Beauchamp et al., 2015, 2018).

Third, one of the most important contributions of CPGs to the improvement of service delivery is that patients are more likely to receive care that is informed by the best and latest research evidence available, which in turn can lead to improved outcomes. Additionally, CPGs can help reduce confusion or uncertainty among service users (Hollon et al., 2014). Given the numerous contradictory statements on best practices for a specific condition or disorder that are widely available on the Internet, CPGs that are endorsed and created by professional organizations or governmental agencies can provide sound and coherent information to patients about the best treatment or intervention for a particular condition.

But the benefits of CPGs extend well beyond individual patients and their families. For the general public, the effective implementation and dissemination of CPGs help foster optimal service delivery in the healthcare industry by promoting efficient and suitable assessment procedures, treatments, and interventions (Farquhar et al., 2002; Hollon et al., 2014; Woolf, 1992; Woolf et al., 1999). CPGs also benefit the public at large by reducing the variability in services delivered (Hollon et al., 2014). By informing healthcare policies and ensuring that interventions or treatments are appropriately covered, CPGs can help make interventions available to all, despite differences in income and geographical location (Schuh et al., 2017; Shirowa et al., 2016; Hollon et al., 2014). As suggested by Hollon et al. (2014), government agencies tend to turn to CPGs when deciding which services or interventions should be made available to the population, including underserved populations. By calling attention to under-recognized health problems, neglected patient populations, and high-risk groups, CPGs can help shape public policy and lead to the promotion of services. They may also promote research on those neglected populations and problematics by highlighting areas in which scientific evidence is lacking in quantity or quality. Finally, because CPGs help further improve professionalism, optimal service delivery, and outcomes in clinical practice, they contribute to a

reduction in the costs of care (Audet et al., 1990; Hollon et al., 2014; Cabana et al., 1999; Graham et al., 2000; van Dijk et al., 2013).

In addition to the benefits CPGs provide to the service user and the broader population, there are also obvious, direct benefits to practitioners. CPGs can guide² the decision-making process by informing clinicians on empirical findings (Halfond et al., 2020; Bastian et al., 2010) in a user-friendly way. This is particularly important as many practitioners otherwise fail to consistently incorporate science in their clinical practice (e.g., Boisvert & Faust, 2006; Lilienfeld et al., 2013; Stewart & Chambless, 2007; Straus et al., 2009). Research indicates that this occurs mainly due to the clinicians' lack of time to stay up to date with the most current evidence (Graham et al., 2011, 2012; Higgins & Green, 2011; McGlynn et al., 2003; Straus & Haynes, 2009; Wolf et al., 2011; Wollersheim et al., 2005). High-quality CPGs also help promote professional training and continuing education by complementing more traditional sources of information that clinicians tend to turn to, such as books or practitioner manuals, with more up-to-date summaries (Parry, 2000). More specific to the field of psychotherapy (see Parry, Cape, & Pilling, 2003), the development and use of CPGs can contribute to the promotion of psychotherapy practices according to Hollon and Teachman (2019), as they facilitate the use of treatments with the best supporting evidence for positive outcomes. Sanderson (2002) further argues that this function of CPGs is especially important given today's increasing demands for quality assurance and accountability from the healthcare industry.

Third, by discouraging the use of non-suitable interventions and approaches and promoting more appropriate and evidence-based interventions (Brouwers et al., 2010; Fervers et al., 2011; Fretheim et al., 2006; Hollon et al., 2014; Margo, 2004), CPGs can influence and improve practitioners' knowledge base, assessment, and treatment processes and decisions (Graham et al., 2011; Wollersheim et al., 2005), which may lead to more favorable patient or client outcomes. The dissemination of CPGs to practitioners is therefore pivotal, as are efforts to ensure their implementation in clinical settings (Giguere et al., 2012).

Unsurprisingly, many organizations produce guidelines today, including regulatory bodies, professional associations, national or international organizations, and governmental agencies. In North America, examples include the American Psychological Association (APA), the American Occupational Therapists Association (AOTA), INESS, the Canadian Association of Psychoeducators (CAP), and the Canadian Association of Occupational Therapist (CAOT), to name

²It is important to note that CPGs are intended to be advisory rather than prescriptive and are therefore not meant to replace clinical judgment. When clinicians consider there are valid reasons not to follow the recommendations summarized in a CPG, they are encouraged to select an alternative approach to treatment based on what they think is most appropriate (Cecamore et al., 2011). In line with the EBP model (Sackett et al., 1996), clinicians are expected to use their expertise and professional judgment when interpreting and applying the recommendations contained in a CPG in the specificity of each context or clinical situation. Practitioners thus retain both the clinical freedom to do something different and responsibility for their decisions. CPGs differ from standards of care, in that standards are mandatory and non-adherence could have legal implications (Hollon et al., 2014).

but a few. CPGs can also be developed locally or nationally; the choice may be reliant on the particular structure of the healthcare system in a given geographical location. For example, Australia, the United Kingdom, and many European countries have favored a nationally coordinated CPG development program in contrast to America where CPG development is generally less centralized.

Regardless of who produces them, CPGs directly address the research-practice gap by bringing scientific knowledge into practice through actionable recommendations, allowing clinicians quicker access to relevant scientific evidence. More specifically, CPGs can make it clearer to practitioners which interventions have the most demonstrated benefits and which are not supported by scientific findings while also outlining potentially harmful or inefficient interventions. However, the quality of a CPG, and the efforts invested in disseminating it, may determine whether clinicians use it and whether it will have a positive impact on clinical outcomes.

The Quality of Clinical Practice Guidelines

Originally, CPGs in medicine were developed based on a consensus process that occurred in expert panels; the clinical recommendations contained in a CPG were merely a reflection of clinical judgments (this process is often referred to as an *eminence* model, whereby experts made recommendations based on their own experience, as opposed to the *evidence* model which will later prevail through the promotion of evidence-based practice). Thus, the development of guidelines was often characterized by a lack of empirical support and did not involve thorough methodologies. Over the years, various organizations produced guidelines based on expert consensus and without using a formal, structured methodology. However, the spark in the production of CPGs, combined with the increasing recognition of the value of evidence-based practices, raised concerns regarding the methods used to develop guidelines as well as their quality. Many organizations eventually developed procedures to support the development of CPGs (see Alonso-Coello et al., 2010; Ansari & Rashidian, 2012; Stamoulos et al., 2014). These include, for example, the methods developed by the National Academy of Medicine, the National Institute for Health and Clinical Excellence (NICE), the Guidelines International Network (GIN), the *Institut National d'Excellence en Santé et Services Sociaux* (INESSS), and the World Health Organization (WHO), to name but a few (see Graham et al., 2011; Hill et al., 2011; Qaseem et al., 2012).

In turn, this massive proliferation of methodologies for guideline development eventually prompted researchers to investigate the methods that are used for the production of CPGs. In one such study, Ansari and Rashidian (2012) examined 19 methods used to produce guidelines, focusing on the core tasks described in each method and their respective relevance for the development of quality CPGs. They extracted 27 tasks from the 19 methods included in their review. They also found important disparities between the tasks considered in each method they reviewed. To determine which task was deemed truly necessary to a guideline's development process, they

considered the ones that were present in over 75% of the handbooks. Then, each task was reviewed by a panel of experts using a web-based questionnaire. Experts were asked to weigh the importance of each task using a Likert-type scale; scores were compiled and a median score was attributed to each task. After the evaluation process, only 15 of the 27 tasks were deemed necessary to ensure a sound development process. The 15 tasks included: (1) “selecting the guideline topic”; (2) “determining the guideline scope”; (3) “identifying relevant existing guidelines”; (4) “involving the consumers”; (5) “forming a guideline development group”; (6) “developing clinical questions”; (7) “systematic search for evidence”; (8) “selecting relevant evidence from the searches”; (9) “appraising identified research evidence”; (10) “making group decision and reaching consensus”; (11) “grading available evidence”; (12) “creating recommendations”; (13) “final stakeholder consultation”; (14) “guidelines implementation strategies”; and (15) “updating recommendations and correcting potential errors.” These tasks are not mutually exclusive, and different tasks might be involved at different points in time during the process.

These 15 tasks, according to Ansari and Rashidian (2012), are absolutely necessary to develop a good guideline. Unsurprisingly, they are present in more reputable handbooks and methods for guideline development. However, they were not present in all handbooks, and some organizations have been found to not consider these tasks when developing guidelines. For example, using the criteria outlined by Ansari and Rashidian (2012), Stamoulos et al. (2014) examined the extent to which each of the 15 tasks was considered in the guidelines development process utilized by the Quebec College of Psychologists (Ordre des Psychologues du Québec [OPQ]). Unfortunately, Stamoulos et al. (2014) reported important shortcomings with the development, methodology, and quality of the CPGs assessed in their pilot study. Precisely, many of the tasks deemed necessary to the development process were missing and the CPGs failed to meet acceptable standards of quality for CPGs.

Other studies have found similar results. Rather than using the criteria outlined by Ansari and Rashidian (2012), these other studies often used the AGREE-II scale (AGREE Collaboration, 2003; Brouwers et al., 2010), which is certainly the most widely used tool to assess guideline quality. It consists of 23 items aggregated to form six broad quality domains, including Scope and purpose, Stakeholder involvement, Rigor of development, Clarity of presentation, Applicability, and Editorial independence (Brouwers et al., 2010; see below for details). Aside from its sound psychometric properties, this instrument is user-friendly, and developers have created a web platform to support appraisers in the management of their ratings and calculation of domain scores (see <https://www.agreetrust.org/agree-ii/>).

A number of studies investigating the quality of guidelines in mental health and in psychology and using AGREE-II have been conducted in recent years. Some of these studies focused on guidelines produced abroad (e.g., Medina et al., 2020); others focused on Canadian organizations. In one such study, Middleton et al. (2018) examined the quality of two CPGs, one on anxiety and one on depression, both developed by the Canadian Psychiatric Association (CPA), and found that their quality was not optimal. The guidelines produced by the College of Psychologists of Quebec have also been extensively investigated. This focus on this College is warranted for many

reasons. First, this organization produces the most guidelines in psychology in Canada, and second, this College is a regulatory body and as such oversees the practice of its members. As stated by Stamoulos et al. (2014), the College of Psychologists of Quebec “has formal authority over its members and over the quality of their practice; it may take action against a psychologist, which may translate, when warranted, into legal action, which could lead, amongst other possible consequences, to a suspension or loss of the right to practice or to a fine” (p. 178).

Building on the study of Stamoulos et al. (2014), Trepanier et al. (2017) used AGREE-II to assess a guideline produced by this College for the assessment of dyslexia. Results again indicated major shortcomings related to the methodology used to develop the guideline as well as the applicability of the guideline and editorial independence of the guideline development team. Similarly, studies have shown that other guidelines produced by this College are of dubious quality (see Trépanier, 2019). For the most part, shortcomings were related to rigor of development, applicability, and editorial independence. These shortcomings were not limited to this College’s CPGs but were also reflected in the quality assessment of some of the CPGs produced by other professional regulatory bodies in Quebec, including the College of Physicians of Quebec, the College of Psychoeducators of Quebec, the College of Guidance Counselors of Quebec, the College of Social Workers of Quebec, and the College of Occupational Therapists of Quebec (see Ciquier et al., 2020). The problem is thus not limited to psychology.

The fact that most CPGs present significant limitations in terms of rigor of development is alarming, as this domain is arguably the one that most significantly impacts CPG quality (Alonso-Coello et al., 2010). Since CPGs are expected to be grounded on sound scientific evidence, it is imperative that their development adequately reflects this. Future CPG undertakings should thus provide a comprehensive description of the methodology used to develop the CPG, including a description of the search strategy used to retrieve the literature, the process for gathering, evaluating, and selecting the evidence as well as summary tables and procedures for grading the strengths of the recommendations. In addition to this, improvements to increase transparency and independence are crucially needed. Efforts to appropriately address potential conflicts of interest are also important to ensure that the recommendations included in the CPG have not been influenced by personal interests, which could potentially affect the CPG’s credibility and trustworthiness (Armstrong et al., 2017; Graham et al., 2011). Furthermore, it is crucial that greater efforts be made to ensure applicability. Utilizing CPGs that fail to meet quality standards increases the risk of relying on invalid or weak recommendations and may impede patient care (Grimshaw & Russell, 1993). Until organizations produce higher quality guidelines, clinicians must remain critical of the guidelines they are provided. A number of tools and resources exist to support clinicians in this endeavor. Unfortunately, until more organizations improve the methods they use to develop guidelines, the burden falls upon the clinician to determine if a guideline is of sufficient quality to be used.

Approach to Mental Health Assessment

One approach to choosing guidelines, although not unflawed, is to opt for guidelines produced by organizations that are reputable in guideline development. To support clinicians, a Canadian team of researchers and clinicians has developed a website—the *Best Practices in Psychology Portal* (www.mcgill.ca/psy)—that aims to support clinicians wishing to have an evidence-based practice. An entire section of the website is dedicated to guidelines; this also includes a webpage where *highly recommended* and *recommended* organizations are presented. The highly recommended organizations are presented in Table 9.1, along with other resources that may be helpful to practitioners. These include organizations that produce guidelines as well as organizations that do not produce guidelines but make many CPGs produced by others available to practitioners. However, while some organizations may be well known and respected in certain professional circles, this general reputation, regardless of how good it may be, is not indicative of the quality of the guidelines they produce. As mentioned earlier, the *Quebec College of Psychologists* has a very good reputation among psychologists in Quebec, yet their guidelines are of dubious quality and should only be used with caution. The problem of low-quality guidelines is not limited to this organization nor to psychology or mental health at large. As such, clinicians are quickly confronted with the problem of determining the quality of a guideline before implementing the recommendations it contains. The *Best Practices in Psychology Portal* is a helpful resource in that regard, as it not only makes guidelines available to practitioners, it also reports quality assessments for many of these guidelines, with clear indications as to their use (e.g., use, use with caution, use with great caution, and do not use).

Table 9.1 Resources for psychologists looking for clinical practice guidelines

Highly recommended organizations that produce quality guidelines	
National Institute for Clinical Excellence (NICE) [UK] (www.nice.org.uk/guidance)	NICE has produced numerous, very high-quality guidelines. The method used by NICE is transparent and rigorous. ^a Guidelines that may be of interest to psychologists include the NICE guidelines ^b on depression, anxiety disorders, eating disorders, addictions and substance use, self-harm, and personality disorders, to name but a few
Scottish Intercollegiate Guidelines Network (SIGN) [Scotland] (www.sign.ac.uk/our-guidelines/)	While SIGN has produced fewer guidelines than NICE in mental health, they do have some interest to psychologists, including guidelines on schizophrenia and autism
Other organizations that produce guidelines	
British Psychological Society [UK] (www.bps.org.uk/article-types/guidelines)	The British Psychological Society has produced numerous guidelines for psychologists, including guidelines on working with refugees and asylum seekers and guidelines for psychologists working with gender, sexuality, and relationship diversity, to name only these
American Psychological Association [USA] (www.apa.org/practice/guidelines/index.aspx)	The APA publishes guidelines for practitioners, including for intervention with specific populations

(continued)

Table 9.1 (continued)

Social Care Institute for Excellence (SCIE) [UK] (www.scie.org.uk)	SCIE produces guidelines that are related to psychosocial practices. Psychologists may however find many to be useful, for example, the SCIE guidelines on working with asylum seekers and refugees, supporting parent mental health, or working with older adults
Guideline databanks and libraries	
The Guidelines Clearinghouse [USA] (www.ahrq.gov/gam/updates/index.html) (www.guideline.gov)	The Agency for Healthcare Research and Quality (AHRQ) in the U.S. maintained a guidelines clearinghouse that included numerous guidelines. While this clearinghouse is still available online, the clearinghouse has not been updated since 2018
Joule [Canada] (https://joulecma.ca/cpg/homepage)	Joule is a database that contains clinical practice guidelines that were developed or endorsed by medical or health organizations in Canada, including many guidelines in mental health
ECRI [International] (www.ecri.org/library/clinical-specialties/psychiatry)	ECRI is a large repository of clinical practice guidelines in health. It includes a section on guidelines for psychiatry, some of which may be relevant for psychologists as well
Health Services/Technology Assessment Texts (HSTAT) [USA] (www.ncbi.nlm.nih.gov/books/NBK16710/)	HSTAT focuses on health technology assessments and evidence reports, but also includes some clinical practice guidelines in mental health
Guideline Central [International] (www.guidelinecentral.com)	Guideline Central is a vast repository of clinical practice guidelines, including in mental health
PubMed [USA] (https://pubmed.ncbi.nlm.nih.gov/)	PubMed can be used to retrieve clinical practice guidelines
UptoDate [USA] (www.uptodate.com/contents/overview-of-clinical-practice-guidelines)	UptoDate requires a subscription. This resource provides a tremendous amount of helpful scientific reviews as well as society guidelines
Support for guideline development and assessment	
Guidelines International Network (GIN) [International] (https://g-i-n.net/) (https://g-i-n.net/library/new-international-guidelines-library)	GIN does not produce guidelines. This international organization however provides support to organizations and individuals wishing to produce clinical guidelines. It is also a repository for CPGs
AGREE II [Canada] (www.agreetrust.org)	

^aSee <https://www.nice.org.uk/about/what-we-do/our-programmes/nice-guidance/nice-guidelines/how-we-develop-nice-guidelines>

^bSee <https://www.nice.org.uk/guidance/conditions-and-diseases/mental-health-and-behavioural-conditions>

Case Study

Jeremy is a 15-year-old boy who lives at home with both parents. He is the only child to his parents, both of whom have completed graduate studies and have stable positions working for the government. Although they describe Jeremy as irritable when he was a toddler, his parents report that his childhood was generally “uneventful”, with perhaps one notable exception. When Jeremy was 10, his parents began arguing regularly. These arguments were related to financial concerns following a poor financial investment made by the couple. At that time, Jeremy became what they described as “oppositional”. He was argumentative with his parents and refused to follow instructions (like going to bed, cleaning his room, etc.). His teachers also reported that he would not follow instructions, would speak out of turn, and often challenge the teacher. This lasted for a period of approximately 5 weeks at which point the school psychologist suggested regular meetings with Jeremy and with his parents. Jeremy only met with the psychologist on three occasions and made it clear that he did not want to have additional sessions. The psychologist also met with the mother on one occasion; she did not feel there was much value in the meeting and also refused to attend further appointments. Nonetheless, perhaps because the parents received financial support from Jeremy’s grandparents, the tension in the household eventually decreased, and Jeremy stopped challenging and confronting his parents. He also stopped being disruptive in class.

At the age of 13, however, Jeremy began once again getting into trouble at home and at school. His mother realized that money had been taken from her purse on a number of occasions; each time she confronted Jeremy, he denied this strongly and accused her of always breathing down his neck. His mother would sometimes find headphones or other objects that she knew did not belong to him in his room; when she would confront him, he would claim that he had found them or that a friend had given them to him. Jeremy’s parents also noticed that bottles of liquor would go missing; Jeremy always strongly denied taking these bottles. He would also leave the house without telling his parents where he was going and return home after the time agreed to. One Saturday afternoon, Jeremy’s father decided to follow him to see where he was going. He found Jeremy with friends; they had a bottle of liquor, a tennis ball, and a small jar with gasoline in it. Jeremy explained that this was to play “fireball”: they would dip the tennis ball in gasoline, light it up, and take turns kicking it off of the brick wall of the school. Whoever had touched the ball last when it stopped burning was eliminated. When his father grounded him, Jeremy swore that he would make him pay. Shortly after, he ran away from home, staying overnight at a friend’s home without telling his parents. He did this three times over a period of approximately 6 months. For this, as for his

other behaviors, he would be punished very harshly although that never led to any improvement.

The situation was no better at school. Jeremy would not do his homework and would lie to his parents, stating that he had already done it or had no homework to do. He would also lie to his teachers, telling them that he had lost his homework or had been ill the day before and had had to go to the hospital. At school, he would take credit for the work of others, would hide in the schoolyard when it was time to return to class, and was found going through the locker of other students. One teacher caught him stealing the lunch of another student. When he was confronted by the teacher, he called her names then later accused the other student of “ratting him out”; later that day, he followed that student in the hallway, called him names, and eventually pushed him to the ground. He would also pretend to punch that student and would laugh at him for being scared. When a third student stepped in to help, he punched this student, which led to him being expelled from school at age 15.

Most clinicians will have recognized that Jeremy presents with what appears to be a conduct disorder, adolescent-onset type. The criteria for this diagnosis are almost identical in the ICD (International Classification of Diseases) and DSM (Diagnostic and Statistical Manual of Mental Disorders). Criterion A of the DSM 5 refers to a series of 15 behaviors that are not age-appropriate or socially appropriate and that involve the violation of the rights of others and various rules. These 15 behaviors are grouped into four broad categories, including behaviors that cause or involve threats of physical harm to others (Jeremy meets Criterion A1 in that he bullied or intimidated others, and A2 in that he initiated physical fights); nonaggressive behaviors that cause property damage or loss; deceitfulness or theft (Jeremy meets Criterion A10 in that he broke into the locker of other students, A11 in that he often lies to obtain recognition and to avoid obligations, and A12 in that he has stolen various objects); and serious violations of rules (Jeremy meets Criterion A13 in that he has run away from home more than once). Once a proper diagnosis is given, clinicians must then decide what services to deliver to the child and his family.

A quick search for guidelines can be done, starting for example with the *Best Practices in Psychology Portal*, which includes guidelines that have been assessed for their rigor (see Table 9.1). The *Best Practices in Psychology Portal*³ contains a number of potentially relevant CGPs. When looking for “conduct disorder” on the portal, a CPG produced by the Ministry of Social Development in New Zealand can be found. However, as the Portal also shows, a study conducted by Andrade et al.

³ See <https://www.mcgill.ca/psy/guidelines/available-guidelines>

(2019) concluded that the guideline should only be used with great caution. Under the rubric “Behavior disorders”, one other guideline can be found, the *Canadian Guidelines on Pharmacotherapy for Disruptive and Aggressive Behaviour in Children and Adolescents With Attention-Deficit Hyperactivity Disorder, Oppositional Defiant Disorder, or Conduct Disorder*. However, that guideline is considered to be of moderate quality, and to only be used with caution. Finally, under the rubric “Antisocial behavior and conduct disorder”, another guideline was found which was deemed to be a high-quality guideline: *Antisocial behaviour and conduct disorders in children and young people: Recognition and management (clinical guideline 158)*, published by the National Institute for Health and Care Excellence in the United Kingdom.

This guideline (NICE, 2013/2017) includes a rigorous and structured review of the literature on the scales and methods used to assess conduct disorder, recommends which scales to use for screening, and indicates when and how a complete assessment should be conducted. For example, the guideline suggests conducting an initial assessment using the Strength and Difficulties Questionnaire (SDQ; Goodman, 1997, 1999) and recommends assessing for complicating factors, including a comorbid mental health problem, a neurodevelopmental condition (in particular ADHD and autism), a learning disability, and substance misuse. At the time of conducting a more comprehensive assessment, the child, Jeremy in this case, should be given the opportunity to meet the professional on their own, although a parent or third party known to the child and familiar with the child will also need to be consulted. In addition to assessing symptomatology (e.g., by using the DSM), Jeremy’s functioning at home, at school, and with peers should be assessed, as well as parenting quality. Furthermore, it is recommended to use formal assessment instruments to aid the diagnosis of comorbid conditions (e.g., the Child Behavior Checklist [Achenbach, 1991]). In addition to this, the guideline recommends assessing the risk of self-harm and harm to others, self-neglect, and exploitation by others, including the risk for physical, sexual, and emotional abuse. Finally, it is also recommended to assess the child–parent relationship, the positive and negative aspects of parenting, including the use of coercive discipline, the presence of positive and negative adult relationships within the child’s family, and parental well-being (mental health, substance misuse, and criminal or antisocial behavior).

Implications for Prevention and Intervention

The NICE guideline on *Antisocial behaviour and conduct disorders in children and young people* also makes a number of recommendations for prevention and intervention. Prevention refers to programs and interventions that target individuals or groups of individuals who are at risk of developing a conduct disorder given individual, family, or social risk factors. Based on a review of the literature, the NICE guidelines recommend offering classroom-based emotional learning and problem-solving programs for children aged 3–7 in schools or groups where there is a high

proportion of children considered to be at risk given a low socioeconomic status, low school achievement, child abuse or parental conflict, parental mental health problems, or substance misuse or parental contact with the criminal justice system. Such programs should be delivered in 30 in-class sessions over the course of a school year and aim to increase the children's awareness of their own and others' emotions, teach self-control, promote a positive self-concept and good peer relations, and develop problem-solving skills.

Once a diagnosis of conduct disorder is given and confirmed, interventions must be given to the child. According to the same NICE guidelines, several interventions can be offered, depending on the child's age. For example, for children aged 11–17 such as Jeremy, multimodal intervention such as multisystemic therapy (e.g., Henggeler et al., 1998) should be considered. The intervention should have a clear focus on family support, draw on a social learning model, and typically include three to four meetings per week over a 3- to 5-month period. Child-focused programs can also be considered, including group social and cognitive problem-solving programs based on cognitive-behavioral principles, and modeling and rehearsal to improve skills, delivered in 10–18 weekly 2-h sessions. For younger children (3–11 years of age), parent training programs that involve both parents are delivered in ten to sixteen 90- to 120-min sessions, delivered in a group format. These programs should be based on a social learning model, using modeling, rehearsal, and feedback to improve parenting skills. Numerous other recommendations are also made for interventions that target foster care parents and guardians or children with complex needs.

In the case of Jeremy, high-quality guidelines were available. However, that is not always the case, as not all guidelines are of good quality. In other cases, for example for other conditions or disorders, guidelines may be available, but it is unknown if the guideline is of good quality. When no such quality rating is available for a guideline, clinicians can turn to guideline assessment tools. Numerous tools and scales exist to review the quality of a guideline (see Siering et al., 2013, for a complete review). While all tools have their strengths and weakness, one stands out as simple to use and rigorous: the AGREE II⁴ (Brouwers et al., 2010).

This tool includes 23 items that are rated using a 7-point Likert-type scale. These items are grouped by domains, as mentioned earlier in this chapter. Domain 1 assesses the *scope and purpose* of the guideline, with questions about the overall objectives of the guideline, the health questions it covers, and the population to whom the guideline is meant to apply. Domain 2 assesses *stakeholder involvement*, with items assessing if the guideline development group includes individuals from all relevant professional groups, if the views and preferences of the target population (i.e., the patients) have been sought, and if the target users of the guideline are clearly defined. Domain 3, which pertains to *rigor of development*, is the domain

⁴AGREE-II is available for download at <https://www.agreetrust.org/wp-content/uploads/2017/12/AGREE-II-Users-Manual-and-23-item-Instrument-2009-Update-2017.pdf>.

A brief introductory video can be found at <https://www.mcgill.ca/psy/guidelines/evaluating-guidelines>

with the most items. It is also, in many ways, the most important domain because it assesses the methodological quality of the guideline. The seven items in that domain are used to determine if systematic methods were used to search for the empirical evidence used to develop the guideline, if the criteria used for selecting this evidence are clearly described, and if the strengths and limitations of the body of evidence are clearly described. The domain also includes items that assess if the methods for formulating the recommendations are clearly described, if the health benefits, side effects, and risks have been considered in formulating the recommendations, and if there is an explicit link between the recommendations and the empirical evidence. Finally, Domain 3 also assesses if the guideline was externally reviewed by experts prior to its publication and if a procedure for updating the guideline is provided. The next domain, Domain 4, examines the clarity of presentation of the guidelines, with questions related to the unambiguity of the clinical recommendations, the presentation of different options for managing the condition, and the extent to which key recommendations are easily identifiable. Domain 5 assesses the *applicability* of the guideline, with questions about the identification of facilitators and barriers to using the guideline, the presentation of advice or tools on how the recommendations can be put into practice as well as the consideration of potential resource implications of applying the recommendations and monitoring and auditing criteria. Finally, Domain 6 examines *editorial independence*, with questions assessing the independence of guideline developers vis-à-vis the funding body as well as possible competing interests of guideline development group members.

To facilitate the use of the tool, AGREE Trust has developed a web platform, Agree Plus,⁵ that can be used to rate a guideline online. The tool also computes total scores for each guideline and can handle multiple raters. Given its validity, simplicity, and the availability of various tools to support its use, AGREE II is without doubt the most widely used tool to assess guidelines. While AGREE only includes 23 items, its use does require some time although, in our experience using the scale, raters quickly become efficient in globally assessing a guideline, often after a single reading.⁶ The AGREE Consortium also has a shorter version of AGREE II, known as the AGREE—GRS,⁷ which includes only seven items.

There is no doubt that assessing a CPG requires some time and effort. However, a quick review, for example with the AGREE—GRS, should at the very least be conducted before a guideline is used. Failing to do may lead to implementing sub-optimal interventions which may in turn have iatrogenic effects.

⁵ See <https://www.agreetrust.org/resource-centre/agree-plus/>

⁶ Training for agree is available at: <https://www.agreetrust.org/resource-centre/agree-ii/agree-ii-training-tools/>

⁷ AGREE-GRS can be downloaded at <https://www.agreetrust.org/resource-centre/agree-ii-grs-instrument/>

Conclusion

Clinical practice guidelines are certainly a very important tool in supporting evidence-based practice. They are beneficial to practitioners who are often pressed for time, by giving them clear and empirically supported guidance to inform their clinical decision-making and service delivery, hence minimizing practices that are idiosyncratic and suboptimal. They can expose practitioners to evidence and practices they may have not considered otherwise and minimize the likelihood of selecting methods and interventions based on personal preferences or bias vis a vis certain population groups or subgroups. This in turn can translate into better outcomes for service users and serve to educate them as to what they can reasonably expect of service providers. Such collaboration and the sharing of common and valid information between a service user and a professional also empowers the service user and sets the foundation for shared decision making and informed dialogue, hence facilitating the consideration of the service users' point of view, their preferences, and their various characteristics, including culture and values.

Given this and unsurprisingly, CPGs are increasing in popularity in most clinical fields, be it psychology, medicine, nursing, and many others. In some cases, the guidelines available to psychologists are of high quality and can be used without hesitation. In other cases, unfortunately, psychologists and other mental health professionals are provided with low-quality guidelines, which may translate into suboptimal services for patients or improper use of resources. For this reason, practitioners should when possible seek quality assessments for the guidelines they intend to use, and when these are not available, they may wish to become familiar with assessment tools such as AGREE and conduct their own assessment. For personal use, it is not necessary to become an expert rater; being generally familiar with the AGREE II items, or with the AGREE-GSR items, should be sufficient to have an overall impression of the quality of a guideline. It is important to stress that professional judgment is a key component of evidence-based practice. Congruent with this, psychologists must exercise their clinical judgment when deciding to use, and when applying the recommendations contained in a guideline. Guidelines should not be confused with standards of care; they are not mandatory, and they do not dictate clinical behaviors. Rather, guidelines are recommendations, and these recommendations must be tailored when needed and sometimes even put completely aside by the clinician.

It is unfortunate that so much rests on the shoulders of individual clinicians. The majority of professional organizations and regulatory bodies in psychology have been encouraging clinicians to implement evidence-based practice, yet most of them fail to provide these clinicians with the tools needed to do so. As such, it could be argued that the difficulties clinicians have in using science in their clinical practice is in large part due to the shortcomings of the organizations that represent them or regulate their practice. Until these organizations optimize their practices and devote more time and effort to synthesizing research findings and translating them into clinical recommendations, clinicians will be confronted with significant barriers to implementing evidence-based practices.

References

- Achenbach, T. M. (1991). *Manual for the child behavior checklist and 1991 profile*. University of Vermont, Department of Psychiatry.
- AGREE Collaboration. (2003, February). Development and validation of an international appraisal instrument for assessing the quality of clinical practice guidelines: The AGREE project. *Quality & Safety in Health Care*, *12*(1), 18–23. <https://doi.org/10.1136/qhc.12.1.18>
- Alonso-Coello, P., Irfan, A., Solà, I., Gich, I., Delgado-Noguera, M., Rigau, D., Tort, S., Bonfill, X., Burgers, J., & Schunemann, H. (2010, December 1). The quality of clinical practice guidelines over the last two decades: A systematic review of guideline appraisal studies. *Quality and Safety in Health Care*, *19*(6), e58. <https://doi.org/10.1136/qshc.2010.042077>
- Andrade, B. F., Courtney, D., Duda, S., Aitken, M., Craig, S. G., Henderson, J., & Bennett, K. (2019). A systematic review and evaluation of clinical practice guidelines for children and youth with disruptive behavior: Rigor of development and recommendations for use. *Clinical Child and Family Psychology Review*, *22*(4), 527–548.
- Ansari, S., & Rashidian, A. (2012). Guidelines for guidelines: Are they up to the task? A comparative assessment of clinical practice guideline development handbooks. *PLoS One*, *7*(11), e49864. <https://doi.org/10.1371/journal.pone.0049864>
- Armstrong, J. J., Goldfarb, A. M., Instrum, R. S., & MacDermid, J. C. (2017). Improvement evident but still necessary in clinical practice guideline quality: A systematic review. *Journal of Clinical Epidemiology*, *81*, 13–21. <https://doi.org/10.1016/j.jclinepi.2016.08.005>
- Audet, A. M., Greenfield, S., & Field, M. (1990). Medical practice guidelines: Current activities and future directions. *Annals of Internal Medicine*, *113*(9), 709–714. <https://doi.org/10.7326/0003-4819-113-9-709>
- Baker, T. B., McFall, R. M., & Shoham, V. (2008). Current status and future prospects of clinical psychology: Toward a scientifically principled approach to mental and behavioral health care. *Psychological Science in the Public Interest*, *9*(2), 67–103. <https://doi.org/10.1111/j.1539-6053.2009.01036.x>
- Bastian, H., Glasziou, P., & Chalmers, I. (2010). Seventy-five trials and eleven systematic reviews a day: How will we ever keep up? *PLoS Medicine*, *7*, e1000326.
- Beauchamp, S., Drapeau, M., & Dionne, C. (2015). The development of practice guidelines in the social and human sciences. *Canadian Psychology/Psychologie Canadienne*, *56*(4), 357–367. <https://doi.org/10.1037/a0038811>
- Beauchamp, S., Drapeau, M., & Dionne, C. (2018). Assess, triangulate, converge, and recommend (ATCR): A process for developing recommendations for practice in the social sector using scientific, contextual and experiential data. *International Journal of Hospital Based Health Technology Assessment*, *1*, 3–14.
- Beauchamp, S., Duplantier, J. P., Moutquin, J. M., Dagenais, P., & Mercier, C. (2012). *Vers une méthode d'élaboration des guides de pratique dans le secteur des services sociaux: Position du Comité sur les guides de pratique en services sociaux de l'INESSS [Towards a method of developing practice guides in the social services sector: Position of the Committee on practice guides in social services of the INESSS]*. Retrieved from http://www.inesss.qc.ca/fileadmin/doc/INESSS/ServicesSociaux/Guide_pratique/GuidePratique_ServicesSociaux.pdf
- Becker, C. B., Zayfert, C., & Anderson, E. (2004). A survey of psychologists' attitudes towards and utilization of exposure therapy for PTSD. *Behaviour Research and Therapy*, *42*, 277–292.
- Beidas, E. S., & Kendall, P. C. (2010). Training therapists in evidence-based practice: A critical review of studies from a systems-contextual perspective. *Clinical Psychology*, *17*(1), 1–30.
- Begley, S. (2010, March 13). *Why psychologists reject science*. Newsweek, downloaded from <http://www.newsweek.com/why-psychologists-reject-science-begley-81063> on May 20th, 2014.
- Bennett, K., Duda, S., Brouwers, M., Szatmari, P., Newton, A., McLennan, J., Sundar, P., Cleverley, K., Charach, A., Henderson, J., Courtney, D., & Rice, M. (2018). Towards high-quality, useful practice guidelines for child and youth mental health disorders: Protocol for a systematic review and consensus exercise. *BMJ Open*, *8*(2), e018053. <https://doi.org/10.1136/bmjopen-2017-018053>

- Boisvert, C. M., & Faust, D. (2006). Practicing psychologists' knowledge of general psychotherapy research findings: Implications for science-practice relations. *Professional Psychology: Research and Practice*, 37(6), 708–716. <https://doi.org/10.1037/0735-7028.37.6.708>
- Brouwers, M. C., Kho, M. E., Browman, G. P., Burgers, J. S., Cluzeau, F., Feder, G., Fervers, B., Graham, I. D., Hanna, S. E., & Makarski, J. (2010, July 13). Development of the AGREE II, part 1: Performance, usefulness and areas for improvement. *CMAJ*, 182(10), 1045–1052. <https://doi.org/10.1503/cmaj.091714>
- Burgers, J. S., Grol, R., Klazinga, N. S., Makela, M., & Zaat, J. (2003a, February). Towards evidence-based clinical practice: An international survey of 18 clinical guideline programs. *International Journal for Quality in Health Care*, 15(1), 31–45. <https://doi.org/10.1093/intqhc/15.1.31>
- Burgers, J. S., Cluzeau, F. A., Hanna, S. E., Hunt, C., & Grol, R. (2003b). Characteristics of high-quality guidelines: Evaluation of 86 clinical guidelines developed in ten European countries and Canada. *International Journal of Technology Assessment in Health Care*, 19(1), 148–157. <https://doi.org/10.1017/s026646230300014x>
- Cabana, M. D., Rand, C. S., Powe, N. R., Wu, A. W., Wilson, M. H., Abboud, P. A., & Rubin, H. R. (1999, October 20). Why don't physicians follow clinical practice guidelines? A framework for improvement. *JAMA*, 282(15), 1458–1465.
- Cecamore, C., Savino, A., Salvatore, R., Cafarotti, A., Pelliccia, P., Mohn, A., & Chiarelli, F. (2011). Clinical practice guidelines: What they are, why we need them and how they should be developed through rigorous evaluation. *European Journal of Pediatrics*, 170(7), 831–836. <https://doi.org/10.1007/s00431-010-1344-y>
- Chambless, D. L., & Ollendick, T. H. (2001). Empirically supported psychological interventions: Controversies and evidence. *Annual Review of Psychology*, 52(1), 685–716. <https://doi.org/10.1146/annurev.psych.52.1.685>
- Ciquier, G., Azzi, M., Hébert, C., Watkins-Martin, K., & Drapeau, M. (2020). Assessing the quality of seven clinical practice guidelines from four professional regulatory bodies in Quebec: What's the verdict? *Journal of Evaluation in Clinical Practice*.
- Dozois, D. J. A., Mikail, S. F., Alden, L. E., Bieling, P. J., Bourgon, G., Clark, D. A., Drapeau, M., Gallson, D., Greenberg, L., Hunsley, J., & Johnston, C. (2014). The CPA presidential task force on evidence-based practice of psychological treatments. *Canadian Psychology/Psychologie Canadienne*, 55(3), 153–160. <https://doi.org/10.1037/a0035767>
- Drapeau, M., & Hunsley, J. (2014). Where's the science? *Canadian Psychology*, 55(3), 145–152.
- Farquhar, C. M., Kofa, E. W., & Slutsky, J. R. (2002). Clinicians' attitudes to clinical practice guidelines: A systematic review. *The Medical Journal of Australia*, 177(9), 502–506.
- Fervers, B., Burgers, J. S., Voellinger, R., Brouwers, M., Browman, G. P., Graham, I. D., Harrison, M. B., Latreille, J., Mlika-Cabane, N., Paquet, L., Zitzelsberger, L., Burnand, B., & ADAPTE Collaboration. (2011). Guideline adaptation: An approach to enhance efficiency in guideline development and improve utilisation. *BMJ Quality & Safety*, 20(3), 228–236. <https://doi.org/10.1136/bmjqs.2010.043257>
- Field, M. J., & Lohr, K. N. (Eds.). (1992). *Guidelines for clinical practice: From development to use*. Committee on clinical practice guidelines division of health care services, Institute of Medicine, National Academy Press.
- Fretheim, A., Schünemann, H., & Oxman, A.D. (2006). Improving the use of research evidence in guideline development: 5. Group processes. *Health Research Policy and Systems volume 4*, Article number: 17. <https://doi.org/10.1186/1478-4505-4-17>
- Geyman, J. P. (2000). Evidence-based medicine in primary care: An overview. In J. P. Geyman, R. A. Deyo, & S. D. Ramsey (Eds.), *Evidence-based clinical practice: Concepts and approaches* (pp. 1–11). Butterworth-Heinemann.
- Giguere, A., Légaré, F., Grad, R., Pluye, P., Haynes, R. B., Cauchon, M., Rousseau, F., Alvarez Argote, J., & Labrecque, M. (2012). Decision boxes for clinicians to support evidence-based practice and shared decision making: The user experience. *Implementation Science*, 7, 72. <https://doi.org/10.1186/1748-5908-7-72>

- Goodman, R. (1997). The strengths and difficulties questionnaire: A research note. *Journal of Child Psychology and Psychiatry*, 38, 581–586.
- Goodman, R. (1999). The extended version of the Strengths and Difficulties Questionnaire as a guide to child psychiatric caseness and consequent burden. *Journal of Child Psychology and Psychiatry, and Allied Disciplines*, 40, 791–799.
- Golec, S. J., & Valier, A. R. (2018). The effect of following clinical practice guidelines on the pain and disability outcomes of patients with low back pain—A critically appraised topic. *Journal of Sport Rehabilitation*, 27(2), 189–193.
- Gordon, J., & Cooper, B. (2010, 2010/09/01). Talking knowledge—Practising knowledge: A critical best practice approach to how social workers understand and use knowledge in practice. *Practice*, 22(4), 245–257. <https://doi.org/10.1080/09503153.2010.495768>
- Girlanda, F., Fiedler, I., Ay, E., Barbui, C., & Koesters, M. (2013). Guideline implementation strategies for specialist mental healthcare. *Current Opinion in Psychiatry*, 26(4), 369–375. <https://doi.org/10.1097/YCO.0b013e328361e7ae>
- Graham, I. D., Evans, W. K., Logan, D., O'Connor, A., Palda, V., McAuley, L., . . . Harrison, M. B. (2000). Canadian oncologists and clinical practice guidelines: A national survey of attitudes and reported use. *Oncology*, 59(4), 283–290.
- Graham, I. D., Mancher, M., Wolman, D. M., Greenfield, S., & Steinberg, E. (2011). *Clinical practice guidelines we can trust*. National Academies Press.
- Gray, M., Plath, D., & Webb, S. A. (2009). *Evidence-based social work: A critical stance*. Routledge/Taylor & Francis Group.
- Grimshaw, J. M., & Russell, I. T. (1993). Effect of clinical guidelines on medical practice: A systematic review of rigorous evaluations. *Lancet (London, England)*, 342(8883), 1317–1322. [https://doi.org/10.1016/0140-6736\(93\)92244-n](https://doi.org/10.1016/0140-6736(93)92244-n)
- Grimshaw, J., Eccles, M. P., Lavis, J. N., Hill, S. J., & Squires, J. E. (2012). Knowledge translation of research findings. *Implementation Science*, 7(50), 50–58. <https://doi.org/10.1186/1748-5908-7-50>
- Halfond, R. W., Wright, C. V., & Bufka, L. F. (2020). The role of harms and burdens in clinical practice guidelines: Lessons learned from the American Psychological Association's guideline development. *Clinical Psychology: Science and Practice*. <https://doi.org/10.1111/cpsp.12343>
- Henggeler, S., Schoenwald, S., Borduin, C., Rowland, M., & Cunningham, P. (1998). *Multisystemic treatment of antisocial behavior in children and adolescents: Treatment manuals for practitioners*. Guilford Press.
- Hepner, K. A., Rowe, M., Rost, K., Hickey, S. C., Sherbourne, C. D., Ford, D. E., et al. (2007). The effect of adherence to practice guidelines on depression outcomes. *Annals of Internal Medicine*, 147(5), 320–329.
- Higgins, J. P. T., & Green, S. (2011). *Cochrane handbook for systematic reviews of interventions. Version 5.1.0*. The Cochrane Collaboration.
- Hill, J., Bullock, I., & Alderson, P. (2011). A summary of the methods that the National Clinical Guideline Centre uses to produce clinical guidelines for the National Institute for Health and Clinical Excellence. *Annals of Internal Medicine*, 154(11), 752–757.
- Hollon, S. D., Arean, P. A., Craske, M. G., Crawford, K. A., Kivlahan, D. R., Magnavita, J. J., Ollendick, T. H., Sexton, T. L., Spring, B., Bufka, L. F., Galper, D. I., & Kurtzman, H. (2014). Development of clinical practice guidelines. *Annual Review of Clinical Psychology*, 10, 213–241. <https://doi.org/10.1146/annurev-clinpsy-050212-185529>
- Hollon, S. D., & Teachman, B. A. (2019). Advantages of developing clinical practice guidelines using international standards. *Psychotherapy*, 56(3), 340–346. <https://doi.org/10.1037/pst0000240>
- Ionita, G., & Fitzpatrick, M. (2014). Bringing science to clinical practice: A Canadian survey of psychological practice and usage of progress monitoring measures. *Canadian Psychology/Psychologie Canadienne*, 55(3), 187–196. <https://doi.org/10.1037/a0037355>
- Karekla, M., Lundgren, J., & Forsyth, J. (2004). A survey of graduate training in empirically supported and manualized treatments: A preliminary report. *Cognitive and Behavioral Practice*, 11, 230–242.

- Lilienfeld, S. O., Ritschel, L. A., Lynn, S. J., Cautin, R. L., & Lutzman, R. D. (2013). Why many clinical psychologists are resistant to evidence-based practice: Root causes and constructive remedies. *Clinical Psychology Review, 33*(7), 883–900. <https://doi.org/10.1016/j.cpr.2012.09.008>
- Margo, C. E. (2004). Quality care and practice variation: The roles of practice guidelines and public profiles. *Survey of Ophthalmology, 49*(3), 359–371. <https://doi.org/10.1016/j.survophthal.2004.02.010>
- McGlynn, E. A., Asch, S. M., Adams, J., Keesey, J., Hicks, J., DeCristofaro, A., & Kerr, E. A. (2003). The quality of health care delivered to adults in the United States. *The New England Journal of Medicine, 348*(26), 2635–2645. <https://doi.org/10.1056/NEJMsa022615>
- Medina, J. C., Schmelefske, E., Hébert, C., & Drapeau, M. (2020, 2020/02/15/). European clinical practice guidelines for depression in adults: Are they good enough? *Journal of Affective Disorders, 263*, 382–385. <https://doi.org/10.1016/j.jad.2019.12.005>
- Mestel, R. (2009, October 8). *Do therapists know what they're doing? Don't bank on it, 3 psychologists say*. Los Angeles Times, downloaded from http://latimesblogs.latimes.com/booster_shots/2009/10/do-therapists-know-what-theyre-doing-dont-bank-on-it-three-psychologists-say.html?cid=6a00d8341c630a53ef0120a62a30f7970c, on May 20th, 2014.
- Middleton, J. C., Kalogeropoulos, C., Middleton, J. A., & Drapeau, M. (2018, September 17). Assessing the methodological quality of the Canadian Psychiatric Association's anxiety and depression clinical practice guidelines. *Journal of Evaluation in Clinical Practice. https://doi.org/10.1111/jep.13026*
- National Institute for Health and Care Excellence. (2013/2017). *Antisocial behaviour and conduct disorders in children and young people: Recognition and management (clinical guideline 158)*. Retrieved from <https://www.nice.org.uk/guidance/cg158/evidence/full-guideline-pdf-189848413>
- Oxman, A. D., Lavis, J. N., Lewin, S., & Fretheim, A. (2009). SUPPORT tools for evidence-informed health policymaking (STP) 1: What is evidence informed policymaking? *Health Research Policy and Systems, 7*(Suppl 1), S1.
- Parry, G. (2000). Developing treatment choice guidelines in psychotherapy. *Journal of Mental Health, 9*(3), 273–281. <https://doi.org/10.1080/jmh.9.3.273.281>
- Parry, G., Cape, J., & Pilling, S. (2003). Clinical practice guidelines in clinical psychology and psychotherapy. *Clinical Psychology & Psychotherapy, 10*(6), 337–351. <https://doi.org/10.1002/cpp.381>
- Qaseem, A., Forland, F., Macbeth, F., Ollenschläger, G., Phillips, S., & van der Wees, P. (2012). Guidelines International Network: Toward international standards for clinical practice guidelines. *Annals of Internal Medicine, 156*(7), 525–531.
- Reed, G. M., McLaughlin, C. J., & Newman, R. (2002). American Psychological Association policy in context: The development and evaluation of guidelines for professional practice. *American Psychologist, 57*(12), 1041–1047. <https://doi.org/10.1037//0003-066X.57.12.1041>
- Rutten, G. M., Degen, S., Hendriks, E. J., Braspenning, J. C., Harting, J., & Oostendorp, R. A. (2016). Adherence to clinical practice guidelines for low back pain in physical therapy: Do patients benefit? *Physical Therapy, 90*(8), 1111–1122.
- Sackett, D. L., Rosenberg, W. M., Gray, J. A., Haynes, R. B., & Richardson, W. S. (1996). Evidence based medicine: What it is and what it isn't. *BMJ (Clinical research ed.), 312*(7023), 71–72. <https://doi.org/10.1136/bmj.312.7023.71>
- Sanderson, W. C. (2002). Why we need evidence-based psychotherapy practice guidelines. *MedGenMed: Medscape General Medicine, 4*(4), 14.
- Schuh, S., Babl, F. E., Dalziel, S. R., Freedman, S. B., Macias, C. G., Stephens, D., Steele, D. W., Fernandes, R. M., Zerneke, R., Plint, A. C., Florin, T. A., Lyttle, M. D., Johnson, D. W., Gouin, S., Schnadower, D., Klassen, T. P., Bajaj, L., Benito, J., Kuppermann, N., ... Plint, A. C. (2017). Practice variation in acute bronchiolitis: A pediatric emergency research networks study. *Pediatrics, 140*(6), e20170842. <https://doi.org/10.1542/peds.2017-0842>

- Shiroiwa, T., Fukuda, T., Ikeda, S., Takura, T., & Moriwaki, K. (2016). Development of an official guideline for the economic evaluation of drugs/medical devices in Japan. *Value in Health*, 20(3), 372–378. <https://doi.org/10.1016/j.jval.2016.08.726>
- Siering, U., Eikermann, M., Hausner, E., Hoffmann-Esser, W., & Neugebauer, E.A. (2013). Appraisal tools for clinical practice guidelines: a systematic review. *PLoS One*, 8, e82915.
- Spring, B. (2007). Evidence-based practice in clinical psychology: What it is, why it matters; what you need to know. *Journal of Clinical Psychology*, 63(7), 611–631. <https://doi.org/10.1002/jclp.20373>
- Stamoulos, C., Reyes, A., Trepanier, L., & Drapeau, M. (2014). The methodological quality of clinical practice guidelines in psychology: A pilot study of the guidelines developed by the Ordre des Psychologues du Québec. *Canadian Psychology/Psychologie Canadienne*, 55(3), 177.
- Stewart, R. E., & Chambless, D. L. (2007). Does psychotherapy research inform treatment decisions in private practice? *Journal of Clinical Psychology*, 63(3), 267–281. <https://doi.org/10.1002/jclp.20347>
- Stewart, R. E., Chambless, D. L., & Stirman, S. W. (2018). Decision making and the use of evidence-based practice: Is the three-legged stool balanced? *Practice Innovations*, 3(1), 56–67. <https://doi.org/10.1037/pri0000063>
- Stewart, R. E., Stirman, S. W., & Chambless, D. L. (2012). A qualitative investigation of practicing psychologists' attitudes toward research-informed practice: Implications for dissemination strategies. *Professional Psychology: Research and Practice*, 43(2), 100–109. <https://doi.org/10.1037/a0025694>
- Straus, S. E., Tetroe, J., & Graham, I. (2009). Defining knowledge translation. *CMAJ*, 181(3–4), 165–168. <https://doi.org/10.1503/cmaj.081229>
- Straus, S., & Haynes, R. B. (2009). Managing evidence-based knowledge: The need for reliable, relevant and readable resources. *Canadian Medical Association Journal*, 180(9), 942–945. <https://doi.org/10.1503/cmaj.081697>
- Trépanier, L. (2019). *An investigation into the quality of clinical practice guidelines, the developers who produced them and an inside look into the guideline development process of regulatory bodies*. McGill University.
- Trepanier, L., Stamoulos, C., & Reyes, A. (2017). Assessing the quality of the OPQ's guidelines for the evaluation of dyslexia in children using the appraisal of guidelines for research and evaluation (AGREE) II: A brief report. *Canadian Psychology/Psychologie Canadienne*, 58(3), 211.
- van Dijk, M. K., Oosterbaan, D. B., Verbraak, M. J., & van Balkom, A. J. (2013). The effectiveness of adhering to clinical-practice guidelines for anxiety disorders in secondary mental health care: The results of a cohort study in the Netherlands. *Journal of Evaluation in Clinical Practice*, 19(5), 791–797. <https://doi.org/10.1111/j.1365-2753.2012.01851.x>
- Vasconcelos, L. P., Oliveira Rodrigues, L., & Nobre, M. R. C. (2019). Clinical guidelines and patient related outcomes: Summary of evidence and recommendations. *International Journal of Health Governance*, 24(3), 230–238.
- Wolf, J. S., Hubbard, H., Faraday, M. M., & Forrest, J. B. (2011). Clinical practice guidelines to inform evidence-based clinical practice. *World Journal of Urology*, 29(3), 303–309. <https://doi.org/10.1007/s00345-011-0656-5>
- Wollersheim, H., Burgers, J., & Grol, R. (2005). *Clinical guidelines to improve patient care*. 63(6), 6.
- Woolf, S. H. (1992). Practice guidelines, a new reality in medicine. II. Methods of developing guidelines. *Archives of Internal Medicine*, 152(5), 946–952.
- Woolf, S. H., Grol, R., Hutchinson, A., Eccles, M., & Grimshaw, J. (1999). Potential benefits, limitations and harms of clinical practice guidelines. *British Medical Journal*, 318(7182), 527–530. <https://doi.org/10.1136/bmj.318.7182.527>

Chapter 10

Psychosocial Interventions for Peer Relationship Problems in Children with Attention-Deficit/Hyperactivity Disorder



Amori Yee Mikami, Hongyuan Qi, and Caroline E. Miller

Abstract Many children with attention-deficit/hyperactivity disorder (ADHD) experience significant difficulties in their peer relationships. For instance, peer rejection (being disliked by most peers and liked by few) and friendship problems (having few friends and poor-quality friendships) are highly common in this population of children. Impairment in peer relationships can be severe and can exacerbate risk for subsequent maladjustment, above and beyond the effects of having ADHD alone. For these reasons, it is important to assess and provide intervention for peer relationship problems in children with ADHD. In this chapter, we present a framework for understanding peer relationships that, crucially, takes two factors into account: (a) the problematic social behaviors of children with ADHD and (b) the social dynamics of the peer group. We argue that both factors are necessary components of any intervention to address peer relationship problems and that considering only the social behaviors of children with ADHD is insufficient. We provide examples of how to assess for and intervene in both factors and present relevant clinical considerations. Finally, we conclude with an illustrative case study.

Guiding Framework

Attention-deficit/hyperactivity disorder (ADHD) is a neurodevelopmental disorder marked by age-inappropriate, elevated symptoms of inattention and/or hyperactivity/impulsivity that affects approximately 5–8% of school-age children worldwide (American Psychiatric Association, 2013). To receive a diagnosis, symptoms of ADHD must be demonstrated in at least two settings (e.g., home and school), appear by age 12, persist for at least 6 months, and impair functioning. Children with ADHD can be classified as the combined presentation (symptoms of both

A. Y. Mikami (✉) · H. Qi · C. E. Miller
University of British Columbia, Vancouver, BC, Canada
e-mail: mikami@psych.ubc.ca

inattention and hyperactivity/impulsivity), the inattentive presentation (inattention symptoms only), or the hyperactive/impulsive presentation (hyperactive/impulsive symptoms only).

Although social problems are not a diagnostic requirement for ADHD, they are a highly common area of impairment in this population that likely affects the majority of children (Gardner & Gerdes, 2015). A frequent issue for children with ADHD concerns the difficult or strained relationships they have with their peers. Studies estimate that over half of children with ADHD are considered to be peer-rejected (i.e., disliked by most of their classmates and liked by few), relative to 14% of those without ADHD (Hoza et al., 2005b). Children with ADHD are also suggested to have fewer friendships (dyadic relationships between two children). Approximately 56–76% of elementary school-age children with ADHD do not have a single reciprocated friend in their classroom, compared with 10–32% of their peers (see Gardner & Gerdes, 2015). Furthermore, any friendships that children with ADHD have are suggested to be of poorer quality, with less closeness/warmth, and more conflict/antagonism (Normand et al., 2011).

These peer relationship problems in children with ADHD are concerning because they may exacerbate their relative risk of poor adjustment in adolescence and adulthood. That is, an ADHD diagnosis is already a known risk factor for concurrent and subsequent maladjustment in a variety of academic, social, and behavioral domains (Barkley, 2002). However, individuals with ADHD and a history of peer relationship problems appear to fare worse in broad domains relative to those with ADHD and no such peer relationship problems. Specifically, even after accounting for the contributions of having ADHD and of the initial childhood levels of adjustment, if children also are peer-rejected this incrementally predicts diverse indices of maladjustment in adolescence such as academic failure (Mikami & Hinshaw, 2006), depression (Mrug et al., 2012), substance use (Molina et al., 2014), and eating pathology (Mikami et al., 2008). The adverse behavioral, educational, and social outcomes often experienced by emerging adults with histories of childhood ADHD may also be partially attributable to long histories of poor peer relationships beginning in childhood (Owens et al., 2017). It is thought that perhaps these incremental effects of peer rejection on subsequent maladjustment occur because poor relationships with peers lead children to dislike school and withdraw from class participation, to experience emotional pain, to lose opportunities to learn and develop social skills, and to socialize with deviant peers (Buhs et al., 2006; Marshal et al., 2003).

Also concerning are findings that peer relationship problems tend to persist or worsen over time in ADHD populations such that they affect individuals with ADHD in all developmental stages. In elementary school-age children, research has documented that high ADHD inattention symptoms at the start of the school year predicted children's lower peer acceptance at the end of the year after accounting for initial peer acceptance (Tseng et al., 2014). An ADHD diagnosis may predict poorer social skills and peer rejection, in cascading and escalating cycles, over several years of elementary school (Murray-Close et al., 2010). Furthermore, studies find that adolescents with ADHD continue to be impaired in their peer relationships and are more disliked by peers than are typically developing adolescents (Bagwell

et al., 2001; Sibley et al., 2010). Although much less work has been conducted on ADHD in adulthood, all available work suggests that social difficulties are also present in emerging adults with this condition (Canu et al., 2014) or with a childhood history of ADHD (Mikami et al., 2015). Taken together, this literature suggests the importance of assessing, and providing intervention for, peer relationship problems in this clinical population.

In the current chapter, we address the reasons that children with ADHD are prone to peer relationship problems. Specifically, we argue that there are two overarching factors that, together, put school-age children with ADHD at heightened risk for peer rejection and friendship difficulties (fewer friends and poorer quality friendships). The first factor, which has a substantive research history, concerns problematic social behaviors in children with ADHD that can turn off peers or interfere with good relationships. The second factor, which is more understudied, concerns the social dynamics in the peer group that may lead peers to reject or dislike children with ADHD. Herein, and in other places (e.g., Mikami & Normand, 2015), we suggest that the first factor is necessary, but not sufficient, to understand (and ultimately, to address) peer relationship problems in children with ADHD. This process is depicted in Fig. 10.1.

Factor 1: Problematic Social Behaviors in Children with ADHD

A robust literature documents that children with ADHD tend to show many negative social behaviors with peers, which we argue contribute to the poor peer relationships seen in this population. Some of these negative behaviors may be tied to the core symptoms of ADHD. For example, inattention may result in difficulty attending to social cues or following fast-paced conversations, such as by daydreaming when peers are talking (Hoza, 2007). Hyperactivity and impulsivity may result in having trouble waiting for one's turn in a game, interrupting peers, self-centered behavior that does not consider the peer's needs, or poor sportsmanship (Hoza, 2007). Common comorbidities with ADHD, such as oppositional defiant disorder (ODD) or conduct disorder (CD) symptoms or diagnoses, also lead to temper tantrums and aggression in peer situations (Becker et al., 2012; Hoza, 2007). Potentially,

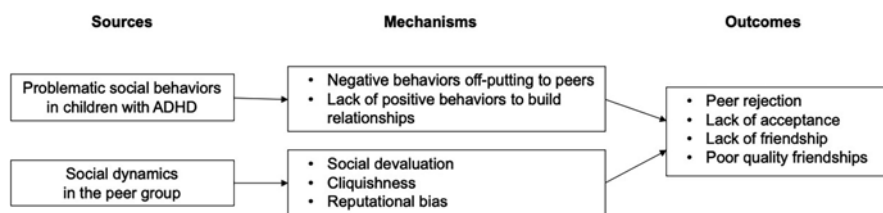


Fig. 10.1 The processes through which problematic social behaviors and peer group social dynamics affect peer relationships in children with ADHD

comorbid learning disorders can also worsen negative behaviors (Germanò et al., 2010) and lead to poor peer relationships. Children with ADHD may also show fewer positive behaviors, such as less interest in peers or less prosociality (e.g., helping, sharing, cooperating), which could be related to comorbid depression or anxiety disorders (Becker et al., 2012; Bishop et al., 2019). However, some studies find that children with versus without ADHD show no differences in the rates of positive behaviors, and rather differ in the former showing more negative behaviors (Hinshaw et al., 1989). Thus, the increased presence of negative behaviors is a more robust finding than the lack of positive behaviors in children with ADHD (Mikami et al., 2019).

Problematic social behaviors in children with ADHD have been found to occur across a wide range of settings, including at school (Abikoff et al., 2002), in a summer camp (Mrug et al., 2007), in small playgroups of children (Ronk et al., 2011), in dyadic interactions with a close friend (Normand et al., 2011), and within the first few hours of meeting unfamiliar peers (Erhardt & Hinshaw, 1994). Notably, they are also documented through a variety of methodologies, including parent report (Karustis et al., 2000; Murray-Close et al., 2010), teacher report (DuPaul et al., 2001; Karustis et al., 2000; Tseng et al., 2012), peer report (Diamantopoulou et al., 2007; Tseng et al., 2012), and observational coding of child behavior (Abikoff et al., 2002; Erhardt & Hinshaw, 1994; Normand et al., 2011; Ronk et al., 2011). A recent meta-analysis on the topic of social functioning in children with or at risk of ADHD reported an overall effect size of $r = .27$ for the association between ADHD and poor social skills (e.g., verbal or nonverbal behaviors that are unlikely to elicit positive social outcomes; Ros & Graziano, 2018). Interestingly, studies that relied on observational methods yielded the largest effect size ($r = .44$) relative to studies that used parent reports ($r = .39$) or combined parent and teacher reports ($r = .13$; Ros & Graziano, 2018). Overall, the consistency of these findings is notable, suggesting that across settings, methodologies, and many studies, children with ADHD are more likely to show problematic social behaviors relative to typically developing children.

These social behaviors are extremely off-putting to peers. In a setting with previously unacquainted peers, one study found that aggressive and disruptive behaviors (e.g., rule-breaking, verbal threats, physical assaults) in children with ADHD predicted peer disliking within the first hours of meeting, while lack of prosocial behaviors predicted fewer friendships (Erhardt & Hinshaw, 1994). Ronk et al. (2011) also found that, when meeting new peers for the first time, children with ADHD exhibited more disruptive and attention-getting behaviors, were less attentive to the ongoing activity, and were consequently rated by these peers as less likable, relative to children without ADHD. In addition, studies support the negative effect of problematic social behaviors on peer relationships over time. For example, teasing, interrupting conversations, and intentional physical aggression displayed by children with ADHD predicted their peer rejection over a 2-week period in a summer camp setting (Mrug et al., 2007). Violating game rules and making self-centered and insensitive proposals in dyadic interactions with a close friend also predicted more negative and less positive friendship quality 6 months later in

children with ADHD (Normand et al., 2013). In another study, when interviewed about why they do not like certain real-life classmates, peers specifically reported disliking children who “overwhelm and annoy others,” whose behavior shows “immaturity and lack of care,” and who behave aggressively (Monjas et al., 2008).

Interestingly, many scholars consider the source of these problematic behaviors in children with ADHD to be a performance difficulty, as opposed to a knowledge difficulty (Evans et al., 2018; Mikami et al., 2019). That is, children with ADHD are thought to possess the knowledge about what the correct social behavior is to do, but rather, the problem is in actually performing that behavior in a real-world peer situation. For instance, one study found that while children with ADHD showed no deficits relative to typically developing children in lab-based tasks evaluating explicit knowledge of Theory of Mind, they showed impairments in applying Theory of Mind skills in everyday life (e.g., noticing peers’ social cues that they are bored, taking peers’ feelings into consideration; Hutchins et al., 2016). Another study investigating social skills knowledge versus performance deficits in children with ADHD reported that while knowledge deficits were rare, both parents and teachers rated children with ADHD as demonstrating significant performance problems compared to a clinical control group (Aduen et al., 2018). Importantly, the source of the problematic behaviors (performance vs. knowledge) has implications for interventions to address them, as detailed subsequently. If the source of the problems is a performance deficit, then interventions should emphasize helping children to enact the skills that they know, as opposed to instructing children to build social skills knowledge.

In summary, children with ADHD show robust negative behaviors in peer situations, and may also show fewer positive behaviors. All evidence points to these behaviors contributing to peer rejection and friendship problems, and these reactions from peers occur within the first few hours of meeting. Accordingly, the research and intervention literature has emphasized the contribution of problematic social behaviors from children with ADHD to their peer relationship problems, for good reason. We agree that the problematic social behaviors of children with ADHD are significant factors that affect their peer rejection and friendship difficulties. However, as seen below, exclusively attending to the contribution of behaviors of the child with ADHD may be missing a significant piece to understanding (and ultimately, treating) peer relationship problems.

Factor 2: Social Dynamics in the Peer Group

While the problematic social behaviors of children with ADHD are well-documented, peer relationships do not exist in a vacuum where only the behavior of the child with ADHD is important. Rather, the broader social dynamics in the peer group will also affect the peer relationships that a child with ADHD has (Mikami & Normand, 2015). As one example, behaviors that peers do, or cognitions that peers have, influence whether peers decide to like or dislike a child with ADHD. Furthermore, a

consistent behavior enacted by a child with ADHD could be interpreted by peers in different ways, with implications for whether a peer will choose to befriend the child with ADHD or the quality of that friendship. We argue that dynamics in the peer group also contribute to the peer relationship problems of children with ADHD and that such peer group factors are historically understudied.

One relevant consideration is the amount that peers devalue ADHD or ADHD behaviors. Remarkably, there may be variability across peer groups to the extent to which this is true. Some of this variability may be attributable to how common ADHD is in the peer group. For instance, studies have found that social behaviors such as relational aggression, overt aggression, and withdrawal vary in the strength of their associations with peer acceptance/rejection across classrooms, based on how common those behaviors are in the peer group (Boor-Klip et al., 2017; Jackson et al., 2015; Stormshak et al., 1999). A conclusion from these studies is that the peer group has a social norm for what is considered to be acceptable behavior, and this norm is influenced by whatever the typical behaviors in the group happen to be. Supporting this idea, peers also expressed discomfort with differences (outgroup prejudices) as a reason for why they disliked particular classmates, in addition to specifying ADHD behaviors as a reason for disliking (García Bacete et al., 2017). An implication of this literature is that a child showing the same level of ADHD behaviors may be more rejected in one peer group than in another because their behavior violates social norms more in the first context.

Another important factor to consider is that some peer groups may simply be more cliquish and hierarchical than other peer groups. Social network analysis, which can be used to understand the social structure in a classroom peer group, refers to “degree centrality” as the total number of social connections a child has with classmates (Grunspan et al., 2014). The aggregated degree centrality across students has been used to index “classroom social network equity”—a structural characteristic of the classroom indicating whether there are clusters of distinct friend groups versus social ties tending to be more equally distributed (Cappella et al., 2013). A classroom with low social network equity contains hierarchical peer relationships in which only a small number of children are well-liked and socially connected. By contrast, a classroom with high social network equity contains egalitarian peer relationships in which social ties are more equitably distributed among children. Research has found that equity in the classroom peer social network may help mitigate the association between children’s behavioral problems and poor attention, participation, and effort in academic activities (Cappella et al., 2013). This suggests a potential, yet largely untested, implication that a child with ADHD may be more socially integrated if a classroom that already possesses a more egalitarian social structure.

Also relevant is the power of reputational bias. Once a child develops a negative reputation, peers may resist changing or altering this impression (Hymel et al., 1990; Rubin et al., 2015). Denham and Holt (1993), for example, found that peers’ initial liking ratings, but not children’s prosocial behavior, predicted peers’ liking ratings of children 10 months later. These results suggest that peer liking may be shaped, to a large extent, by peers’ initial impressions and is unlikely to be altered

by positive social behaviors. There is also research finding that peers are more likely to make hostile attributions for the same ambiguous behavior (e.g., a classmate bumps you) performed by a classmate whom they dislike relative to a classmate whom they like (Peets et al., 2007). For example, peers might assume that a disliked classmate bumped them “out of anger” but assume that a liked classmate bumped them “by accident” (Peets et al., 2007). Taken together, this set of findings raises the possibility that peers may be cognitively predisposed to not alter their peer rejection of children with ADHD, once their negative impressions are set.

Finally, the attributions peers make for children’s ADHD symptoms may also affect peers’ liking or disliking of those children. In the stigma literature, a significant body of research suggests that internal, stable, and controllable attributions for mental illness (not specific to ADHD) are associated with harshness and anger (Corrigan et al., 2003). By contrast, external, unstable, and uncontrollable attributions for mental illness are associated with pity (Corrigan et al., 2003). Indeed, it has been proposed that children with autism spectrum disorder and no intellectual disability may experience more stigma than their counterparts with intellectual disability: the former group is presumed to be able to control their behaviors (Nguyen & Hinshaw, 2020). From this literature, one might think that if peers interpret children’s ADHD behaviors as out of their control, then peers may be more socially accepting of children with ADHD. Little stigma research has been done that assesses children’s feelings about real-life classmates with ADHD, as opposed to reports about a hypothetical child with ADHD on a vignette. However, one study found the opposite: that peers’ perceptions of children’s ADHD behaviors as being within the child’s control were associated with more liking of real-life classmates with ADHD (Na & Mikami, 2018). We wonder if this occurred because perceptions of uncontrollability may evoke pity, but pity does not equate to liking. Pity may imply an inherently unequal relationship, which may explain why it is associated with both desire to help but also greater endorsement of coercive treatment approaches in mental illness stigma research (Corrigan et al., 2003). In contrast, perceiving that real-life classmates can control their ADHD symptoms may be connected to peers being more willing to like those classmates because they see them more as competent equals (Na & Mikami, 2018). Although these ideas are speculative, they underscore the potential utility of peers’ attributions as relevant to understanding the peer relationship problems of children with ADHD.

In summary, there is substantive reason to believe that factors in the peer group contribute to the peer relationships of children with ADHD, such as peers’ social norms for ADHD behaviors, peers’ tendency for cliquishness, peers’ cognitive biases against disliked children, and peers’ attributions for children’s ADHD symptoms. This is all consistent with the conceptualization of peer relationships as an evolving and active dynamic between all parties involved. Nonetheless, these peer group factors have been understudied in the literature to date, relative to the much larger literature on problematic behaviors in children with ADHD, as explanations for why children with ADHD are peer-rejected and have friendship difficulties (Mikami & Normand, 2015). We wonder if perhaps the medical model of clinical disorders (such as ADHD) has led, in part, to the emphasis on the problem being

located within children with ADHD as opposed to as within the broader social context of the peer group. In any case, we argue that a complete conceptualization and understanding of peer relationship difficulties in ADHD populations requires consideration of both the problematic behaviors in children with ADHD and the social dynamics of the peer group (see Fig. 10.1). Such a conceptualization has implications for assessment and intervention, as detailed below.

Clinical Reasoning Model

In this section, we outline potential ways that the framework presented above could vary for individual children, which may have implications for assessment and intervention.

Factor 1: Problematic Social Behaviors in Children with ADHD

Behavior problems in children with ADHD may manifest differently across children based on their ADHD presentation (Milich et al., 2001; Solanto et al., 2009). Although research documents problematic social behaviors in all ADHD presentations, they are likely the most pronounced for children with elevated hyperactivity/impulsivity (i.e., in the combined or the hyperactive/impulsive presentations of ADHD). Children with these presentations tend to show the most negative behaviors with peers, containing emotional dysregulation, argumentativeness, and self-centered proposals (Hodgens et al., 2000; Maedgen & Carlson, 2000; Mayes et al., 2009; Ronk et al., 2011). Comorbid CD or ODD is also most prevalent in the combined and hyperactive/impulsive presentations, leading to aggressive or defiant social behaviors in these children (Bauermeister et al., 2005; Connor et al., 2010).

By contrast, children with the inattentive presentation of ADHD may tend to display a different pattern of social behavior, characterized by forgetfulness, sluggishness, behavioral withdrawal, and the appearance of apathy (Cordier et al., 2010; Hodgens et al., 2000; Lee et al., 2017; Mikami et al., 2007). These social behaviors may also interfere with peer relationships, especially with forming close and stable friendship bonds (Blachman & Hinshaw, 2002), but not as much as the negative behaviors associated with hyperactivity/impulsivity. This may be why studies find that children with the inattentive presentation of ADHD are more neglected by peers (i.e., neither liked nor disliked), as opposed to actively rejected (Hinshaw, 2002; Milich et al., 2001).

The combined and hyperactive/impulsive presentations of ADHD have been described as disorders of behavioral inhibition (Barkley, 1997) in contrast to the inattentive presentation. It is specifically in the combined and hyperactive/impulsive presentations of ADHD where children are thought to know the correct behavior to do but they are unable to inhibit competing impulses in the heat of the moment to

do unskilled behaviors (Maedgen & Carlson, 2000). Thus, the conceptualization of social behavior problems as due to performance deficits, not skills deficits, may apply less to the inattentive presentation of ADHD (Maedgen & Carlson, 2000; Pfiffner et al., 2007). Again, the different conceptualizations for why problematic social behaviors manifest may have implications for tailoring interventions to address these behaviors in children with each ADHD presentation.

Factor 2: Social Dynamics in the Peer Group

The strength of the peer group factors that contribute to the peer relationship problems of children with ADHD could also vary for several reasons. One important consideration may be the child's gender. Because the gender ratio for ADHD in school-age children is approximately 2–3:1 male:female (American Psychiatric Association, 2013; Willcutt, 2012), ADHD behaviors in girls may be more contrary to social norms and therefore evoke more negative responses in peers (Elkins et al., 2011; Hinshaw & Blachman, 2005; Quinn & Madhoo, 2014). Potentially, ADHD symptoms may also be more damaging to the type of peer interactions that girls have relative to boys. That is, girls' peer groups tend to take turns engaging in a verbal back and forth, whereas boys' peer groups may be more likely to play video games or do rough and tumble activities (Rose & Rudolph, 2006). The core symptoms of ADHD, inattention and hyperactivity/impulsivity, may therefore be less noticeable in the usual social interactions of boys. Supporting these ideas, when girls with ADHD have comorbid conduct problems, the impact on their peer rejection may be more extreme compared to when boys with ADHD have similar conduct problems (Mikami & Lorenzi, 2011).

There is also a growing line of research examining ways that the teacher acts as an invisible hand to shape classroom peer dynamics (Farmer et al., 2011, 2019). In line with Bronfenbrenner (1992), the classroom social ecology is affected by ongoing, reciprocal interactions between students and one another as well as teachers and students. Thus, the teachers' actions and relationships with students are thought to affect students' relationships with one another. A caveat is that this research has not specifically involved children with ADHD, so it is unclear whether peers interpret a teacher's behaviors the same way if directed toward a child with versus without prominent behavior problems or a preexisting negative reputation. However, some research has found that the quality of teacher–student relationship is a potent predictor of peer acceptance and rejection. For example, Hughes and Im (2016) found that changes in teacher-student warmth and conflict with a child predicted changes in that child's peer relationships over a 4-year period. Specifically, children received fewer disliking nominations when in classrooms where they had a supportive and low conflict relationship with their teacher. Moreover, Sette et al. (2020) found that, among Grade 5 and 6 students, being liked by teachers was positively associated with peer inclusion, which in turn led to improvements in academic achievement. Experimental research has also found that when child participants

watched a video vignette of a teacher giving positive attention to a child actor (relative to the teacher behaving neutrally), participants evaluated that actor more favorably (Brey & Shutts, 2018). Meanwhile, naturalistic studies (also in community samples) have found that teachers' corrective feedback of children's behavior was associated with peers' later unwillingness to work with the recipients (Wullschleger et al., 2020). In sum, perhaps the teacher's behavior may influence children's liking and disliking of one another, and this could be applied to peers' affective judgments of children with ADHD.

Fascinatingly, a peer group might develop a social norm about what is acceptable behavior not solely based on the existing prevalence of that behavior but also potentially influenced by the teacher's actions. For instance, if a teacher devalues a certain behavior (e.g., aggression, social withdrawal), this can affect the extent to which that behavior is associated with peer rejection in the classroom (Chang et al., 2004, 2007). Chang et al. (2004) further found that teacher liking of students mitigated the negative impacts of disruptive social behaviors on peer acceptance, and McAuliffe et al. (2009) found that the association between children's aggressive behaviors and peer disliking was mediated by observed teacher criticism of those children. These studies suggest that teachers may potentially send a message to peers about how much they approve of ADHD behaviors, which could have downstream effects on peers' decisions to like, dislike, or befriend children with ADHD. Collectively, this research raises the intriguing possibility that there may be ways to affect peers' tolerance for ADHD symptoms via the teacher's actions, which do not require increasing the commonality of ADHD in the classroom.

Considerations for Clinical Practice

Variability in these above mentioned factors between individual children has implications for clinical practice. We argue that any assessment and intervention plan for peer relationship problems should consider both problematic behaviors in children with ADHD and the social dynamics in the peer group because solely considering problematic behaviors may be necessary but not sufficient to understand and improve peer relationships. However, for a particular child, one of these factors (e.g., problematic behaviors, or peer group social dynamics) may be stronger than the other. The relative strength of the various contributors to peer problems could relate to ADHD presentation, child gender, or a teacher's behaviors, and clinicians should be aware of these possibilities when conducting assessments.

Individual differences in the circumstances between children could also affect what a clinician chooses to target in an intervention plan. One relevant consideration is whether children have adults in their environment who could facilitate either factor (helping the child demonstrate better social behaviors, or affecting the peer group dynamics). We will describe interventions for both factors in the section below. However, they all require parents and teachers in the child's life to carry out the intervention. It is important to think about whether the adults in a child's life are

amenable to and capable of carrying out some types of interventions more than others. As one example, suppose a child has a parent with social anxiety. Perhaps that parent would be well-equipped to do skills training with the child to improve the child's social behaviors. However, this parent might have more difficulty with the interventions that target the social dynamics of the peer group, since many of them (as will be seen in the section below) involve the parent networking with other families. As another example, suppose the child has a general education classroom teacher who is willing and able to do things to address peer group dynamics because these involve universal teacher practices that are delivered classroom-wide. However, there may be no support for pull-out services at the child's school, which would be needed for individualized skills training to help the child with demonstrating better social behaviors. These different circumstances could influence the intervention plan chosen by the clinician.

Ultimately, clinicians also need to remember that intervention in one factor could be more expected or more palatable than intervention in the other factor for different families. One family could feel most comfortable with an intervention to address the child's problematic social behaviors. So, trying to address the peer group dynamics may be met with resistance, skepticism, and confusion. It may be difficult, at least initially, for the clinician to gain the family's trust to be able to try such an intervention. Alternatively, another family may welcome interventions to address the peer group dynamics and instead find interventions to address the child's behavior problems to be stigmatizing. Expectations for what interventions should look like, and where the source of the problem is, differ between families and are influenced by a host of things including the family's cultural or neighborhood context (Dong et al., 2020).

Approach to Mental Health (Psychosocial) Assessment

This section discusses how clinicians might assess peer relationship problems in children with ADHD and then how they might determine the relative weight of each contributing factor to peer relationship problems. We include pros and cons of different assessment approaches as well as potential pitfalls.

Assessing Peer Relationship Problems

Peer relationship problems reflect affective judgments (e.g., rejection or acceptance by the peer group) or mutual affective bonds (e.g., reciprocated friendships with peer group members). For this reason, the ideal method of assessing this involves asking the peers themselves. However, doing so is often impractical for clinicians.

Peer sociometric measures, where peers are asked to report their own affective judgments, are often considered to be the gold standard for assessing peer problems

from a research perspective (Bukowski et al., 1994). In sociometric measures (Coie et al., 1982), typically administered within a classroom, peers nominate the other children whom they like and those whom they dislike. Proportion scores can be computed for each child by calculating the number of liked nominations received (or conversely, the number of disliked nominations received), divided by the number of classmates participating in the sociometric procedure. These proportion scores index peer acceptance and rejection, respectively. Additionally, children can nominate peers with whom they are friends, and reciprocated friendship nominations (where both the child and friend mutually nominate one another as friends) can be calculated. These can also be represented as a proportion score of the number of classmates who participated in the sociometric procedure.

However, sociometrics are usually impractical to administer outside of a research context. This is because they usually require someone to interview each child individually, in a quiet space apart from peers, to maintain privacy. The process of converting the answers from the interviews to the nomination or friendship proportion score received by each child is also time-consuming and not straightforward. In addition, teachers usually find little educational benefit from the activity for the class, and they are sometimes concerned that asking children about who they like and dislike can reinforce these perceptions. Thus, our field is still in need of better measures to assess peers' actual feelings about individual children, which are more feasible for classroom teachers to administer than sociometrics. Our lab has piloted a procedure where children create booklets with a personalized message for each classmate, in a fun and educational activity (Mikami et al., 2013). Our research staff has examined the content of the messages to gain an indication of peers' feelings about children with ADHD, but this examination could also be done by the classroom teacher or school psychologist. This methodology, briefly discussed in Mikami et al. (2013), is under development.

Because of the practical difficulties associated with administering sociometric measures, it is more common (and feasible) for clinicians to assess peer relationship problems using questionnaires from parents and teachers. Importantly, these questionnaires measure parent or teacher presumptions of peers' affective judgments, as opposed to asking the peers themselves. Some examples of scales are the Child Behavior Checklist (CBCL) and parallel Teacher Report Form (TRF) social problems narrowband scale (Achenbach & Rescorla, 2001), or the Strengths and Difficulties Questionnaire (SDQ) peer problems subscale (Goodman, 2001). These measures indicate the extent to which adult informants perceive a child to be disliked by peers or to have few friends. Both are normed measures and the SDQ is accessible at no charge. It is also possible to ask teachers to estimate the proportion of classroom peers who like, dislike, and are neutral toward the child being assessed. This measure is used by Dishion and Kavanagh (2003), who report moderate correlations with peer sociometrics. All of these scales are likely feasible for clinicians to use, because they are short, and parents and teachers are usually willing to complete questionnaires about children for clinical assessment purposes.

Another possibility involves asking children themselves to report on their own peer relationships. There are cautions to doing so with children with ADHD,

however, because of the documented positive illusory self-perceptions in this population (Owens et al., 2007). Specific to peer relationships, children with ADHD tend to report social acceptance that is sometimes equivalent to the level of that reported by typically developing children, despite their social acceptance as being rated much lower by parents, teachers, observers, and on peer sociometric measures (Hoza et al., 2000, 2002, 2005b). Although the mechanisms underlying positive illusory self-perceptions are still being studied, not acknowledging the extent of their peer relationship problems is thought to protect children with ADHD from negative affect (Owens et al., 2007). The end result, however, is that children with ADHD are usually poor reporters of their own social difficulties. Nonetheless, asking children about their peer relationships can be useful for treatment planning purposes to understand the child's viewpoint or to increase therapeutic alliance. Child self-report likely becomes more important to include the older a child is, although research also finds positive illusory self-perceptions about peer acceptance to persist among teenagers with ADHD (Hoza et al., 2010).

Finally, behavioral observations (for instance, at lunch or recess at school) could give a clinician some understanding of the peer relationships between a child with ADHD and classmates. For instance, the proportion of time that the child is socially isolated versus playing with peers could be noted, as could peers' behaviors (positive, negative, neutral) initiated toward the child (Abikoff et al., 2004); these data could be compared to the typical patterns for the child's classmates. Nonetheless, such observations of peers' behavior toward a child with ADHD are proxies for peers' affective judgments about a child with ADHD and are not expected to align perfectly. For instance, peers might refrain from initiating negative behaviors toward a child with ADHD (perhaps because of strong norms against this at a school) but dislike that child in their personal feelings.

Factor 1: Problematic Social Behaviors in Children with ADHD

As in the assessment of peer relationship problems, the most common, and usually most feasible, method to assess children's problematic social behaviors is through questionnaires completed by parents and teachers. A commonly used measure is the Social Skills Improvement System (SSIS; Gresham & Elliott, 2008). In this normed questionnaire, parents and teachers report the child's socially skilled behaviors (or lack thereof) in categories such as communication, cooperation, assertion, responsibility, empathy, engagement, and self-control. Raw scores can be converted to standard scores based on the child's age and gender so that the child's behaviors can be compared to others in a similar demographic group. The SSIS subscales also allow clinicians to understand if social behavior problems exist uniformly across the board or if they affect certain categories of behaviors more than other categories (e.g., cooperation but not assertion). However, there are many other questionnaires that allow clinicians to gain a picture of the problematic social behaviors the child

is enacting, including ones that clinicians could create themselves (perhaps, based on parent or teacher interviews about the child behaviors that are concerning).

Another option is to observe the child's behavior in a naturalistic peer setting, such as in the classroom or on the playground at school. Although logistically more difficult to arrange than questionnaires, it is nonetheless reasonably common for clinicians to do. A benefit to this method is that it can provide another perspective about the child's behavior. The clinician usually enters the observation without the biases and expectations that come from a longstanding history with the child. The clinician may also be able to notice things during the observation that are difficult for parents and teachers to notice when they are busy engaging with the child. In a school observation, the clinician might focus on the social behaviors the child shows with peers during academic work, free play, and recess. The child's behaviors can be compared to what most classmates are doing at that time.

However, data generated from observations have caveats. One is that it is difficult to conduct a standardized assessment protocol outside of a research context. This compromises the ability to compare the child's behavior to that of classmates in any systematic or standardized way (e.g., besides the clinician's impressions). Therefore, it is hard to draw conclusions about how deviant or problematic the child's behavior is, relative to what would be expected for a typically developing child. Another issue is that the observation represents a single time slice that may not represent the child's usual behavior. Repeated observations over different days, when feasible, can help to address this issue.

It is possible to use sociometric interviews to ask peers to nominate classmates who engage in certain behaviors (e.g., is aggressive, is withdrawn), and this is often done in a research context (Masten et al., 1985). Again, however, all sociometric methods are usually impractical for clinicians. Finally, asking children to report on their own social behaviors is another option. As was discussed regarding children's self-reports of their peer relationship problems, the same limitations of this method apply here.

Factor 2: Social Dynamics in the Peer Group

Assessment of social dynamics in the peer group is difficult for clinicians, and it is not usually done. Difficulties in the assessment of peer group factors probably reflect these factors being understudied in the literature and also simultaneously contribute to their continued neglect. Notably, there are no commonly used or normed questionnaires for parents or teachers to assess social dynamics in the peer group, in contrast to the vast number of existing questionnaires to assess children's problematic behaviors.

With the acknowledgment that clinicians may not be used to doing so, we suggest that clinicians could simply ask parents or teachers to what extent they think reputational bias or a cliquish peer group is playing a part in the child's peer problems. Although this is not a standardized assessment, it will provide some useful

information nonetheless and may also prime parents' and teachers' awareness of this factor. This could allow parents and teachers to pay more attention to it in the future, and they could report any new insights to the clinician at a later date. Notably, the literature suggests that some teachers may be more attuned to students' peer dynamics (and able to report them accurately) relative to other teachers, although training may help in this regard (Farmer et al., 2019).

In a research context, it is possible to administer questionnaires to the peer group to assess their stigma of ADHD (Kellison et al., 2010; O'Driscoll et al., 2012). Although these are not normed measures, the data generated could provide information about the peer group's understanding of and beliefs about ADHD behaviors, and their reported likelihood of socially devaluing a classmate with ADHD. It is usually not feasible for a clinician to administer measures to the entire class, however. Similarly, sociometric interview data can be used by researchers to calculate the hierarchical versus equitable nature of a social network in a classroom (e.g., Cappella et al., 2013). On top of the impracticalities of sociometric interviews for clinicians, as noted above, social network analysis further requires special computerized software to convert and transform scores. Again, this is unlikely to be feasible outside of a research context.

In summary, the assessment of social dynamics in the peer group is far behind the assessment of problematic social behaviors in children with ADHD. However, we suggest that it is still useful for clinicians to keep the peer group social dynamics in mind, and to talk with parents and teachers about this potential contributor to peer relationship problems.

Perspectives and Approaches to Prevention and Intervention

In this section, we provide ideas as to how clinicians might intervene to address problematic social behaviors in children with ADHD, and also address peer-group social dynamics, when working to prevent or to treat peer relationship problems. When available, we provide empirical evidence for the efficacy of each approach and include potential areas of difficulty. Our focus is on psychosocial interventions given the audience for this chapter, but these interventions can be combined with psychotropic medication for ADHD.

Factor 1: Problematic Social Behaviors in Children with ADHD

Behavioral management is a commonly-used intervention to improve positive behaviors and reduce negative behaviors in children with ADHD (Evans et al., 2018; Simonsen et al., 2008). It can be used to address the antecedents of behaviors (which serve to prevent problematic social behaviors from occurring), as well as a consequence for already-displayed problematic behaviors (which can change the

likelihood of their expression in the future). Behavioral management is often implemented at home (most commonly by parents) and/or at school (most commonly by teachers), with some evidence suggesting that an integrated home-school approach is maximally efficacious (Pfiffner et al., 2016).

In behavioral management interventions, parents and/or teachers are encouraged to set clear and consistent behavioral expectations and communicate these to the child so that the child knows exactly what behavior is expected. For instance, before circle time, a teacher might review the classroom rules that each student sits in their designated spot, listens to the speaker, and raises their hand before speaking. This is an example of using behavioral management to prevent problematic social behaviors before they happen. Frequent and specific performance feedback about displayed behaviors, and associated consequences, are also provided to the child. When behaviors meet expectations, reinforcement is often given (e.g., praise, positive attention, privileges, rewards) to increase the likelihood of the child doing more of the same desired behaviors in the future. When behaviors do not meet expectations, parents and teachers consider whether a loss of privileges or punishment should be applied to reduce the behavior from reoccurring, and what can be done in the future to scaffold the child to be able to meet behavioral expectations. This is an example of using behavioral management to address problematic behaviors that are already happening. Often, parents and teachers track the child's achievement of target behaviors so that they can communicate about and view progress. Considerable empirical literature supports the efficacy of behavioral management for shaping children's social behaviors (Pelham & Bender, 1982), and it is considered an evidence-based intervention for ADHD (Evans et al., 2018; Simonsen et al., 2008).

Behavioral management can be applied to improving behavior in any context, such as morning routine, homework, chores, or relevant to this chapter, to improve social behaviors with peers. That is, target behaviors needed for good peer relationships can be identified, and behavior plans can be created to shape and encourage these specific behaviors. For example, if a common problem is difficulty waiting for one's turn in games with peers, the target behavior could be letting everyone take their turn. This target behavior could be explained to the child in advance of games so that the child knows what is expected, monitored and tracked, and reinforced. In this way, behavioral management can be a useful tool to address the problematic social behaviors in children with ADHD that contribute to their peer relationship difficulties.

Although in principle behavior management sounds simple, parents and teachers face some common challenges in implementation. One challenge is designing a behavior plan at the appropriate level of difficulty (Long & Edwards, 1994). Ideally, the initial plan should contain target behaviors that are easily achievable by the child where the child already performs them sometimes. This allows room for improvement but ensures that the child stays motivated to work on the plan. When target behaviors are selected that the child rarely or never does, the child can feel hopeless. The idea is that as the target behavior is achieved, the criteria for mastery increases, or a different target is introduced. Another challenge is creating a behavior plan that is simple enough for everyone (including the child) to remember and for parents and

teachers to implement consistently (Owens et al., 2018). Often, parents and teachers perceive so many behavioral deficiencies in children with ADHD that they may feel pressure to address them all. However, trying to do so can lead to an overly complex plan that nobody can carry out, so it is better to target one or two behaviors at a time. A third challenge is keeping the child invested in the behavior plan (DuPaul et al., 2011). The behavior plan rewards should be individualized and tailored to a child's interests to maximize the child's motivation to achieve them. The novelty of a plan may also spark the child's excitement at first, but the child loses interest over time. This is expected, but it underscores the importance of keeping the behavior plan fun. Involving the child in modifications of the behavior plan or selection of the reinforcements, or rotating the reinforcements offered, can help to increase buy-in and interest. Clinicians or behavior specialists can support parents and teachers in implementing behavioral plans with consideration of these common pitfalls.

Social skills training is another intervention that is commonly used to address problematic behaviors that impact peer relationships in children with ADHD (Mikami et al., 2014). Like behavior management, this intervention can be viewed as preventing subsequent problematic behaviors by teaching children the skills needed to behave appropriately, or it can be used after problematic behaviors are already displayed to teach children better substitute behaviors. Common topics covered in social skills training are starting conversations, giving compliments, good sportsmanship, or conflict resolution (Mize & Ladd, 1990). However, at least as it is applied in traditional, clinic-based settings, social skills training is not empirically supported for children with ADHD (Evans et al., 2018). This may relate to the theory behind social behavior problems in ADHD being attributable not to a lack of knowledge but rather to difficulties in performance. Social skills training, at least in clinic-based settings, has tended to emphasize the clinician teaching knowledge about the correct thing to do. Much less emphasis (or sometimes, no emphasis) has been paid on how to translate those skills to actual, real-world peer situations. Therefore, the concern with traditional social skills training has been children's lack of generalization of skills learned in session (Abikoff, 2009; Mikami et al., 2014).

The poor efficacy of traditional social skills training has led to increased attention about how to translate knowledge taught in sessions into interactions in the real world. Based on the idea that children with ADHD may have performance barriers instead of knowledge barriers, efforts have been made to increase the involvement of parents in the intervention. The idea is that in the heat of the moment, children with ADHD become distracted or they cannot stop their impulsive (and often negative) responses. Therefore, they require in vivo reminders and reinforcers to help them remember to carry out the skills that they know. There is increasing thought that parents may be well-poised to provide these reminders in real-world peer situations. This is because, unlike therapists for whom it is not feasible to do so, parents are already present during the child's naturalistic peer interactions. Particular attention has been paid to parental involvement in playdates, which parents organize for school-age children, and which are thought to be the cornerstones of friendship development (Frankel & Mintz, 2011).

In a growing number of interventions such as Children's Friendship Training (Frankel et al., 1997), the Program for the Evaluation and Enrichment of Relational Skills (which is an adaptation of Children's Friendship Training for adolescents; Gardner et al., 2019), and the Collaborative Life Skills program (Pffiffner et al., 2016), parents are actively involved in understanding what skills the therapist is teaching the child with ADHD so that the parent can support the generalization of these skills at home. These programs have shown promise in increasing parent- and teacher-rated social skills in children with ADHD (Frankel et al., 1997; Gardner et al., 2019; Pffiffner et al., 2016). Parental Friendship Coaching (Mikami et al., 2010, 2020a) takes this premise a step farther by relying on the parent as the primary agent of change. In this intervention, the clinician works directly with the parent and there is no child treatment component. The parent learns to coach the child with ADHD to display better friendship behaviors that are known to relate to good quality friendships and to be lacking in children with ADHD. In this way, the parent acts as a therapist in the provision of social skills training. However, a key distinction is that the parent continues to be present to provide the in vivo reminders and reinforcements to help the child to carry out the skilled behaviors. Some recent evidence suggests that Parental Friendship Coaching may help children with ADHD to display better friendship behaviors and less socially withdrawn/depressed behaviors (as measured by parent report, teacher report, and observation), relative to an active comparison intervention involving psychoeducation and social support (Mikami et al., 2020a; Smit et al., 2022). It may also improve friendship quality for certain subgroups of children with ADHD, specifically those with comorbid ODD/CD, or those whose families have received psychosocial intervention before (Mikami et al., 2020a).

Despite the promise of interventions for changing problematic social behaviors in children with ADHD, it should be noted that, to date, none of these interventions have been validated to change peers' sociometric impressions of children with ADHD. In fact, somewhat shockingly, in the Multimodal Treatment Study of Children with ADHD, neither medication management nor behavior therapy, individually or in combination, was efficacious in affecting sociometrically assessed peer rejection among children with ADHD, when compared to a control group receiving community care (Hoza et al., 2005a). This is despite the fact that the same interventions reduced ADHD and ODD behaviors and increased parent- and teacher-reported social skills (MTA Cooperative Group, 1999). The findings from the Multimodal Treatment Study of Children with ADHD underscore the difficulty in changing peers' impressions of children with ADHD, even if children's problem behaviors change.

Factor 2: Social Dynamics in the Peer Group

Relative to the amount of research on interventions to address children's problematic social behaviors, we know much less about interventions to address the social dynamics in the peer group, either as an approach to prevent negative social

dynamics from occurring, or to remedy an existing negative peer dynamic. Because of findings that changing problematic behaviors of children with ADHD may not affect peer reports of acceptance/rejection (Hoza et al., 2005a), there have been thoughts that perhaps, incorporating efforts to change the social dynamics in the peer group could be a useful direction (Mikami & Normand, 2015). Work in this area is ongoing but unfortunately, at this moment, there are still no empirically supported interventions for changing peer group factors that may contribute to the peer relationship problems of children with ADHD.

Based on the idea (discussed above) that teachers are an invisible hand that shapes relationships between students in their classroom (Farmer et al., 2011, 2019), this has inspired some intervention approaches. Because of findings in community samples that teachers' naturalistic behaviors toward individual students (e.g., liking, criticism, praise) may predict peers' subsequent judgments about those students (Hughes & Im, 2016; Sette et al., 2020), some researchers have wondered if the teacher's behavior could be leveraged to address peer relationship problems in children with ADHD. However, these existing studies assess the results of teachers' natural positivity toward children and thus have a different methodology than an intervention that tries to encourage teachers to like children with ADHD, who teachers may not naturally already like.

In the Making Socially Accepting Classrooms (MOSAIC) program (Mikami et al., *in press*, 2020b), consultants recommend that teachers enact strategies to help demonstrate to peers that children with ADHD have social value. For instance, teachers are encouraged to point out genuine positive attributes in children with ADHD or to take personalized one-on-one time to get to know the child with ADHD and that child's interests. Other MOSAIC strategies encourage teachers to better manage children's problematic behaviors, but the idea is that the strategies to encourage peers' inclusiveness are also necessary. A pilot study of MOSAIC that took place in a 2-week, nonacademic summer program demonstrated that previously unacquainted peers were more likely to befriend, and not reject, children with ADHD on sociometric measures if they were randomized to receive MOSAIC versus behavioral management (Mikami et al., 2013). On the other hand, recent work testing a school-based version of MOSAIC relative to typical practice in general education elementary school classrooms has found some diverse results (Mikami et al., *in press*). Receiving MOSAIC (vs. typical practice) was associated with better teacher-rated social and academic competencies, and lower impairments, in all children. However, for the at-risk group of children with elevated ADHD symptoms, there were additional mixed findings. This group of children perceived their relationships with their teachers to be better in MOSAIC classrooms, but peers also gave more negative sociometric judgments to these children in MOSAIC classrooms. We wonder if peers did not believe the teaching strategies that were meant to demonstrate that the teacher valued children with ADHD, or if peers became resentful seeing children with ADHD behavior problems receiving positive attention from teachers. We are undertaking future work to better understand this result.

In Parental Friendship Coaching (Mikami et al., 2020a), the parent is also taught to network with other parents, with the goal of helping to build friendships for the

child with ADHD. The idea is to increase social connections for the child through the parent's connections. Parent networking also has the goal of helping other families to gain a more positive impression of the child with ADHD through viewing the parent of the child with ADHD as knowledgeable and likable. However, the efficacy of this aspect of the intervention has not been tested individually, relative to the other aspects of Parental Friendship Coaching that focus on parents reinforcing children's display of socially skilled behaviors in the heat of the moment.

In summary, although there are intriguing approaches to addressing the peer group influences, there is limited empirical evidence for any of these approaches at the current time for preventing or treating the peer relationship problems of children with ADHD, at least when the outcome variable is peer sociometric measures. Thus, the best way to address the peer rejection and friendship problems of children with ADHD remains perplexing.

Case Study

Herein, we provide an illustrative case study of the assessment and treatment of peer relationship problems in a child with ADHD. This child represents a combination of many children that we have seen clinically over the years.

Julia, aged 9, is in the fourth grade. She lives with her parents and a younger brother who is 7 years old. Julia was diagnosed with ADHD (combined presentation) 3 years ago, and she is taking stimulant medication. Her parents and teachers report that the medication has helped to reduce some of her ADHD symptoms and ODD behaviors and has helped homework go more smoothly. However, Julia continues to have problems with peer rejection and with making and keeping friends.

The issues with peer relationships have been ongoing since Julia was in preschool. When Julia plays games with peers, she is bossy and tends to control the situation. For instance, she likes to tell peers where to move their pieces. When peers get annoyed by this, Julia does not seem to notice and will persist in her behavior, even as peers get progressively more annoyed. She is a poor sport and if she is losing, Julia will change the rules of the game to advantage her. When things do not go her way, she experiences strong negative emotions and does not regulate them well, resulting in meltdowns. At school, Julia has difficulty waiting her turn to speak or engaging in the academic task at hand. Therefore, she often is corrected by the teacher. The class frequently hears the teacher say, "when Julia puts her things away then everyone can go to lunch." This leads to peers urging "Julia, HURRY UP." When the teacher puts children into teams for projects, most students do not want to work with Julia. The teacher therefore repeatedly pairs Julia with the one or two children who do not actively complain about having her as a partner. Outside school, Julia is not invited to birthday parties and playdates the way that other children are. Julia's parents feel uncomfortable talking with the parents of her classmates because they think that other families have heard negative things about Julia. For example, one day when Julia's mom was picking her up after school, another

child pointed to Julia and told her dad “*that’s her,*” to which the dad’s response was “shhhhhh.” Julia’s parents worry that other parents at the school blame them for Julia’s problematic behaviors.

Crucially, Julia is at the age where she is starting to notice her peer relationship problems. Julia has been bothering her parents recently to buy her certain things (e.g., brand name jeans, bracelets) that popular girls in her classroom have, and when her parents refuse, she throws a temper tantrum. Julia’s parents think that this is because she wants to be socially accepted by her peers. Recently in her classroom, the teacher intercepted students passing around a note that said “if you don’t like Julia, sign here.” The note had nearly reached Julia and almost everyone had signed. When the teacher tells Julia’s parents about the note, it makes her parents very concerned about what Julia’s peer relationships will be like in adolescence. This motivates them to speak to their family doctor, who refers them to a clinical psychologist who specializes in ADHD.

The psychologist first conducts an assessment to understand the peer relationship problems that Julia experiences and potential contributors to these problems. In an interview, Julia’s parents and teacher all report that they perceive her to be disliked by the majority of her classmates, and they relate the event with the note that led to the current referral. To assess problematic social behaviors, the psychologist asks Julia’s parents and her teacher to complete the SSIS, which provides a taxonomy of the social skills Julia does and does not demonstrate. All informants report Julia to have significant social skills problems, most particularly in the areas of cooperating with peers and controlling negative behaviors. The psychologist also asks Julia’s parents and teachers if Julia has any friends and who those friends might be. The teacher says that she sees Julia play with another child sometimes, Eileen. This is one of the two children with whom the teacher pairs Julia for groupwork because Eileen is relatively easy-going and does not complain about the pairing. The teacher is not sure how much Eileen likes Julia, but they seem to tolerate each other. Julia’s parents say that to their knowledge, Julia does not have any friends and has not had a playdate in years. They do not know who she talks to at school.

To assess peer-group social dynamics, the psychologist also asks Julia’s parents and teacher to what extent they perceive that Julia has a negative reputation within her peer group. All informants endorse this idea strongly. When asked to elaborate, the teacher says that even when a new child joined the class, it seemed that the new child was quickly told to stay away from Julia. The teacher thinks that children avoid associating with Julia because she is always in trouble and that might get them in trouble too. The parents think that Julia is known as the “bad kid” at her school so other parents decline to invite her over to their house.

In an interview with Julia, the psychologist asks her to describe what she likes and what she doesn’t like about the other kids at school, how they treat her, and whether she has a best friend. Julia says that other kids at school are mean to her sometimes, but she does report that Eileen is her best friend. When asked more about their friendship, Julia says that she and Eileen like to play the same games and that they are close friends who get along well.

The psychologist then makes a visit to Julia's school to observe Julia during two periods: an academic activity where children are moving between different workstations and lunch recess. The psychologist notices that Julia has a lot of problematic behaviors that are difficult for the teacher to manage. That is, Julia infrequently follows directions and she needs multiple reminders to stay on task. Julia does not always respond well to the teacher's instructions and will sometimes argue back defiantly. Although the teacher is always professional, it is apparent that she gets exasperated with Julia at times. Second, the psychologist notices that at lunch recess, Julia bounces from one peer group to another, and in each case the group ignores her. Julia does not pick up on these cues, and she tries to tell peers how they should be playing, until peers say she can't play with them. Finally, Julia finds Eileen, who is sitting by herself on the sidelines. The two of them play together until the end of recess.

Based on these data, the psychologist puts together a treatment plan, which contains components to address both the problematic social behaviors that Julia displays and also the peer group social dynamics. To address Julia's problematic behaviors, the psychologist recruits Julia's parents to practice game-playing skills with Julia. Specifically, they work on Julia following the rules of the game and letting others move their own pieces, by reminding her that "other people like to play for themselves. It's being a good friend if you let them make their own moves." They also work on Julia's emotion regulation and her calming down when upset if things are not going her way in the game. For instance, they try deep breathing and helpful cognitions like saying "it's just a game, what's more important is to be friends." Finally, they work on recognition of social cues by role-playing examples of when the other person is upset, or bored. Julia's parents are told to practice these skills by instituting a family game night. Interestingly, they used to do this but stopped several years ago because Julia's behavior during games made the experience aversive. However, the psychologist encourages the parents to try again so that Julia, by interacting with her parents and younger brother, can have a context in which to learn and practice social skills.

To address the peer group social dynamics, the psychologist talks with the teacher about how the teacher's frustration with Julia, while entirely understandable, may be reinforcing peers' negative perceptions about Julia. The teacher reflects on this idea and says this has not been her intention, but she understands why this would occur. She says that she genuinely finds it difficult to manage Julia's behavior and sometimes is at a loss for what to do. The psychologist suggests two things. First, the psychologist helps the teacher devise a behavior plan for Julia so that her behaviors will be more under control. Second, the psychologist recommends that the teacher spend some one-on-one time getting to know Julia and the things she likes to do, to build a more positive teacher-student relationship. The idea is that this will serve as money in the bank for the times when the teacher does need to correct Julia's behavior.

In addition, the psychologist encourages Julia's parents to foster friendship with Eileen. Based on what the psychologist saw at school, Eileen may be somewhat shy, but she seemed amenable to playing with Julia. First, Julia's parents are encouraged

to make contact with Eileen's parents, perhaps at a school event or at a pickup after school. The parents are advised to not put too much pressure on the relationship at first and to just say hello. After some time, Julia's parents might explore having a playdate with Julia and Eileen. An easy, supervised one could be for Julia's mom or dad to pick up both girls after school and stop for ice cream on the way home, for a special treat. This opens the door to a potential friendship between Julia and Eileen. In the context of the friendship, Julia can have more opportunities to learn and practice the social skills on which her parents are working at home.

Conclusion

The peer rejection and friendship difficulties of children with ADHD are significant and, in many cases, resistant to intervention. In this chapter, we presented a framework for understanding peer relationship problems that, importantly, considers both the problem behaviors in children with ADHD and also the peer group social dynamics. Existing work has more typically focused on problematic social behaviors in children with ADHD as explaining their peer relationship problems, whereas the consideration of peer group social dynamics is more understudied to date. Thus, considering both these factors in assessment, and intervention planning, represents an innovative approach that integrates service delivery at the level of the child with ADHD with that at the level of the peer group. We argue that such an approach will help our field most comprehensively address peer relationship difficulties in ADHD populations.

References

- Abikoff, H. B. (2009, June 24). ADHD psychosocial treatments: Generalization reconsidered. *Journal of Attention Disorders, 13*(3), 207–210. <https://doi.org/10.1177/1087054709333385>
- Abikoff, H. B., Hechtman, L., Klein, R. G., Gallagher, R., Fleiss, K., Etcovitch, J. O. Y., Cousins, L., Greenfield, B., Martin, D., & Pollack, S. (2004). Social functioning in children with ADHD treated with long-term methylphenidate and multimodal psychosocial treatment. *Journal of the American Academy of Child and Adolescent Psychiatry, 43*(7), 820–829. <https://doi.org/10.1097/01.chi.0000128797.91601.1a>
- Abikoff, H. B., Jensen, P. S., Arnold, L. E., Hoza, B., Hechtman, L., Pollack, S., Martin, D., Alvir, J., March, J. S., Hinshaw, S., Vitiello, B., Newcorn, J., Greiner, A., Cantwell, D. P., Conners, C. K., Elliott, G., Greenhill, L. L., Kraemer, H., Pelham, W. E., ... Wigal, T. (2002). Observed classroom behavior of children with ADHD: Relationship to gender and comorbidity. *Journal of Abnormal Child Psychology, 30*(4), 349–359. <https://doi.org/10.1023/a:1015713807297>
- Achenbach, T. M., & Rescorla, L. A. (2001). *Manual for the ASEBA school-age forms & profiles*. University of Vermont, Research Center for Children, Youth, and Families.
- Aduen, P. A., Day, T. N., Kofler, M. J., Harmon, S. L., Wells, E. L., & Sarver, D. E. (2018). Social problems in ADHD: Is it a skills acquisition or performance problem? *Journal of Psychopathology and Behavioral Assessment, 40*, 440–451. <https://doi.org/10.1007/s10862-018-9649-7>

- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Author.
- Bagwell, C. L., Molina, B. S. G., Pelham, W. E., & Hoza, B. (2001). Attention-deficit hyperactivity disorder and problems in peer relations: Predictions from childhood to adolescence. *Journal of the American Academy of Child and Adolescent Psychiatry*, *40*(11), 1285–1292. <https://doi.org/10.1097/00004583-200111000-00008>
- Barkley, R. A. (1997). Behavioral inhibition, sustained attention, and executive functions: Constructing a unifying theory of ADHD. *Psychological Bulletin*, *121*(1), 65–94. <https://doi.org/10.1037/0033-2909.121.1.65>
- Barkley, R. A. (2002). ADHD—Long-term course, adult outcome, and comorbid disorders. In *Attention deficit hyperactivity disorder: State of the science—best practices* (pp. 4–12). Civic Research Institute.
- Bauermeister, J. J., Matos, M., Reina, G., Salas, C. C., Martínez, J. V., Cumba, E., & Barkley, R. A. (2005). Comparison of the DSM-IV combined and inattentive types of ADHD in a school-based sample of Latino/Hispanic children. *Journal of Child Psychology and Psychiatry*, *46*(2), 166–179. <https://doi.org/10.1111/j.1469-7610.2004.00343.x>
- Becker, S. P., Luebke, A. M., & Langberg, J. M. (2012). Co-occurring mental health problems and peer functioning among youth with Attention-Deficit/Hyperactivity Disorder: A review and recommendations for future research. *Clinical Child and Family Psychology Review*, *15*(4), 279–302. <https://doi.org/10.1007/s10567-012-0122-y>
- Bishop, C., Mulraney, M., Rinehart, N., & Sciberras, E. (2019). An examination of the association between anxiety and social functioning in youth with ADHD: A systematic review. *Psychiatry Research*, *273*, 402–421. <https://doi.org/10.1016/j.psychres.2019.01.039>
- Blachman, D. R., & Hinshaw, S. P. (2002). Patterns of friendship among girls with and without attention-deficit/hyperactivity disorder. *Journal of Abnormal Child Psychology*, *30*(6), 625–640. <https://doi.org/10.1023/a:1020815814973>
- Boor-Klip, H. J., Segers, E., Hendrickx, M. M., & Cillessen, A. H. (2017). The moderating role of classroom descriptive norms in the association of student behavior with social preference and popularity. *The Journal of Early Adolescence*, *37*(3), 387–413. <https://doi.org/10.1177/0272431615609158>
- Brey, E., & Shutts, K. (2018). Children use nonverbal cues from an adult to evaluate peers. *Journal of Cognition and Development*, *19*(2), 121–136. <https://doi.org/10.1080/15248372.2018.1449749>
- Bronfenbrenner, U. (1992). Ecological systems theory. In V. Ross (Ed.), *Six theories of child development: Revised formulations and current issues* (pp. 187–249). Jessica Kingsley Publishers.
- Buhs, E. S., Ladd, G. W., & Herald, S. L. (2006). Peer exclusion and victimization: Processes that mediate the relation between peer group rejection and children's classroom engagement and achievement? *Journal of Educational Psychology*, *98*(1), 1–13. <https://doi.org/10.1037/0022-0663.98.1.1>
- Bukowski, W. M., Hoza, B., & Newcomb, A. F. (1994). Using rating scale and nomination techniques to measure friendship and popularity. *Journal of Social and Personal Relationships*, *11*(3), 485–488. <https://doi.org/10.1177/0265407594113012>
- Canu, W. H., Tabor, L. S., Michael, K. D., Bazzini, D. G., & Elmore, A. L. (2014). Young adult romantic couples' conflict resolution and satisfaction varies with partner's Attention-Deficit/Hyperactivity Disorder type. *Journal of Marital and Family Therapy*, *40*(4), 509–524. <https://doi.org/10.1111/jmft.12018>
- Cappella, E., Kim, H. Y., Neal, J. W., & Jackson, D. R. (2013). Classroom peer relationships and behavioral engagement in elementary school: The role of social network equity. *American Journal of Community Psychology*, *52*(3-4), 367–379. <https://doi.org/10.1007/s10464-013-9603-5>
- Chang, L., Liu, H., Fung, K. Y., Wang, Y., Wen, Z., Li, H., & Farver, J. A. M. (2007). The mediating and moderating effects of teacher preference on the relations between students' social behaviors and peer acceptance. *Merrill-Palmer Quarterly*, *53*(4), 603–630. <https://doi.org/10.1353/mpq.2008.0006>

- Chang, L., Liu, H., Wen, Z., Fung, K. Y., Wang, Y., & Xu, Y. (2004). Mediating teacher liking and moderating authoritative teaching on Chinese adolescents' perceptions of antisocial and prosocial behaviors. *Journal of Educational Psychology, 96*(2), 369–380. <https://doi.org/10.1037/0022-0663.96.2.369>
- Coie, J. D., Dodge, K. A., & Coppotelli, H. (1982). Dimensions and types of social status: A cross-age perspective. *Developmental Psychology, 18*(4), 557–570. <https://doi.org/10.1037/0012-1649.18.4.557>
- Connor, D. F., Steeber, J., & McBurnett, K. (2010). A review of attention-deficit/hyperactivity disorder complicated by symptoms of oppositional defiant disorder or conduct disorder. *Journal of Developmental & Behavioral Pediatrics, 31*(5), 427–440. <https://doi.org/10.1097/DBP.0b013e3181e121bd>
- Cordier, R., Bundy, A., Hocking, C., & Einfeld, S. (2010). Comparison of the play of children with attention deficit hyperactivity disorder by subtypes. *Australian Occupational Therapy Journal, 57*(2), 137–145. <https://doi.org/10.1111/j.1440-1630.2009.00821.x>
- Corrigan, P., Markowitz, F. E., Watson, A., Rowan, D., & Kubiak, M. A. (2003). An attribution model of public discrimination towards persons with mental illness. *Journal of Health and Social Behavior, 162*–179. <https://doi.org/10.2307/1519806>
- Denham, S. A., & Holt, R. W. (1993). Preschoolers' likability as cause or consequence of their social behavior. *Developmental Psychology, 29*(2), 271. <https://doi.org/10.1037/0012-1649.29.2.271>
- Diamantopoulou, S., Rydell, A.-M., Thorell, L. B., & Bohlin, G. (2007). Impact of executive functioning and symptoms of attention deficit hyperactivity disorder on children's peer relations and school performance. *Developmental Neuropsychology, 32*(1), 521–542. <https://doi.org/10.1080/87565640701360981>
- Dishion, T. J., & Kavanagh, K. (2003). *Intervening in adolescent problem behavior: A family-centered approach*. Guilford.
- Dong, Q., Garcia, B., Pham, A. V., & Cumming, M. (2020). Culturally responsive approaches for addressing ADHD within multi-tiered systems of support. *Current Psychiatry Reports, 22*, 1–10. <https://doi.org/10.1007/s11920-020-01154-3>
- DuPaul, G. J., McGoey, K. E., Eckert, T. L., & VanBrakle, J. (2001). Preschool children with attention-deficit/hyperactivity disorder: Impairments in behavioral, social, and school functioning. *Journal of the American Academy of Child & Adolescent Psychiatry, 40*(5), 508–515. <https://doi.org/10.1097/00004583-200105000-00009>
- DuPaul, G. J., Weyandt, L. L., & Janusis, G. M. (2011). ADHD in the classroom: Effective intervention strategies. *Theory Into Practice, 50*(1), 35–42. <https://doi.org/10.1080/00405841.2011.534935>
- Elkins, I. J., Malone, S., Keyes, M., Iacono, W. G., & McGue, M. (2011). The impact of attention-deficit/hyperactivity disorder on preadolescent adjustment may be greater for girls than for boys. *Journal of Clinical Child & Adolescent Psychology, 40*(4), 532–545.
- Erhardt, D., & Hinshaw, S. P. (1994). Initial sociometric impressions of attention-deficit hyperactivity disorder and comparison boys: Predictions from social behaviors and from nonbehavioral variables. *Journal of Consulting and Clinical Psychology, 62*(4), 833–842. <https://doi.org/10.1037/0022-006x.62.4.833>
- Evans, S. W., Owens, J. S., Wymbs, B. T., & Ray, A. R. (2018). Evidence-based psychosocial treatments for children and adolescents with attention deficit/hyperactivity disorder. *Journal of Clinical Child and Adolescent Psychology, 47*(2), 157–198. <https://doi.org/10.1080/15374416.2017.1390757>
- Farmer, T. W., Hamm, J. V., Dawes, M., Barko-Alva, K., & Cross, J. R. (2019). Promoting inclusive communities in diverse classrooms: Teacher attunement and social dynamics management. *Educational Psychologist, 54*(4), 286–305. <https://doi.org/10.1080/00461520.2019.1635020>
- Farmer, T. W., Lines, M. M., & Hamm, J. V. (2011). Revealing the invisible hand: The role of teachers in children's peer experiences. *Journal of Applied Developmental Psychology, 32*(5), 247–256. <https://doi.org/10.1016/j.appdev.2011.04.006>
- Frankel, F., & Mintz, J. (2011). Maternal reports of play dates of clinic referred and community children. *Journal of Child and Family Studies, 20*(5), 623–630. <https://doi.org/10.1007/s10826-010-9437-9>

- Frankel, F., Myatt, R., Cantwell, D. P., & Feinberg, D. T. (1997). Parent-assisted transfer of children's social skills training: Effects on children with and without attention-deficit hyperactivity disorder. *Journal of the American Academy of Child and Adolescent Psychiatry*, 36(8), 1056–1064. <https://doi.org/10.1097/00004583-199708000-00013>
- García Bacete, F. J., Carrero, V. E., Marande, G., & Musitu, G. (2017). Understanding rejection between first and second grade elementary students through reasons expressed by rejecters. *Frontiers in Psychology*, 8, 1–13. <https://doi.org/10.3389/fpsyg.2017.00462>
- Gardner, D. M., & Gerdes, A. C. (2015). A review of peer relationships and friendships in youth with ADHD. *Journal of Attention Disorders*, 19(10), 844–855. <https://doi.org/10.1177/1087054713501552>
- Gardner, D. M., Gerdes, A. C., & Weinberger, K. (2019). Examination of a parent-assisted, friendship-building program for adolescents with ADHD. *Journal of Attention Disorders*, 23(4), 363–373. <https://doi.org/10.1177/1087054715588188>
- Germanò, E., Gagliano, A., & Curatolo, P. (2010). Comorbidity of ADHD and dyslexia. *Developmental Neuropsychology*, 35(5), 475–493. <https://doi.org/10.1080/87565641.2010.494748>
- Goodman, R. (2001). Psychometric properties of the Strengths and Difficulties Questionnaire. *Journal of the American Academy of Child & Adolescent Psychiatry*, 40(11), 1337–1345. <https://doi.org/10.1097/00004583-200111000-00015>
- Gresham, F. M., & Elliott, S. N. (2008). *Social skills improvement system-rating scales*. Pearson Assessments.
- Grunspan, D. Z., Wiggins, B. L., & Goodreau, S. M. (2014). Understanding classrooms through social network analysis: A primer for social network analysis in education research. *CBE Life Sciences Education*, 13(2), 167–178.
- Hinshaw, S. P. (2002). Preadolescent girls with attention-deficit/hyperactivity disorder: I. Background characteristics, comorbidity, cognitive and social functioning, and parenting practices. *Journal of Consulting and Clinical Psychology*, 70(5), 1086–1098. <https://doi.org/10.1037/0022-006x.70.5.1086>
- Hinshaw, S. P., & Blachman, D. R. (2005). Attention-deficit/hyperactivity disorder in girls. In D. Bell-Dolan, S. Foster, & E. J. Mash (Eds.), *Behavioral and emotional problems in girls*. Kluwer Academic/Plenum.
- Hinshaw, S. P., Henker, B., Whalen, C. K., Erhardt, D., & Dunnington, R. E., Jr. (1989). Aggressive, prosocial, and nonsocial behavior in hyperactive boys: Dose effects of methylphenidate in naturalistic settings. *Journal of Consulting and Clinical Psychology*, 57(5), 636–643. <https://doi.org/10.1037/0022-006x.57.5.636>
- Hodgens, J. B., Cole, J., & Boldizar, J. (2000). Peer-based differences among boys with ADHD. *Journal of Clinical Child Psychology*, 29(3), 443–452. https://doi.org/10.1207/s15374424jccp2903_15
- Hoza, B. (2007). Peer functioning in children with ADHD. *Ambulatory Pediatrics*, 7(1 Suppl), 101–106. <https://doi.org/10.1016/j.amp.2006.04.011>
- Hoza, B., Gerdes, A. C., Mrug, S., Hinshaw, S. P., Bukowski, W. M., Gold, J. A., Arnold, L. E., Abikoff, H. B., Conners, C. K., Elliott, G. R., Greenhill, L. L., Hechtman, L., Jensen, P. S., Kraemer, H. C., March, J. S., Newcorn, J. H., Severe, J. B., Swanson, J. M., Vitiello, B., ... Wigal, T. (2005a). Peer-assessed outcomes in the multimodal treatment study of children with attention deficit hyperactivity disorder. *Journal of Clinical Child and Adolescent Psychology*, 34(1), 74–86. https://doi.org/10.1207/s15374424jccp3401_7
- Hoza, B., Mrug, S., Gerdes, A. C., Hinshaw, S. P., Bukowski, W. M., Gold, J. A., Kraemer, H. C., Pelham, W. E., Jr., Wigal, T., & Arnold, L. E. (2005b). What aspects of peer relationships are impaired in children with attention-deficit/hyperactivity disorder? *Journal of Consulting and Clinical Psychology*, 73(3), 411–423. <https://doi.org/10.1037/0022-006x.73.3.411>
- Hoza, B., Murray-Close, D., Arnold, L. E., Hinshaw, S. P., & Hechtman, L. (2010). Time-dependent changes in positively biased self-perceptions of children with attention-deficit/hyperactivity disorder: A developmental psychopathology perspective. *Development and Psychopathology*, 22(2), 375–390. <https://doi.org/10.1017/s095457941000012x>

- Hoza, B., Pelham, W. E., Dobbs, J., Owens, J. S., & Pillow, D. R. (2002). Do boys with attention-deficit/hyperactivity disorder have positive illusory self-concepts? *Journal of Abnormal Psychology, 111*(2), 268–278. <https://doi.org/10.1037/0021-843x.111.2.268>
- Hoza, B., Waschbusch, D. A., Pelham, W. E., Molina, B. S., & Milich, R. (2000). Attention-deficit/hyperactivity disorder and control boys' responses to social success and failure. *Child Development, 71*(2), 432–446. <https://doi.org/10.1111/1467-8624.00155>
- Hughes, J. N., & Im, M. H. (2016). Teacher–student relationship and peer disliking and liking across grades 1–4. *Child Development, 87*(2), 593–611. <https://doi.org/10.1111/cdev.12477>
- Hutchins, T. L., Prelock, P. A., Morris, H., Benner, J., LaVigne, T., & Hoza, B. (2016). Explicit vs. applied theory of mind competence: A comparison of typically developing males, males with ASD, and males with ADHD. *Research in Autism Spectrum Disorders, 21*, 94–108. <https://doi.org/10.1016/j.rasd.2015.10.004>
- Hymel, S., Wagner, E., & Butler, L. J. (1990). Reputational bias: View from the peer group. In S. R. Asher & J. D. Coie (Eds.), *Peer rejection in childhood* (pp. 156–186). Cambridge University Press.
- Jackson, D. R., Cappella, E., & Neal, J. W. (2015). Aggression norms in the classroom social network: Contexts of aggressive behavior and social preference in middle childhood. *American Journal of Community Psychology, 56*(3), 293–306. <https://doi.org/10.1007/s10464-015-9757-4>
- Karustis, J. L., Power, T. J., Rescorla, L. A., Eiraldi, R. B., & Gallagher, P. R. (2000). Anxiety and depression in children with ADHD: Unique associations with academic and social functioning. *Journal of Attention Disorders, 4*(3), 133–149. <https://doi.org/10.1177/108705470000400301>
- Kellison, I., Bussing, R., Bell, L., & Garvan, C. (2010). Assessment of stigma associated with attention-deficit hyperactivity disorder: Psychometric evaluation of the ADHD Stigma Questionnaire. *Psychiatry Research, 178*(2), 363–369. <https://doi.org/10.1016/j.psychres.2009.04.022>
- Lee, S., Burns, G. L., & Becker, S. P. (2017). Can sluggish cognitive tempo be distinguished from ADHD inattention in very young children? Evidence from a sample of Korean preschool children. *Journal of Attention Disorders, 21*(8), 623–631. <https://doi.org/10.1177/1087054716680077>
- Long, N., & Edwards, M. (1994). The use of a daily report card to address children's school behavior problems. *Contemporary Education, 65*(3), 152.
- Maedgen, J. W., & Carlson, C. L. (2000). Social functioning and emotional regulation in the attention deficit hyperactivity disorder subtypes. *Journal of Clinical Child Psychology, 29*(1), 30–42. https://doi.org/10.1207/S15374424jccp2901_4
- Marshal, M. P., Molina, B. S. G., & Pelham, W. E. (2003). Childhood ADHD and adolescent substance use: An examination of deviant peer group affiliation as a risk factor. *Psychology of Addictive Behaviors, 17*(4), 293–302. <https://doi.org/10.1037/0893-164x.17.4.293>
- Masten, A. S., Morison, P., & Pellegrini, D. S. (1985). A revised class play method of peer assessment. *Developmental Psychology, 21*(3), 523–533.
- Mayes, S. D., Calhoun, S. L., Chase, G. A., Mink, D. M., & Stagg, R. E. (2009). ADHD subtypes and co-occurring anxiety, depression, and oppositional-defiant disorder: Differences in Gordon diagnostic system and Wechsler working memory and processing speed index scores. *Journal of Attention Disorders, 12*(6), 540–550.
- McAuliffe, M., Hubbard, J., & Romano, L. (2009). The role of teacher cognition and behavior in children's peer relations. *Journal of Abnormal Child Psychology, 37*(5), 665–677. <https://doi.org/10.1007/s10802-009-9305-5>
- Mikami, A. Y., Griggs, M. S., Lerner, M. D., Emeh, C. C., Reuland, M. M., Jack, A., & Anthony, M. R. (2013). A randomized trial of a classroom intervention to increase peers' social inclusion of children with Attention-Deficit/Hyperactivity Disorder. *Journal of Consulting and Clinical Psychology, 81*(1), 100–112. <https://doi.org/10.1037/a0029654>
- Mikami, A. Y., & Hinshaw, S. P. (2006). Resilient adolescent adjustment among girls: Buffers of childhood peer rejection and attention-deficit/hyperactivity disorder. *Journal of Abnormal Child Psychology, 34*(6), 823–837. <https://doi.org/10.1007/s10802-006-9062-7>
- Mikami, A. Y., Hinshaw, S. P., Patterson, K. A., & Lee, J. C. (2008). Eating pathology among adolescent girls with attention-deficit/hyperactivity disorder. *Journal of Abnormal Psychology, 117*(1), 225–235. <https://doi.org/10.1037/0021-843x.117.1.225>

- Mikami, A. Y., Huang-Pollock, C. L., Pfiffner, L. J., McBurnett, K., & Hangai, D. (2007). Social skills differences among attention-deficit/hyperactivity disorder types in a chat room assessment task. *Journal of Abnormal Child Psychology*, 35(4), 509–521. <https://doi.org/10.1007/s10802-007-9108-5>
- Mikami, A. Y., Jia, M., & Na, J. J. (2014). Social skills training. *Child and Adolescent Psychiatric Clinics of North America*, 23(4), 775–788.
- Mikami, A. Y., Lerner, M. D., Griggs, M. S., McGrath, A., & Calhoun, C. D. (2010). Parental influence on children with attention-deficit/hyperactivity disorder: II. Results of a pilot intervention training parents as friendship coaches for children. *Journal of Abnormal Child Psychology*, 38(6), 737–749. <https://doi.org/10.1007/s10802-010-9403-4>
- Mikami, A. Y., & Lorenzi, J. (2011). Gender and conduct problems predict peer functioning among children with attention-deficit/hyperactivity disorder. *Journal of Clinical Child & Adolescent Psychology*, 40(5), 777–786. <https://doi.org/10.1080/15374416.2011.597089>
- Mikami, A. Y., Miller, M., & Lerner, M. D. (2019). Social functioning in youth with attention-deficit/hyperactivity disorder and autism spectrum disorder: Transdiagnostic commonalities and differences. *Clinical Psychology Review*, 68, 54–70.
- Mikami, A. Y., & Normand, S. (2015). The importance of social contextual factors in peer relationships of children with ADHD. *Current Developmental Disorders Reports*, 2(1), 30–37. <https://doi.org/10.1007/s40474-014-0036-0>
- Mikami, A. Y., Normand, S., Hudec, K. L., Guet, J., Na, J. J., Smit, S., Khalis, A., & Maisonneuve, M. F. (2020a). Treatment of friendship problems in children with Attention-Deficit/Hyperactivity Disorder: Initial results from a randomized clinical trial. *Journal of Consulting and Clinical Psychology*, 88(10), 871–885. <https://doi.org/10.1037/ccp0000607>
- Mikami, A. Y., Owens, J. S., Evans, S. W., Hudec, K. L., Kassab, H., Smit, S., Na, J. J., & Khalis, A. (in press). Promoting classroom social and academic functioning among children at risk for ADHD: The Making Socially Accepting Inclusive Classrooms Program. *Journal of Clinical Child and Adolescent Psychology*. <https://doi.org/10.1080/15374416.2021.1929250>
- Mikami, A. Y., Owens, J. S., Hudec, K. L., Kassab, H., & Evans, S. W. (2020b). Classroom strategies designed to reduce child problem behavior and increase peer inclusiveness: Does teacher use predict students' sociometric ratings? *School Mental Health*, 12, 250–264. <https://doi.org/10.1007/s12310-019-09352-y>
- Mikami, A. Y., Szwedo, D. E., Ahmad, S. I., Samuels, A. S., & Hinshaw, S. P. (2015). Online social communication patterns among emerging adult women with histories of childhood attention-deficit/hyperactivity disorder. *Journal of Abnormal Psychology*, 124(3), 576–588. <https://doi.org/10.1037/abn0000053>
- Milich, R., Balentine, A. C., & Lynam, D. R. (2001). ADHD combined type and ADHD predominantly inattentive type are distinct and unrelated disorders. *Clinical Psychology: Science and Practice*, 8(4), 463–488. <https://doi.org/10.1093/clipsy.8.4.463>
- Mize, J., & Ladd, G. W. (1990). A cognitive-social learning approach to social skill training with low-status preschool children. *Developmental Psychology*, 26(3), 388–397. <https://doi.org/10.1037/0012-1649.26.3.388>
- Molina, B. S., Walther, C. A., Cheong, J., Pedersen, S. L., Gnagy, E. M., & Pelham, W. E., Jr. (2014). Heavy alcohol use in early adulthood as a function of childhood ADHD: Developmentally specific mediation by social impairment and delinquency. *Experimental and Clinical Psychopharmacology*, 22(2), 110.
- Monjas, M. I., Sureda, I., & García-Bacete, F.-J. (2008). ¿ Por qué los niños y las niñas se aceptan y se rechazan? *Cultura y Educación*, 20(4), 479–492.
- Mrug, S., Hoza, B., Pelham, W. E., Gnagy, E. M., & Greiner, A. R. (2007). Behavior and peer status in children with ADHD: Continuity and change. *Journal of Attention Disorders*, 10(4), 359–371. <https://doi.org/10.1177/1087054706288117>
- Mrug, S., Molina, B. S. G., Hoza, B., Gerdes, A. C., Hinshaw, S. P., Hechtman, L., & Arnold, L. E. (2012). Peer rejection and friendships in children with Attention-Deficit/Hyperactivity Disorder: Contributions to long-term outcomes. *Journal of Abnormal Child Psychology*, 40(6), 1013–1026. <https://doi.org/10.1007/s10802-012-9610-2>

- MTA Cooperative Group. (1999). A 14-month randomized clinical trial of treatment strategies for attention-deficit/hyperactivity disorder. *Archives of General Psychiatry*, *56*(12), 1073–1086. <https://doi.org/10.1001/archpsyc.56.12.1073>
- Murray-Close, D., Hoza, B., Hinshaw, S. P., Arnold, L. E., Swanson, J., Jensen, P. S., Hechtman, L., & Wells, K. (2010). Developmental processes in peer problems of children with attention-deficit/hyperactivity disorder in the Multimodal Treatment Study of Children with ADHD: Developmental cascades and vicious cycles. *Development and Psychopathology*, *22*(4), 785–802. <https://doi.org/10.1017/S0954579410000465>
- Na, J. J., & Mikami, A. Y. (2018). Pre-existing perceptions of ADHD predict children's sociometrics given to classmates with ADHD. *Journal of Child and Family Studies*, *27*(10), 3218–3231. <https://doi.org/10.1007/s10826-018-1147-8>
- Nguyen, P. T., & Hinshaw, S. P. (2020). Understanding the stigma associated with ADHD: Hope for the future? *The ADHD Report*, *28*(5), 1–10.
- Normand, S., Schneider, B., Lee, M., Maisonneuve, M.-F., Kuehn, S., & Robaey, P. (2011). How do children with ADHD (mis)manage their real-life dyadic friendships? A multi-method investigation. *Journal of Abnormal Child Psychology*, *39*(2), 293–305. <https://doi.org/10.1007/s10802-010-9450-x>
- Normand, S., Schneider, B. H., Lee, M. D., Maisonneuve, M.-F., Chupetlovska-Anastasova, A., Kuehn, S. M., & Robaey, P. (2013). Continuities and changes in the friendships of children with and without ADHD: A longitudinal, observational study. *Journal of Abnormal Child Psychology*, *41*(7), 1161–1175. <https://doi.org/10.1007/s10802-013-9753-9>
- O'Driscoll, C., Heary, C., Hennessy, E., & McKeague, L. (2012). Explicit and implicit stigma towards peers with mental health problems in childhood and adolescence. *Journal of Child Psychology and Psychiatry*, *53*(10), 1054–1062.
- Owens, E. B., Zalecki, C., Gillette, P., & Hinshaw, S. P. (2017). Girls with childhood ADHD as adults: Cross-domain outcomes by diagnostic persistence. *Journal of Consulting and Clinical Psychology*, *85*(7), 723–736. <https://doi.org/10.1037/ccp0000217>
- Owens, J., Goldfine, M., Evangelista, N., Hoza, B., & Kaiser, N. (2007). A critical review of self-perceptions and the positive illusory bias in children with ADHD. *Clinical Child and Family Psychology Review*, *10*(4), 335–351. <https://doi.org/10.1007/s10567-007-0027-3>
- Owens, J. S., Holdaway, A. S., Smith, J., Evans, S. W., Himawan, L. K., Coles, E. K., Girio-Herrera, E., Mixon, C. S., Egan, T. E., & Dawson, A. E. (2018). Rates of common classroom behavior management strategies and their associations with challenging student behavior in elementary school. *Journal of Emotional and Behavioral Disorders*, *26*(3), 156–169.
- Peets, K., Hodges, E. V. E., Kikas, E., & Salmivalli, C. (2007). Hostile attributions and behavioral strategies in children: Does relationship type matter? *Developmental Psychology*, *43*(4), 889–900. <https://doi.org/10.1037/0012-1649.43.4.889>
- Pelham, W. E., & Bender, M. E. (1982). Peer relationships in hyperactive children: Description and treatment. In K. D. Gadow & I. Bailer (Eds.), *Advances in learning and behavioral disabilities* (Vol. 1, pp. 365–436). JAI Press.
- Pfiffner, L. J., Mikami, A. Y., Huang-Pollock, C., Easterlin, B., Zalecki, C., & McBurnett, K. (2007). A randomized, controlled trial of integrated home-school behavioral treatment for ADHD, predominantly inattentive type. *Journal of the American Academy of Child and Adolescent Psychiatry*, *46*(8), 1041–1050. <https://doi.org/10.1097/chi.0b013e318064675f>
- Pfiffner, L. J., Rooney, M., Haack, L., Villodas, M., Delucchi, K., & McBurnett, K. (2016). A randomized controlled trial of a school-implemented school-home intervention for Attention-Deficit/Hyperactivity Disorder symptoms and impairment. *Journal of the American Academy of Child and Adolescent Psychiatry*, *55*(9), 762–770. <https://doi.org/10.1016/j.jaac.2016.05.023>
- Quinn, P. O., & Madhoo, M. (2014). A review of attention-deficit/hyperactivity disorder in women and girls: Uncovering this hidden diagnosis. *The Primary Care Companion for CNS Disorders*, *16*(3), PCC.13r01596. <https://doi.org/10.4088/PCC.13r01596>
- Ronk, M. J., Hund, A. M., & Landau, S. (2011, 2011/08/01). Assessment of social competence of boys with Attention-Deficit/Hyperactivity Disorder: Problematic peer entry, host responses, and

- evaluations. *Journal of Abnormal Child Psychology*, 39(6), 829–840. <https://doi.org/10.1007/s10802-011-9497-3>
- Ros, R., & Graziano, P. A. (2018). Social functioning in children with or at risk for attention deficit/hyperactivity disorder: A meta-analytic review. *Journal of Clinical Child & Adolescent Psychology*, 14(2), 213–235. <https://doi.org/10.1080/15374416.2016.1266644>
- Rose, A. J., & Rudolph, K. D. (2006). A review of sex differences in peer relationship processes: Potential trade-offs for the emotional and behavioral development of girls and boys. *Psychological Bulletin*, 132(1), 98–131. <https://doi.org/10.1037/0033-2909.132.1.98>
- Rubin, K. H., Bukowski, W. M., & Bowker, J. C. (2015). Children in peer groups. In R. M. Lerner (Ed.), *Handbook of child psychology and developmental science* (Vol. 5, 7th ed., pp. 322–412). Wiley.
- Sette, S., Gasser, L., & Grütter, J. (2020). Links between teachers' liking of students, peer inclusion, and students' academic achievement: A two-wave longitudinal study. *Journal of Youth and Adolescence*, 49(3), 747–756. <https://doi.org/10.1007/s10964-019-01048-5>
- Sibley, M. H., Evans, S. W., & Serpell, Z. N. (2010). Social cognition and interpersonal impairment in young adolescents with ADHD. *Journal of Psychopathology and Behavioral Assessment*, 32(2), 193–202. <https://doi.org/10.1007/s10862-009-9152-2>
- Simonsen, B., Fairbanks, S., Briesch, A., Myers, D., & Sugai, G. (2008). Evidence-based practices in classroom management: Considerations for research to practice. *Education and Treatment of Children*, 31(3), 351–380. Retrieved from <https://doi.org/www.jstor.org/stable/42899983>
- Smit, S., Mikami, A. Y., & Normand, S. (2022). Effects of the Parental Friendship Coaching Intervention on parental emotion socialization of children with ADHD. *Research on Child and Adolescent Psychopathology*, 50, 101–115. <https://doi.org/10.1007/s10802-021-00818-9>
- Solanto, M. V., Pope-Boyd, S. A., Tryon, W. W., & Stepak, B. (2009). Social functioning in predominantly inattentive and combined subtypes of children with ADHD. *Journal of Attention Disorders*, 13(1), 27–35. <https://doi.org/10.1177/1087054708320403>
- Stormshak, E. A., Bierman, K. L., Bruschi, C., Dodge, K. A., & Coie, J. D. (1999). The relation between behavior problems and peer preference in different classroom contexts. *Child Development*, 70(1), 169–182. <https://doi.org/10.1111/1467-8624.00013>
- Tseng, W.-L., Kawabata, Y., Gau, S. S.-F., Banny, A. M., Lingras, K. A., & Crick, N. R. (2012). Relations of inattention and hyperactivity/impulsivity to preadolescent peer functioning: The mediating roles of aggressive and prosocial behaviors. *Journal of Clinical Child & Adolescent Psychology*, 41(3), 275–287. <https://doi.org/10.1080/15374416.2012.656556>
- Tseng, W.-L., Kawabata, Y., Gau, S. S.-F., & Crick, N. R. (2014). Symptoms of Attention-Deficit/Hyperactivity Disorder and peer functioning: A transactional model of development. *Journal of Abnormal Child Psychology*, 42(8), 1353–1365. <https://doi.org/10.1007/s10802-014-9883-8>
- Willcutt, E. G. (2012). The prevalence of DSM-IV attention-deficit/hyperactivity disorder: A meta-analytic review. *Neurotherapeutics*, 9(3), 490–499. <https://doi.org/10.1007/s13311-012-0135-8>
- Wullschleger, A., Garrote, A., Schnepel, S., Jaquíery, L., & Moser Opitz, E. (2020). Effects of teacher feedback behavior on social acceptance in inclusive elementary classrooms: Exploring social referencing processes in a natural setting. *Contemporary Educational Psychology*, 60, 101841. <https://doi.org/10.1016/j.cedpsych.2020.101841>

Chapter 11

Mood and Anxiety Disorders in Children and Youth: The Role of Parenting and Child Temperament and Implications for Early Identification and Prevention



Daniel C. Kopala-Sibley

Abstract In this chapter, we review theory and evidence pertaining to the complex associations between parenting, offspring temperament, and offspring risk for internalizing disorders, including major depression and anxiety disorders. Understanding these complex associations is important for multiple reasons. First, a large body of literature has confirmed that individual differences in children's and youths' temperament or personality traits can elucidate which youth are potentially vulnerable to internalizing disorders. More recent research has also begun to clarify the complex pathways and interactions with environmental factors, such as parenting and life stress, through which temperament may confer risk for internalizing disorders. It is also well-established that internalizing disorders are frequently heterogeneous in terms of the nature and severity of symptom presentation. Children's personality traits may be useful in understanding this heterogeneity as certain traits may be associated with a relatively more or less severe presentation or course of a disorder. Moreover, identifying parenting behaviors or styles that confer risk for the development of maladaptive temperament traits may lead to interventions to prevent the development of these maladaptive traits, and potentially mitigate the vulnerability to mood and anxiety disorders. There is additional evidence that personality traits may be useful in tailoring treatment approaches as well as predicting who will best respond best to different therapeutic approaches.

Here, we review specific models pertaining to parenting, temperament, and internalizing disorders grounded in psychoanalytic, humanistic, and cognitive-behavioral perspectives as well as developmental, social, and personality psychologists' theories related to parenting and temperamental development. Throughout this

D. C. Kopala-Sibley (✉)

Department of Psychiatry, University of Calgary, Calgary, AB, Canada

Mathison Centre for Mental Health Research & Education, Calgary, AB, Canada

Alberta Children's Hospital Research Institute, Calgary, AB, Canada

Hotchkiss Brain Institute, Calgary, AB, Canada

e-mail: Daniel.kopalasibley@ucalgary.ca

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chapter, we adopt a dynamic-interactionist framework that considers the complex interactions between these factors, as opposed to models that view one factor as simply an outcome of another. We review evidence regarding the influence of parenting on the development of children's temperamental traits, and evidence that children's traits are not only linked to internalizing symptoms but these traits also predict increases in symptoms over time as well as the onset of diagnosable episodes of internalizing disorders. However, we also review a growing body of literature that suggests children's temperament traits and symptoms influence the parenting they receive, thus creating a pernicious cycle. We then review a large body of research examining diathesis-stress models, or the possibility that individual differences in personality traits may exacerbate or buffer the effects of parenting on psychopathological outcomes. We also consider evidence that mood and anxiety disorders may have a "scarring" effect on children's temperament traits. Additionally, we discuss evidence about "pathoplasty" models, which propose that temperament traits may contribute to the severity or pattern of symptomatology, course, and response to treatment. Next, we discuss implications for clinicians, parents, and educators in terms of the early identification and prevention of mood and anxiety disorders in youth based on the parenting they receive and the nature of their temperamental traits. We conclude with a case example elucidating these complex associations between personality traits, parenting, and the development of internalizing disorders.

Guiding Framework

Internalizing disorders, including depression and anxiety, are the leading causes of burden of disease and among the leading causes of suicide in adolescents (Ferrari et al., 2013). Approximately 75% of depressive or anxiety disorders onset in adolescence (Kessler et al., 2007). Affected youth are at risk for a host of negative psychosocial consequences such as alcohol dependence, suicide attempts, educational underachievement, and unemployment (Fergusson & Woodward, 2002). Moreover, depressive and anxiety disorders are the most costly illnesses worldwide and have a tenfold increase in societal cost if they begin before adulthood (Lee et al., 2014). Thus, understanding factors that confer risk for depression or anxiety is arguably the most pressing health concern in children and adolescents. This is additionally important given that 50% of those who have had one episode of depression or anxiety will experience a second. Of those who have experienced two episodes, 80% will experience a third or more (Burcusa & Iacono, 2007), at which point depression and anxiety are chronic, often treatment-resistant diseases.

In this chapter, we review theory and evidence pertaining to the complex relationships between parenting, offspring temperament, and offspring risk of mood (e.g., major depression) and anxiety disorders (e.g., generalized anxiety disorder, and social phobia). The relations of temperament to internalizing psychopathology are undoubtedly complex and cannot be fully understood via simple comparisons of differences in temperament between depressed and nondepressed individuals or via correlations of temperament with internalizing psychopathology. As such, our

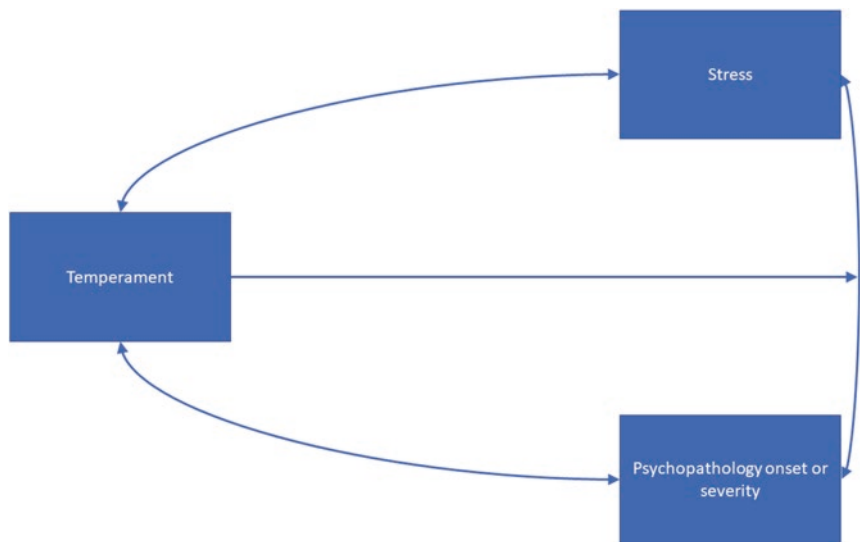


Fig. 11.1 Conceptual depiction of a dynamic interactionist model of the temperament-stress-psycho-pathology relationship

guiding framework is that of dynamic-interactionist models of temperament, the environment, and internalizing psychopathology (see Fig. 11.1) which posit that there are complex and transactional relations among these factors. Zuroff et al. (2004) note that personality/temperament traits are not only statically linked to psychopathology. Rather, temperament likely influences the events that occur in a child's life as well the nature of the child's interpersonal relationships (i.e., stress generation and availability of parental and peer support; Hammen, 2006), and interacts with those events to either buffer or enhance their effects on depression (i.e., diathesis stress, see Fig. 11.2). Dual vulnerability or social push personality-by-environment models argue that maladaptive temperament or elevated stress may confer risk of depression but that low levels of both are necessary for healthy psychological functioning (Morris et al., 2008; Raine, 2002; Fig. 11.2). Moreover, those events and interpersonal relations may feedback into a child's temperament, thereby further altering already maladaptive temperament traits. Similarly, depression or anxiety may feed back into or reinforce maladaptive temperament traits ("scar" or "consequence" models, Fig. 11.1). Individual differences in temperament may not just confer vulnerability to depression and anxiety but also influence the expression and severity of symptoms among depressed or anxious individuals (i.e., pathoplasty). Finally, while temperament is typically considered to be relatively stable over time, it also shows variability over time and across situations. Within-subject variability over time in temperament may relate to fluctuations in depression and mood (Zuroff et al., 2016). As such, a review of the relationship of temperament to internalizing psychopathology requires consideration of these complex, dynamic models.

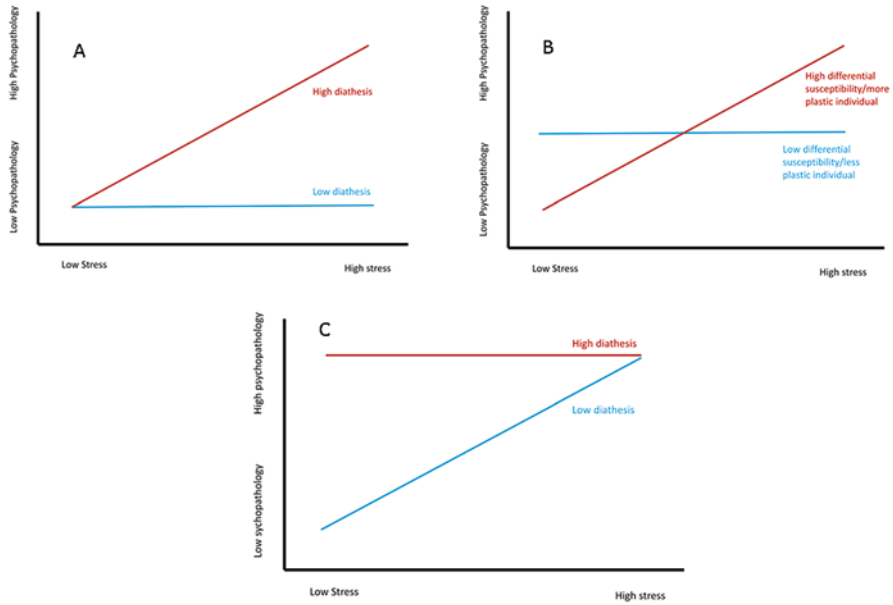


Fig. 11.2 Conceptual depiction of person-by-situation models: (a) the diathesis-stress model, (b) the differential susceptibility model, and (c) the social push model

Understanding these complex relationships is important for multiple reasons. First, a large body of literature has confirmed that individual differences in children's and youths' temperament or personality traits can elucidate which youth are potentially vulnerable to internalizing disorders. More recent research has also begun to clarify the complex pathways and interactions with environmental factors through which temperament may confer risk for internalizing disorders. It is also well-established that internalizing disorders are frequently heterogeneous in terms of the nature and severity of symptom presentation. Children's temperament/personality traits may be useful in understanding this heterogeneity as certain traits may be associated with a relatively more or less severe presentation of a disorder as well as with the course of the disorder. Moreover, identifying parenting behaviors or styles that confer risk for the development of maladaptive temperament traits may lead to interventions to prevent the development of these maladaptive traits, thereby preventing the development of the vulnerability to mood and anxiety disorders. Finally, here is evidence that temperament/personality traits may be useful in tailoring treatment approaches as well as predicting who will best respond to different therapeutic approaches.

Throughout this chapter, we adopt a dynamic-interactionist framework that considers the complex interactions between these factors as opposed to models that view one factor as simply an outcome of another. We review evidence regarding the effects of parenting on the development of children's temperamental traits, and evidence that children's traits are linked to internalizing symptoms, predict increases

over time in symptoms, and predict onsets of diagnosable episodes of internalizing disorders. We also review a growing body of literature which suggests that children's temperament traits and symptoms influence the parenting they receive, thus creating a pernicious cycle. We then review a large body of research examining diathesis-stress models or the possibility that individual differences in temperament traits may exacerbate or buffer the effects of stress on psychopathological outcomes. We also consider evidence that mood and anxiety disorders may have a "scarring" effect on children's temperament traits. We then discuss evidence pertaining to "pathoplasty" models, which propose that temperament traits may contribute to the severity or pattern of symptomatology, course, and response to treatment. We finish by discussing a range of implications of this body of research for parents, teachers, and clinicians in terms of assessment, early identification and intervention for children and youth at risk, and treatment of youth with internalizing psychopathology.

In our review of the literature, we focus on studies that (a) compare individuals with diagnosable levels of internalizing psychopathology to healthy as well as other psychiatric groups, (b) examine temperament predicts the onset of depressive or anxiety episodes, (c) examine whether temperament predicts subclinical levels of psychopathology, and (d) test dynamic models of these relations. Studies on subclinical internalizing symptoms in healthy/community populations are included here because internalizing psychopathology exists on a continuum of severity from nonexistent to mild, moderate, or severe and occurs, to some degree, in nearly all individuals, even if they never meet the criteria for a diagnosable episode (Blatt, 2004). Subthreshold symptoms are also one of the most powerful predictors of later diagnosable episodes (Cuijpers & Smit, 2004). The risk is particularly high in individuals with persistent or recurrent subthreshold symptoms (Klein et al., 2009). In our next section, we discuss a clinical reasoning approach and evidence for these models of the temperament-parenting/stress-psychopathology relationship.

What Is Temperament?

Temperament was originally conceptualized as entirely genetic in origin, emerging early in life, and being relatively stable across development, whereas character or personality were considered individual differences that emerge largely due to socialization experiences (e.g., parenting). However, research has since challenged this view, and temperament is now broadly defined as individual differences in emotional and behavioral style that appear early in life, are influenced by genes, but are also influenced by environmental experiences (Rothbart et al., 2006). Moreover, in the last 20 years, it has become generally recognized that there is no distinction between temperament and personality. They are both genetically and environmentally influenced and show substantial stability over time, although they are relatively more fluid in childhood and adolescence compared to adulthood (Clark & Watson, 1999; Krueger & Johnson, 2008). As such, in this chapter, we review evidence pertaining to both temperament and personality as it relates to the development of mood and anxiety disorders. We, therefore, use the terms "temperament" and "personality" interchangeably.

Models of Temperament

Dating at least to ancient Greece and Hippocrates, theorists have noted there are specific clusters of personality traits such that individual tendencies toward certain behaviors group together. Since the 1980s, the Five-Factor Model of personality has been the most widely-studied model of temperament (Goldberg, 1993; Costa & McCrae, 1992; John & Srivastava, 1999; Klein et al., 2011; Clark & Watson, 1999; Markon et al., 2005). This body of research confirmed, through factor-analytic methods, that a range of adjectives that can be used to describe a person generally cluster under one of five broad constructs: neuroticism, conscientiousness, extraversion, openness to experience, and agreeableness.

Neuroticism is characterized by tendencies towards emotional instability, elevated negative emotions such as anger, sadness, or fear, and increase emotional reactivity following stressful events. Conscientiousness is characterized by attention to detail, following rules, and high levels of self-discipline. Extraversion is characterized by being outgoing, sociable, gregarious, and generally engaging substantially with the outside world. Openness to experience is characterized by a general appreciation for trying new things such as art, adventure, and new ideas. Finally, agreeableness is associated with valuing social harmony and getting along with others.

The Five Factor Model is most commonly studied in adults, while childhood and adolescent researchers frequently study a Big Three model (Caspi & Shiner, 2008; Rothbart et al., 2006) comprised of negative emotionality, positive emotionality, and disinhibition or effortful control. Big Five and Big Three factors are closely related (Klein et al., 2018). Neuroticism is virtually identical to negative emotionality and extroversion corresponds to positive emotionality. Disinhibition reflects low conscientious combined with low agreeableness, while openness does not have a Big Three counterpart. We therefore refer to “Neuroticism/NE” and “Extraversion/PE” throughout this chapter as these constructs are considered very closely related.

Specific Trait-Like Vulnerabilities to Mood and Anxiety Issues

While the Big Five and Big Three are probably the most widely studied models in terms of their links to psychopathology in children, youth, and adults a range of theorists have proposed traits that are specifically associated with risk for psychopathology. Some of the most widely studied include self-criticism (Blatt, 1974; Blatt et al., 1976; Blatt & Zuroff, 1992), perfectionism (Hewitt & Flett, 1991). Blatt and colleagues (e.g., Blatt & Luyten, 2009; Blatt & Zuroff, 1992; Kopala-Sibley & Zuroff, 2014) articulated a *two-polarities* theoretical model, according to which self-definition, or one’s sense of self, and relatedness, or one’s sense of relationships with close others, represent life span developmental tasks that are fundamental to both healthy functioning and the development of psychopathology. Delays or deficits in the development of a healthy sense of relatedness, due to negative developmental experiences, may lead to high levels of a personality style

labeled *dependency*. This trait is characterized by fears of abandonment as well as insecurity regarding close others and a sense of self-worth that is contingent upon the care and support of others.

In contrast, delays or deficits in the development of self-definition, again due to adverse developmental experiences, may lead to high levels of a personality style labeled *self-criticism*. Highly self-critical individuals are permeated with feelings of low self-worth and guilt, and have excessive needs to ascertain, confirm, and preserve status and value in the eyes of important others (see Blatt et al., 1976; Blatt & Luyten, 2009; Kopala-Sibley & Zuroff, 2014 for reviews).

Perfectionism is also associated with an intense fear of criticism, concern about making mistakes, and desire for complete admiration. If they fail in these regards, perfectionists are believed to be highly vulnerable to depression (Hewitt & Flett, 1991; Hewitt et al., 2017). More recently, research has distinguished between self-critical and personal standards perfectionism. Self-critical perfectionism is a maladaptive form of perfectionism characterized by harsh self-scrutiny and self-evaluation and fear of criticism for failing to achieve goals or to exercise control over their environment (Dunkley et al., 2006). Personal standards perfectionism, in contrast, involves actively striving for high standards and goals one sets for oneself (Dunkley et al., 2006). As such, self-critical perfectionism is closely related to self-criticism as conceptualized in Blatt's theories. Evidence from both adults and youth generally suggests that these personality factors, both in isolation and in interaction with negative events, confer vulnerability to depression (Blatt & Zuroff, 1992; Hewitt & Flett, 1991; Kopala-Sibley & Zuroff, 2014, 2020; Zuroff et al., 2004). Studies examining these variables in relation to internalizing psychopathology are therefore also discussed in this chapter.

We note that self-criticism and perfectionism are assessed via self-report. Because of this, while many studies have examined these factors in adolescents, very little research has examined them in children as younger children are not typically able to provide reliable self-reports. As such, it is unclear if or how self-criticism and perfectionism are related to internalizing psychopathology in younger children. There may therefore be promising avenues for future research into observational measures to assess these potential vulnerabilities to internalizing psychopathology in younger children.

Parenting and Child Temperament

Many researchers have examined the effects of parenting on the development of temperament over time (e.g. Kopala-Sibley et al., 2017a, b, c; see Kiff et al., 2011; Lipscomb et al., 2011). In their review, Kiff et al. (2011) conclude that, across dozens of longitudinal studies, there is a robust effect of suboptimal forms of parenting on the development of maladaptive temperament traits such as fearfulness, frustration, impulsivity, and poor self-regulation. Prior research had found that positive parenting behaviors such as contingent responding and involvement predict increases in positive emotionality (Belsky et al., 1991; Malatesta & Haviland,

1982). Subsequent research has further confirmed Kiff et al.'s (2011) conclusions. Lipscomb et al. (2011), in a three-wave longitudinal study of early childhood, found that increasing parental reactivity and decreasing maternal efficacy predicted increasing NE from age 9 to 27 months. Another longitudinal multi-wave study similarly found that a poorer quality mother–child relationship at age 3 years predicted increases in NE and decreases in PE at age 6 years, albeit only in children with altered physiological stress responses (Kopala-Sibley et al., 2017a, b, c). As such, there appear to be robust effects of suboptimal parenting behaviors on the development of children's temperament.

However, it is also well-established that children's temperament influences the parenting they receive (Belsky, 1984; Kendler et al., 1997; Bornstein, 2016; Kiff et al., 2011; Kopala-Sibley et al., 2012, 2017a, b). For example, a child with behavioral difficulties or who is higher in NE, for example, may elicit more anger or hostility from parents. Indeed, Kiff et al. (2011) reviewed multiple longitudinal studies that show that elevated levels of children's fearfulness, frustration, and poor effortful control elicit maladaptive parenting behaviors. This is consistent with a sizeable body of literature that has found that children's psychopathology, in particular externalizing behaviors, predict increases over time in maladaptive parenting behaviors such as authoritarianism and permissiveness (Kopala-Sibley et al., 2017a, b, c).

For example, Patterson's (1982; Granic & Patterson, 2006; Patterson et al., 1989) model of coercive interactions describes a pattern in which parents either provide a directive or refuse a child's request, thereby increasing the child's distress and aversive behaviors such as screaming or crying. Ultimately, the parent accedes to the child's wishes to avoid the further escalation of undesirable child behaviors and possible public embarrassment. The child then learns that increased negative behaviors will eventually be rewarded, while the parent learns that acquiescing to the child's desires will immediately decrease the aversive behaviors. This is one example of a process that likely occurs not only in moment-to-moment interactions but also on a larger scale of child psychopathology, temperament, and parenting practices.

As such, the relationship between parenting and child temperament is likely bidirectional and reciprocal as maladaptive parenting behaviors may deleteriously influence child temperament, which in turn leads to further increases in maladaptive parenting, thereby creating a vicious cycle. Several longitudinal studies have supported this transactional model and found that while negative parenting behaviors, such as permissiveness, inconsistent discipline, or punishment (corporal or otherwise), or a lack of parental involvement predict increases in externalizing symptoms (e.g., attention deficit hyperactivity disorder, oppositional defiant disorder), externalizing symptoms also predict increases in these parental behaviors (Burke et al., 2008; Combs-Ronto et al., 2009; Hawes et al., 2011; Pardini et al., 2008). While much less literature has examined reciprocal relations between parenting and depressive and anxiety symptoms as opposed to externalizing behaviors, at least one study found that child externalizing symptoms have a stronger influence on parenting behaviors compared to child internalizing symptoms (Kopala-Sibley et al., 2017a, b, c).

Parenting is most commonly assessed by child- or parent-report, via either questionnaires or interviews. There is a wide range of well-validated parent-report instruments such as the Parenting Styles and Dimensions Questionnaire (PSDQ;

Robinson et al., 2001) which assesses the broad parenting styles of authoritarianism, authoritativeness, and permissiveness (Baumrind, 1967). Similarly, the Children's Report of Parenting Behaviours (CRPBI; Schaefer, 1965; Schludermann & Schludermann, 1970) is valid in children 10 years of age and assesses similar parenting styles as the PSDQ.

However, it is well-established that parent- or child reports of parenting may be subject to errors or biases in the recall due to current psychopathology (Hardt & Rutter, 2004). For example, a currently depressed child may be more likely to perceive that their parents are less caring, regardless of the objective nature of the parenting they receive. As such, a range of observational measures has been developed to provide unbiased objective assessments of the parent-child relationship. Self-reports correspond poorly with lab- or home-based observations of parenting (Zaslow et al., 2006), while lab-based observations of parenting are better predictors of child outcomes than parent- or child reports (Zaslow et al., 2006). There are numerous observational measures developed to date. For example, the teaching tasks battery (Egeland et al., 1995) consists of six standardized parent-child interaction tasks lasting a total of 25–30 min. These are designed to elicit a variety of parenting styles and child behaviors, and consist of book reading, naming objects with wheels, building with blocks, matching shapes, completing a maze, and opening a gift. From these, trained coders rate such parenting behaviors as hostility and support. Similarly, the three-bags task, developed by the National Institute of Child Health and Human Development (NICHD) involves 10 min of free play between the parent and child with three bags. This free play can then be coded for a range of parenting behaviors. Parenting can also be observationally assessed via well-established structured coding systems in an unstructured manner via visiting the parent and child's home. For example, the Living in Family Environments (LIFE; Hops et al., 1995) coding system consists of 7 non-verbal affect codes (e.g., anger, dysphoria, and happiness) and 27 verbal content codes (e.g., validation, provocation, and criticism). This system uses a microanalytic event-based protocol in which new codes are entered each time the parent's affect or verbal content changes. While observational measures are generally considered the gold-standard method for assessing parenting, it should also be noted that these are brief snapshots of the parent-child relationship and may not generalize to other situations. They may also be influenced by transient factors such as the mood of the parent or child on that occasion.

Clinical Reasoning Approach (Model)

Precursor/Predisposition Models

The precursor and predisposition models posit that temperament traits are antecedents and predictors of psychopathology, although the precursor model does not propose a causal role for temperament, while the predisposition model does (see Klein et al., 2018). To the extent that other factors, such as life events, also influence psychopathology, their effects are independent of personality, resulting in an additive model of personality and stress on psychopathology (Kushner, 2015).

A substantial body of literature has supported cross-sectional associations between temperament and depression and anxiety. For example, in their meta-analysis, Kotov et al. (2010) found that NE is consistently and strongly linked to depression and anxiety while low extroversion/PE is more modestly associated with depression and anxiety.

The proposition that maladaptive temperament traits in children precede and predict the development of symptoms of depression or anxiety or onset of diagnosable disorders such as Major Depression or Generalized Anxiety disorder has considerable support (Klein et al., 2018, 2011; Kopala-Sibley et al., 2017a, b, c). A number of studies using large community samples have reported that higher levels of Neuroticism/NE predict the onset of first lifetime MDD episodes (de Graaf et al., 2002; Fanous et al., 2007; Hengartner et al., 2016; Kendler et al., 1993, 2006; Ormel et al., 2004; Wilson et al., 2014). There is also evidence that E/PE predicts the first onset of MDD (Kendall et al., 2015; Kendler et al., 2006); however, it is much weaker and some studies have failed to find an association (Fanous et al., 2007; Hirschfeld et al., 1989; Kendler et al., 1993). Two recent meta-analyses have also found that higher Neuroticism/NE predicted an increase in depressive symptoms over time (Hakulinen et al., 2015; Jeronimus et al., 2016).

Regarding more specific trait-like vulnerability factors, self-criticism, dependency, and perfectionism are associated with longitudinal increases in depression and anxiety in adults and adolescents as well as with first lifetime onsets of depressive and anxiety disorder episodes (Kopala-Sibley et al., 2014, 2015, 2017a, b; Antony et al., 1998; Abela et al., 2006).

Person-by-Environment Models

Diathesis-stress models posit that when temperamental vulnerability is low (e.g., low NE), then there should be minimal effects of stress on psychopathology (see Kushner et al., 2015 for a review). However, in the context of elevated levels of temperament vulnerability traits, elevated stress should predict elevated psychopathology. Alternatively, dual vulnerability models argue that maladaptive temperament or elevated stress may confer risk for psychopathology but that low levels of both are necessary for healthy psychological functioning (Morris et al., 2008; Raine, 2002). “Stress-generation” (e.g., Hammen, 2006) models suggest that temperament influences the generation of stress, which in turn leads to elevated levels of internalizing psychopathology.

A number of studies support temperamental diathesis-stress models. Several studies have found that Neuroticism/NE interacts with stressful life events and chronic stress to predict the first onset of major depression (Kendler et al., 2004; Ormel et al., 2001; van Os & Jones, 1999) and increases in depressive symptoms (Brown & Rosellini, 2011; Vinkers et al., 2014). For example, Kopala-Sibley et al. (2017a, b, c) found that elevated NE in children exacerbates the effects of stress from a natural disaster on post-disaster depressive and anxiety symptoms. There is some evidence that PE moderates the effects of daily stressors on depressive symptoms in adults (Wichers et al., 2007; Kopala-Sibley et al., 2016a, b).

Much less research has tested dual vulnerability models. One study found that adolescents with highly elevated levels of self-criticism or dependency showed an increased likelihood of a subsequent depressive disorder, regardless of the level of life stressors they experienced. In contrast, youth with lower levels of self-criticism or dependency exhibited higher rates of internalizing disorders only when subjected to a high level of stressful life events (Kopala-Sibley et al., 2017a, b, c).

A substantial body of research has tested stress-generation models. Neuroticism/NE has been repeatedly implicated in the generation of stressful life events (Kercher et al., 2009; Lahey, 2009; Middeldorp et al., 2008; Uliaszek et al., 2012), and there is evidence that negative life events and chronic stress mediate the relationship between Neuroticism/NE and depressive symptoms (Chow & Roberts, 2014; Hankin, 2010).

Self-criticism longitudinally predicts higher stress across several domains including lower support from community members and college students as well as stress in romantic, roommate, and friend relationships in both adolescents and adults (Dunkley et al., 2000, 2006; Hewitt & Flett, 1993; Kopala-Sibley et al., 2015; Mongrain et al., 2004; Priel & Shahar, 2000; Shahar & Priel, 2003; Shahar et al., 2004a, b; Shih et al., 2009; Starrs et al., 2017; Zuroff et al., 2004). Negative events, in turn, predict distress in the form of negative mood and depression symptoms (Dunkley et al., 2014, 2009; Mandel et al., 2015; Shahar & Priel, 2003). Higher levels of self-criticism additionally predict less care toward children (Amitay et al., 2008). Perfectionism also predicts a poorer quality social network in patients in treatment for depression, which in turn predicts a poorer outcome in treatment (Shahar et al., 2004a).

Consequences/Scar Models of Temperament and Psychopathology

While it is well-established that temperament may predict the onset of internalizing psychopathology, the consequences or scar model holds that episodes of depression or anxiety (or elevated symptoms) have lasting effects on temperament, even after recovery from an episode of depression or anxiety (Klein et al., 2011).

Results testing the consequences model of personality and depression have been inconsistent (see Klein et al., 2018). A number of early studies used remission designs, comparing patients who had recovered from a depressive episode to never depressed controls or population norms on self-rated personality traits. These studies found that Extroversion/PE is significantly lower in formerly depressed patients than healthy controls (Hirschfeld et al., 1983; Spinhoven et al., 2011), arguing against the concomitants model and in favor of the precursor, predisposition, and/or consequences models. However, the results for Neuroticism/NE were less consistent (Hirschfeld et al., 1983; Spinhoven et al., 2011). Some longitudinal evidence following cohorts of depressed individuals have found that temperament traits, including neuroticism and dependency, are increased following a depressive episode (e.g., Fanous et al., 2007; Rohde et al., 1990, 1994), whereas others have not

found such an effect (e.g., Ormel et al., 2004; Shea et al., 1996). However, although levels of Neuroticism/NE decline significantly after remission from a depressive episode (i.e., absolute stability), individuals' relative positions with respect to levels of N/NE (i.e., rank-order stability) tend to be moderately well preserved (de Fruyt et al., 2006; Morey et al., 2010). Moreover, clinical trials suggest that changes in depressive symptoms are not always accompanied by changes in personality (Quilty et al., 2008; Tang et al., 2009), although they often are (Barlow et al., 2013).

Evidence is similarly mixed regarding consequences models for personality vulnerability traits including self-criticism and perfectionism (see Kopala-Sibley & Zuroff, 2020). Less research has examined the possibility that depression may influence self-criticism. Depressed individuals show elevated levels of self-criticism relative to nondepressed individuals, while remitted depressed individuals show elevated self-criticism relative to never-depressed individuals (Fairbrother & Moretti, 1998), suggesting that self-criticism is a trait-level risk factor for depression. However, other studies have found similar levels of self-criticism across depressed and remitted depressed individuals (Franche & Dobson, 1992). Zuroff et al. (1999) found that self-criticism displayed both mean level changes and relative stability in depressed patients undergoing treatment and suggested that self-criticism likely shows both trait and state properties.

McGrath et al. (2012) found transactional relations between perfectionism and depressive symptoms over a 4-week period, although they did not examine depressive episodes or depressed patients. However, another study found that self-critical perfectionism predicted increases over time in depression symptoms but not vice versa (Sherry et al., 2014). In contrast, Shahar et al. (2004b) found that, in female adolescents, self-criticism and depressive symptoms showed a transactional relationship over a 1-year period. Consistent with this, Zuroff et al. (1990) found reciprocal relations between self-criticism and depressed affect over a 12-month period, although they did not find this association with depressive symptoms. Schiller et al. (2016) similarly found that elevated levels of psychopathological symptoms, although not isolated to depressive symptoms, predicted change over time in self-criticism.

Shahar and Henrich (2019) found that, in Israeli adolescents exposed to missile attacks, there were reciprocal relations between depression and self-criticism only in youth who were exposed to lower levels of missile attacks. However, in those exposed to high levels of missile attacks, there was no such reciprocal association. Recently, Kopala-Sibley et al. (2017a, b, c) failed to find effects of prior depressive episodes on the personality traits of self-criticism and dependency.

Finally, emerging neurobiological temperament/personality research may shed light on consequences models. In a 4-week trial of repetitive transcranial magnetic stimulation (rTMS) for major depression, Kopala-Sibley et al. (2020) found that neuroticism significantly decreased from baseline to follow-up, although this change was not associated with a change in depressive symptoms. However, elevated self-criticism predicted an enhanced anti-depressant response, but did not change significantly over the course of treatment. Taken together, future research is needed to determine whether temperament is influenced by the occurrence of a depressive or anxiety episode.

Pathoplasty Models of Temperament and Personality

Despite general agreement about the core features of internalizing psychopathology, it is also well-established that there is substantial heterogeneity within disorders in terms of severity and symptom expression as well as the course of the disorder and response to treatment. Pathoplasty models of the temperament-psychopathology relationship propose that individual differences in temperament may explain this within-disorder variability.

There is evidence that both Neuroticism/NE and Extroversion/PE have pathoplastic influences on the course of depression after the onset of the disorder (Klein et al., 2018). For example, many studies have reported that higher N/NE and lower E/PE predict a poorer course and response to treatment (Bukh et al., 2016; de Fruyt et al., 2006; Morris et al., 2009; Quilty et al., 2008; Spinhoven et al., 2011; Tang et al., 2009; Wilson et al., 2014). There is also evidence that chronic, as opposed to acute, depression is associated with higher N/NE and lower E/PE than non-chronic MDD, and early-onset depression is associated with higher N/NE than late-onset depression (Klein & Allmann, 2014; Korten et al., 2012; Kotov et al., 2010; Wiersma et al., 2011).

Other studies have found that temperament predicts the anti-depressant response to psychotherapy in children (Kampman & Poutanen, 2011) and that elevated child PE/extroversion may predict a better response to psychotherapy for anxiety (Festen et al., 2013).

Specific personality traits such as self-criticism and perfectionism also predict a poorer prognosis in the psychotherapeutic treatment of depression (Blatt et al., 1998; Marshall et al., 2008), with this effect partially accounted for by self-criticism resulting in a poorer therapeutic alliance (Hawley et al., 2006; Zuroff et al., 2000) and less social support outside therapy (Shahar et al., 2004a). Elevated levels of self-criticism are also linked to increased severity of symptoms in patients with major depression and are linked in particular to cognitive symptoms pertaining to guilt and low self-worth (Luyten et al., 2007; Dinger et al., 2015). Recent studies using observer-rated assessments of self-criticism-oriented symptoms of depression have found that symptoms relevant to *self-critical depression* cluster together, as opposed to *submissive depression*, *dismissive depression*, and *needy depression* (Rost et al., 2018). In sum, temperament and personality traits explain the severity and symptom expression within depressed individuals and predict the course of the disorder and response to treatment.

State Versus Trait Models of Temperament/Personality and Depression

A trait marker of a disorder distinguishes an individual with a disorder from healthy controls or is present before and predicts disorder onset. In contrast, a state marker fluctuates within subjects with levels of symptoms over time. To date, nearly all tests of the association between temperament/personality and depression have examined trait (or between-subject) comparisons. That is, researchers have

primarily examined whether if one person is elevated on, for example, NE, relative to another, does that person also have higher levels of depression. However, most questions in clinical psychology are fundamentally within-subject questions. That is, when an individual's temperament/personality changes, does that same individual also experience changes in psychopathology? Tests of this question have remained rare in the literature on temperament/personality and depression, possibly because at least three time points of data are required as this introduces within-subject variance that is not present with fewer time points (Snijders & Bosker, 2002).

Although there is little literature linking within-subject fluctuations in temperament/personality to psychopathology, theorists (e.g., Treadway & Leonard, 2016; Zuroff et al., 2016) have noted that there are average individual differences in psychopathology symptoms over time as well as within-subject fluctuations over time. Measures of temperament/personality therefore reflect both stable, trait-like characteristics of individuals and state-like fluctuations from observation to observation. An understanding of intra-individual fluctuations over time, such as those proposed here, may therefore improve our ability to identify temperamental markers of risk for psychopathology.

For example, Zuroff et al. (2016) assessed individual's levels of self-criticism, mood, and cognitions every day for 6 days. Consistent with prior research, they found that average levels of self-criticism were related to average levels of mood and cognition (i.e., trait effects). However, they also found that day-to-day fluctuations in self-criticality were related to daily fluctuations in mood and cognition. In an experimental design, Kolubinski et al. (2020) exposed non-depressed participants to either an impossible to complete task or a control task and found that those in the impossible to complete task condition experienced acute increases in self-critical rumination. As such, some evidence highlights that personality vulnerability has both state- and trait effects, although more research is needed. We are not aware of state-based research linking within-subject fluctuations of Big Five or Big Three variables to psychopathology, although Naragon-Gainey et al. (2013) assessed individuals over 3 time points over the course of a year and found that while temperament traits show substantial time-invariance, they also vary over time, suggesting there are likely within-subject fluctuations in temperament over time.

Summary of Temperament-Psychopathology Research

Taken together, a substantial body of research over the past several decades has highlighted how maladaptive temperament traits may confer risk for depression and anxiety in adults, children, and youth. Research has highlighted that temperament traits are associated with depressive and anxiety symptoms and diagnoses, predict the onset of disorders, interact with life events to predict psychopathology, generate stressful life events, and are influenced over time by life events, including parenting. Temperament traits may also elucidate within-disorder severity, symptom expression, and predict the course of the disorder as well as treatment response (described in more detail below). For example, more highly self-critical or neurotic children or

teens may have poorer outcomes in psychotherapy (Marshall et al., 2008). In the next section of this chapter, we discuss the implications of this body of work for early identification/assessment and prevention for children and youth at risk for psychopathology as well as implications for treatment of youth depression and anxiety.

Approach to Mental Health Assessment

Assessment and Early Identification of Personality and Temperament of Those at Risk and Treatment of Maladaptive Temperament

An understanding of the role of temperament in risk of depression and anxiety can inform early identification of those children and youth at risk prior to the onset of depression based on maladaptive temperament traits. Indeed, one substantial advantage of using temperament traits to identify those at risk is that parent or youth self-reports can be administered with relative ease to assess temperament. Although we note that lab or naturalistic observations compared to parent- or child-report are generally considered to be the gold standard for assessing temperament (Klein et al., 2018). This is because self- or parent reports may be biased or contaminated by current mood state, limited insight, response styles, and the difficulty of distinguishing traits from the effects of stable environmental contexts (Chmielewski & Watson, 2009).

We note that, as in all branches of developmental psychology, young children are not able to reliably report on their behaviors or their internal thoughts and feelings. As such, in younger children, parent reports are necessary. Some child-reported temperament measures have been validated in children 9 years of age (e.g., Luby et al., 1999). There is no established cut-off for at what age children can reliably complete self-report measures and this will undoubtedly vary depending on the construct being assessed. However, this is an issue of which researchers and clinicians should be cognizant.

There are multiple widely used, well-validated parent or youth-report measures to assess temperament and personality. The Depressive Experiences Questionnaire (DEQ; Blatt et al., 1976) is the most widely used measure of self-criticism, and evidence suggests that the self-criticism construct predicts whether or not youth will experience a first lifetime onset of depression and anxiety disorders (Kopala-Sibley et al., 2017a, b, c). It should be noted that the DEQ's name is somewhat misleading; it does not measure depressive experiences but rather assesses personality vulnerabilities to psychopathology. An adolescent version in which items are rephrased to be appropriate for teens has also been developed (Blatt et al., 1992).

There is a wide range of instruments to assess temperamental neuroticism or extroversion. A few examples include the widely used Big Five Inventory (BFI; John et al., 2008), the Schedule for Non-adaptive and Adaptive Personality (Clark et al., 1993), the Children's Behavior Questionnaire (CBQ; Rothbart et al., 2001), although this, not an exhaustive list and there are many more published instruments. It should be noted that these measures assess personality/temperament dimensionally, and do

not provide cutoffs or categorical groupings. This is appropriate given that personality lies on a continuum; that is, an individual is not “neurotic” or “non-neurotic,” rather, they may show relatively higher or lower levels of neuroticism compared to other individuals. As such, it falls on the therapist to cautiously interpret responses on these measures and combine their discussion with the client to best understand a client’s personality.

Alternatively, therapists do not necessarily need to use formal assessments such as questionnaires or observational measures to assess temperament. For example, under a cognitive-behavioral therapy (CBT) framework, the personality trait of self-criticism would be considered a core belief about feelings of worthlessness, incompetence, and others not valuing them. These can be assessed by identifying automatic thoughts in particular situations (e.g., a youth fails a test and thinks he is stupid). Examining particular patterns and themes may shed light on the nature of the client’s personality/temperament.

Similarly, a general assessment of emotional reactivity to stressful situations as well as general emotions outside the context of stress (i.e., trait-like emotions) may shed light on temperamental characteristics such as neuroticism and extroversion. Inquiring about whether they enjoy social situations and meeting new people as well as how they react when good things happen to them can also provide information about temperamental extroversion. Simple questions such as asking the client how they view themselves as a person, are they very hard on themselves and do they fear making mistakes may elucidate underlying personality traits.

Alternatively, and in light of the evidence described above regarding parenting and temperamental development, understanding a client’s developmental experiences may be particularly useful in understanding their personality. For example, if a child’s parents are regularly harsh or critical when the child makes mistakes, the child may come to learn that if they make mistakes, they are unlovable or incompetent. This may over time become internalized and the child develops a highly self-critical personality style characterized by a sense of self that is dependent on achievement or a sense of self that is self-deprecating regardless of their accomplishments. Alternatively, individuals high in neuroticism, who are characterized by emotional lability. In some cases this may stem from developmental experiences in which caregivers did not provide adequate emotional regulation to the client when the client was distressed, leading the client to have difficulty regulating their own emotions. Factors such as these can potentially be elucidated through a discussion of the client’s childhood and adolescent experiences.

Downward arrow techniques may also be useful in identifying temperament/personality characteristics. By examining the meaning of surface-level cognitions (e.g., automatic thoughts), for example by inquiring about what it would mean if a thought were true about them (e.g., I’m not good at school), deeper beliefs the client holds about themselves may gradually be uncovered and identify core beliefs that can help the therapist identify personality traits.

Having assessed temperament, it would then be important to consider its relations to a client’s depression in light of a dynamic-interactionist framework. For example, for some individuals, elevated levels of neuroticism or self-criticism in

and of themselves may have led to depression. Directly targeting these traits in therapy would then be indicated. Alternatively, the trait itself may not have caused depression but may have interacted with life stressors to bring about a depressive episode. In this case, interventions focused on coping with stress as well as targeting the underlying personality trait may be warranted. Therapists should also consider how ongoing life events may be influencing change over time in personality, and how a client's personality is influencing the stressors that occur (i.e., stress generation). Taken together, a dynamic interactionist perspective of the personality-stress-psychopathology relationship opens up multiple avenues for intervention in depression.

Prevention, Intervention, and Prediction of Treatment Response

Personality research has important implications for the prevention of depression. Meta-analytic evidence indicates that existing preventive interventions can reduce the incidence of depressive disorders by 25% (Cuijpers et al., 2008). However, the available strategies are a mix of universal (intervention is administered to the entire population), selective (to a well-defined at-risk group), and indicated (to those with the subthreshold disorder) approaches. Universal interventions are costly, lack a personalized focus, and require very large samples to yield detectable effects, whereas indicated interventions may be better described as a treatment than prevention given that they target those who already show elevated psychopathology (Muñoz et al., 2010).

In contrast, selective interventions are true preventive measures that are cost-effective and can be tailored to a specific mechanism of risk. However, implementation of selective strategies requires knowledge of risk factors and causal processes that lead from the vulnerability to the disorder. Research to date suggests temperament/personality in children and youth may be a viable target for early identification and prevention of depression. Directly targeting temperament is also advantageous given that most psychological disorders, in particular mood and anxiety disorders, are highly comorbid. Thus, targeting broad transdiagnostic risk factors such as maladaptive temperament may reduce rates of a range of psychopathologies, rather than attempting to treat each cluster of symptoms separately.

Indeed, personality is at least somewhat malleable, especially in youth (Roberts et al., 2006; Roberts & DelVecchio, 2000), but can forecast the onset of depression and anxiety years in advance, which makes it an attractive means of identifying individuals at risk for depression and informing the selection of interventions. Another advantage of understanding temperament/personality is it can be assessed relatively easily and efficiently, and thus is ideal for screening.

Prevention of Depression and Anxiety via Targeting Temperament

A growing body of literature suggests maladaptive temperament traits are amenable to change via psychotherapy or pharmacotherapy (see Barlow et al., 2014; Sauer-Zavala et al., 2017). Here, we focus on Neuroticism/NE and self-criticism, as these have the largest bodies of evidence in terms of how they are affected by psychotherapy and they are the traits most strongly linked to depression, although we discuss a few studies examining interventions for other temperament traits given their relevance to the themes of this chapter.

There are, however, few behavioral interventions specifically designed to address or change maladaptive temperament in children (see Sauer-Zavala et al., 2017). One of the only such interventions of which we are aware was developed by Rapee et al. (2005), although it was developed to address behavioral inhibition, another maladaptive temperament trait characterized by distress and a tendency to withdraw from unfamiliar people, situations, or environments. Their program focused on parenting training to minimize augmentation of the child's biological nature through environmental interactions and includes psychoeducation about the nature of anxiety, traditional cognitive-behavioral strategies (i.e., exposure and cognitive restructuring) directed toward personal concerns, and training in behavior management techniques that prevent an overprotective parenting style. Results from randomized controlled trials (Rapee et al., 2005, 2010) suggest that this program is successful at preventing anxiety disorders. Although a brief version of this program did not appear to produce significant changes in behavioral inhibition measured via parent report or laboratory observation (Rapee et al., 2010), a more intensive version with higher risk children led to significantly greater reductions in this trait compared with those who did not receive the treatment (Kennedy et al., 2009). Differences among groups increased over time, leading Rapee et al. (2010) to speculate that more intensive interventions directed at temperament might produce an increasing trajectory of change in temperament compared with addressing more surface-level disorder symptoms.

More recently, Armstrong and Rimes (2016) conducted a pilot study examining the effect of mindfulness-based cognitive therapy (MBCT; Segal et al., 2002) that had been explicitly modified to directly target levels of neuroticism. They included a control group that was provided with self-help resources. After 8 weeks, results showed that participants in the MBCT condition showed greater decreases in neuroticism compared to those in the self-help group. In a larger study ($N = 137$) of adults, Spinhoven et al. (2017) found that MBCT results in improvements in mindfulness skills post-therapy and that the degree to which participants improved in mindfulness predicted decreases in NE/Neuroticism 15 months later. Another more recent study found that 7 weeks of MBCT in Norwegian graduate students was related to decreased neuroticism compared to a wait-list control group, and this decrease in neuroticism predicted decreased depressive symptoms at the 6-year follow-up.

Interventions for Depression and Anxiety That Target Personality or Temperament

Barlow and colleagues (e.g., Barlow et al., 2011) in the past decade have developed the unified protocol for the transdiagnostic treatment of emotional disorders (UP). The UP is a cognitive-behavioral approach that views NE/neuroticism as a core transdiagnostic factor that underpins a range of mood and anxiety disorders and therefore makes NE/neuroticism a primary focus of treatment. The UP targets identification and modification of the strong negative reactions to emotions that lead to problematic, avoidant coping across emotional disorders (Ellard et al., 2010). Amelioration of negative reactions to emotions in turn changes the frequency and intensity of future emotional experiences and thereby affects temperamental constructs (Barlow et al., 2013; Sauer-Zavala et al., 2017).

Payne et al. (2014) provide a detailed description of the modules of the UP. Briefly, by providing information about the adaptive, functional nature of emotions in the psychoeducation module (core module 1), patients begin to cultivate the stance that emotions provide useful information and should not be avoided. Next, patients receive instruction on how to engage willingly, versus with avoidance, with their emotional experiences via mindfulness training (core module 2); specifically, patients are taught the benefits of a present-focused, nonjudgmental attitude toward their emotions through three complementary experiential exercises (Sauer-Zavala et al., 2017).

Results from trials of the UP show that, relative to wait-list controls, adult participants receiving the UP show small-to-moderate decreases in NE/neuroticism and increases in PE/extraversion over 18 months (Carl et al., 2014). These changes in temperament are associated with improvements in core depressive and anxiety symptomatology, functional impairment, and quality of life (Carl et al., 2014).

There are relatively few studies that directly examined interventions specifically designed to reduce self-criticism, as opposed to treating psychopathological symptoms, although several groups have examined whether specific therapies reduce self-criticism. Shahar et al. (2012; also see Shahar, 2015 for a review) examined whether two-chair dialogue therapy, an intervention used in emotion-focused therapy, leads to reductions in self-criticism. Emotion-focused therapy (EFT; Greenberg et al., 1993; Greenberg & Watson, 2006) is an empirically supported, process-experiential therapy that emphasizes a strong therapeutic relationship based on the client-centered principles of empathy, genuineness, and unconditional acceptance given by Carl Rogers (1951). After building a strong relational foundation, emotion-focused therapists initiate various experiential interventions designed to help clients develop emotional awareness, access primary adaptive emotions, regulate dysregulated emotions and change maladaptive emotions (Greenberg, 2008). EFT is a marker-guided therapy, in which therapists apply particular interventions in response to specific client behaviors that naturally emerge in therapy. For example, expression of unresolved feelings towards an attachment figure suggests that an empty chair for unfinished business intervention is indicated. The empty-chair intervention

is designed to facilitate processing, transforming, and resolving these feelings (Greenberg & Foerster, 1996; Greenberg & Malcolm, 2002; Paivio & Greenberg, 1995). Similarly, when a marker for self-criticism emerges in the course of EFT, two-chair work for conflict splits is indicated.

In EFT, based on gestalt therapy principles (Perls, 1969; Perls et al., 1965), self-criticism is conceptualized as a conflict split between two aspects of the self, where one part of the self harshly criticizes, judges, evaluates, and blocks the experiences and health needs of another, more submissive part of the self. The dominant part of the self is usually labeled as the “inner critic,” and the more submissive part is often labeled as the “experiencing self” (Greenberg & Watson, 2006). In a two-chair intervention, the client is asked to enact a dialogue between the inner critic and the experiencing self using two chairs. The client is asked to “be” the inner critic and speak to the experiencing self using one chair and then enact the experiencing self and respond to the self-critical attacks from the second chair. During the dialogue, the client switches chairs whenever the roles are switched, using empathic guidance and emotion coaching from the therapist to explore, process, and provide space for expressing emotions and needs associated with each part of the self (Elliott et al., 2004; Greenberg et al., 1993). Shahar et al. (2012) found that this approach led to reductions in self-criticism 6 months later, which were in turn linked to reductions in depression.

Gilbert and colleagues (Gilbert & Irons, 2005; Gilbert & Procter, 2006) have examined self-critical processes and developed a therapeutic approach specifically designed to reduce shame and self-criticism by helping patients develop self-compassion. Gilbert’s developed a group-based approach designed to increase self-compassion (compassion-focused therapy, CFT; Gilbert & Irons, 2005; Gilbert & Procter, 2006). According to Gilbert’s model, the ability to self-soothe develops in a context of secure attachment with early caregivers. In a developmental context characterized by abuse and neglect, the affect regulation system responsible for self-soothing and safeness does not develop properly because the individual invests most of his/her attentional resources to detect and respond to threats. In such a context, a self-critical style is often internalized as a safety strategy to prevent further abuse and to establish a better (less inferior) social rank (Gilbert & Irons, 2005). Multiple studies have found that CFT decreases self-criticism and improves a range of psychopathologies (Beaumont et al., 2016; Sommers-Spijkerman et al., 2018; Kelly & Carter, 2015; Kannan & Levitt, 2013). Finally, there is also evidence that CBT and interpersonal therapy lead to decreases in self-criticism (e.g., Hawley et al., 2006).

Summary of Temperament-Based Prevention and Intervention

Taken together, research to date strongly suggests that temperamental vulnerabilities to psychopathology can be effectively reduced via psychotherapy. It additionally appears that a range of different forms of psychotherapy and interventions lead to change in temperament/personality. Therapists should be aware of this as some

clients may prefer one form of therapy over another. However, to our knowledge, the vast majority of these studies either had no control group or had a wait-list control group, while one study compared their treatment to self-help (Armstrong and Rimes 2016). As such, it is unclear if these different psychotherapies are more effective than placebo (e.g., supportive therapy). It is also unclear if one form of therapy is more effective in changing temperament than others. Importantly, studies in children are extremely rare, and the preponderance of evidence comes from studies of adults. As such, further research is required to examine whether maladaptive temperament traits can be successfully improved in children and whether some approaches may be more effective than others. However, children and youth may benefit from a range of interventions designed to directly reduce levels of self-criticism and NE/Neuroticism.

Prediction of Treatment Response

Personality also can inform treatment of internalizing disorders post-onset. In particular, traits can predict response to treatment. As noted earlier, substantial evidence has accumulated that individuals with lower N/NE have better outcomes across treatment modalities (Kennedy et al., 2005; Mulder, 2002; Tang et al., 2009). Other Big Five traits have been studied less and their roles are not yet certain. However, a large study of a combination intervention (medication plus psychotherapy) found that low N/NE and high conscientiousness predicted who would respond to treatment, and although high E/PE did not contribute directly, it amplified the effect of high conscientiousness (Quilty et al., 2008).

A large body of evidence confirms that self-critical individuals show poorer outcomes in psychotherapy for depression (e.g., Blatt et al., 1995; Blatt et al., 2010; Kannan & Levitt, 2013). This may be due to several interrelated factors. For example, highly self-critical individuals tend to be less motivated for therapy. They also tend to have a poorer quality therapeutic relationship as well as poorer quality interpersonal relationships outside therapy (Shahar, 2015; Blatt et al., 2010). However, evidence suggests that psychotherapy successfully reduces levels of self-criticism, and this reduction predicts symptomatic improvement (Blatt et al., 2010).

The processes underlying these predictive associations are not entirely clear. One hypothesis is that personality change mediates the effect of treatment on depression. Indeed, there is a fair amount of evidence that depression treatment reduces N/NE and increases E/PE (Zinbarg et al., 2008) and that this effect is not due to confounding by the depressive state (Tang et al., 2009). Indeed, Quilty et al. (2008) tested a mediation model and found direct support for this hypothesis. Similarly, Hawley et al. (2006) found that decreases in self-critical perfectionism over the course of psychotherapy mediated decreases in depressive symptoms.

Furthermore, personality may be useful in matching patients to interventions. For instance, Bagby et al. (2008) reported that patients high on N/NE or low on some agreeableness facets respond better to antidepressant medication than

psychotherapy. There is additionally a small body of evidence that more highly self-critical individuals may show a better prognosis to biological interventions to treat depression relative to less self-critical individuals. For example, Marshall et al. (2008) found that elevated levels of self-criticism predicted a better response to anti-depressant treatment. However, in the only other similar study of which we are aware, Rector et al. (2000) found that self-criticism did not predict anti-depressant response to pharmacotherapy, although it did predict response to psychotherapy. Recently, Kopala-Sibley et al. (2020) found that elevated baseline self-criticism, but not neuroticism/NE, predicted enhanced anti-depressant response to repetitive transcranial magnetic stimulation. They also found that while self-criticism did not change over the course of treatment, neuroticism/NE significantly decreased, suggesting neuroticism may be a state-based marker of depression. As such, a limited body of evidence suggests temperament/personality may be useful in matching patients to treatments and in predicting treatment response, although more research is needed. As with the literature examining whether temperament predicts treatment response, there is little research examining whether childhood temperament may predict differential response to pharmacotherapy versus psychotherapy or different forms of psychotherapy. However, taken together, it is likely important for therapists to evaluate temperament/personality traits before treatment and to monitor them during the course of treatment.

A Case Study of Self-Criticism in Depression and Anxiety

The following case study provides an illustrative example of how maladaptive parenting combined with cultural influences led to the development of a self-critical personality that then conferred vulnerability to depression and anxiety in an older adolescent.

John (name changed for confidentiality), an 18-year-old male who immigrated to Canada in late childhood, presented with substantial social anxiety as well as anxiety around his academic performance and career future. He also reported a substantially depressed mood, had poor eating and sleeping habits, and periodically self-harmed via cutting.

John grew up as a Christian in a predominantly Muslim country in which Christians were looked down upon, if not persecuted. Additionally, John identified as homosexual, which was not permissible in his country. Importantly, his parents were highly unsupportive of the fact that he was gay. He also described them as highly critical of him any time he did not succeed in school and put pressure on him to have a “high status” job later in life, such as becoming a doctor. Because of this, John had strong fears of failure and fears of social rejection, high levels of emotional instability, and a generally self-critical personality style.

Although the presenting issue was largely social anxiety, John’s essential issues were his very harsh self-criticism and low self-worth. These contributed to beliefs that he is inferior to others and that others won’t like him, and concomitant

avoidance of social activities, despite a desire for friendships. His self-criticism also led to avoidance of pursuing desired goals, such as doing well in school and pursuing graduate studies, as he was more driven by a fear of failure than a pursuit of success, which is often characteristic of a self-critical personality.

Thus, the focus of therapy, at times, bounced around, although his self-criticism was a common theme throughout. Behaviorally, John improved his self-care in terms of eating and sleeping habits. By taking care of himself in this way, he over time began to believe he actually was worthy of care. We also altered his study habits, as he would routinely study for 10 or more hours per day, although he felt this was not very effective. By reducing his study time and emphasizing “quality” over “quantity” John slowly developed a stronger sense of self-efficacy as he felt better able to absorb the material and did better in his courses. In fact, he reported that his most recent grades were the highest he has ever achieved. This accomplishment helped John realize he is in fact quite competent and can achieve goals when he puts his mind to them.

We also built emotional regulation skills, as John would periodically self-harm or binge eat early in therapy. Distraction, staying active, self-care, and coping better with stress have all helped him in this regard. He eventually stopped self-harming or binge eating.

Another focus of therapy has been his relationship with his parents, who he reports were often very critical and controlling of him, which undoubtedly contributed to his self-critical personality. On the one hand, we worked on John distancing himself from these experiences by recognizing that his parents’ criticisms were more a reflection of their own anxieties than a reflection of him as a person. This was a more general theme in the sense of John learning to separate his sense of self from the views of others, as well as from his “rank” relative to others. That is, he has worked on recognizing that he is not worse as a person compared to someone else just because that person has higher grades, a better job, or nicer clothes, for example.

Regarding his social anxiety in particular, John has begun actively pursuing social relationships and now makes periodic plans. Although these are not as frequent as he would like, he is now ready to pursue these more regularly, whereas he would have previously avoided this. We have also discussed identifying healthy and unhealthy interpersonal relationships, as John’s self-criticism led to him tolerating less than healthy friendships in the past. Along this line, we discussed interpersonal effectiveness in terms of assertiveness and defusing conflict. Although John has absorbed and makes use of some of these skills, his assertiveness is sometimes lacking, due to a fear of negative evaluation by others.

It is also worth mentioning that while the therapeutic alliance is always important in therapy, it was particularly important in working with John. Having had little to no support, encouragement, or validation throughout his life, the presence of a therapist who could provide these was arguably an emotionally transformative experience for John. It is likely that having a source of unconditional positive regard helped John to develop a more positive sense of self and to recognize that others will likely view him in a positive light.

When we finished therapy, John reported relatively few symptoms of anxiety or depression, although he has days or weeks in which he reports being quite concerned about his future. He is also still fairly susceptible to stress. For example, someone canceling social plans on him may result in a day or two of feeling quite down. John will likely have many road bumps ahead of him as he begins school again in the fall and pursues graduate studies. However, by targeting the developmental origins of his self-criticism, challenging his maladaptive core beliefs, and having him pursue experiences that contradicted his beliefs about himself, John made substantial improvements in terms of his anxiety and depression.

Summary and Conclusion

This chapter reviewed the now sizeable body of literature examining associations between personality/temperament and depression, including studies in children, youth, and adults. A number of conclusions can be drawn. First, there is a large and robust body of evidence confirming that maladaptive personality traits are linked to depression and anxiety and precede and predict the development of depressive and anxiety symptoms as well as diagnosable episode of mood or anxiety disorders. Second, multiple studies have confirmed that adverse parenting behaviors influence the development of children's temperament. However, children's temperament also influences the parenting they receive, thereby creating a vicious cycle of maladaptive parenting and child temperament transactionally contributing to one another. Third, a growing body of literature has found that temperament/personality may moderate the effects of stressful life events on depression and anxiety. This suggests that neither maladaptive temperament nor elevated stress is sufficient to result in depression; rather, it is the interaction of the two that confers risk of depression.

Whether an episode of depression alters temperament ("scar" models) is much less clear, with research to date being limited and contradictory. There is, however, more evidence that temperament/personality traits explain severity and symptom expression within depressed or anxious individuals and predict the course of the disorder and response to treatment. Finally, there is also a very limited body of literature suggesting that temperament may fluctuate over time within an individual, with these fluctuations related to the severity of symptom expression.

While maladaptive personality/temperament traits have long been associated with risk for depression and anxiety, directly targeting them, as opposed to symptoms specifically, for prevention and intervention, is a relatively novel approach. However, a growing body of literature suggests that such an approach may yield positive outcomes in terms of identifying children and youth at risk and in preventing and treating depression and anxiety.

Identifying risk profiles in vulnerable individuals is also critically needed to enhance system service integration by informing mental health resources and treatment allocation to rapidly match youth to evidence-based care tailored to their individual needs. Stepped care models match individuals with appropriate levels of

mental health treatment based on their reported mental health symptomatology and risk profiles (Cornish, 2020). Moving up the stepped care continuum, mental health care increases in intensity, required resources, and health professional involvement. Indeed, stepped care has been integrated within *Wellness Together Canada* funded by the Government of Canada (Government of Canada, 2020). By screening personality traits care can be streamlined and youth and children can be assigned the most appropriate level of intervention.

This body of literature has substantial clinical implications for parents, teachers, and mental health care workers. It will likely be important for teachers, parents, and clinicians to be aware of children's temperament given the strong links with psychopathology and with how parenting may influence temperament and vice versa. Clinicians will also likely benefit from assessing children's temperament prior to interventions to potentially match them to the most suitable treatment and to be able to predict their likely outcome. Clinicians may also want to focus on addressing the core temperamental vulnerabilities in children that underpin their emotional or anxiety disorders.

References

- Abela, J. R., Webb, C. A., Wagner, C., Ho, M. H. R., & Adams, P. (2006). The role of self-criticism, dependency, and hassles in the course of depressive illness: A multiwave longitudinal study. *Personality and Social Psychology Bulletin*, *32*(3), 328–338.
- Amitay, O. A., Mongrain, M., & Faza, N. (2008). Love and control: Self-criticism in parents and daughters and perceptions of relationship partners. *Personality and Individual Differences*, *44*(1), 75–85.
- Antony, M. M., Purdon, C. L., Huta, V., & Swinson, R. P. (1998). Dimensions of perfectionism across the anxiety disorders. *Behaviour Research and Therapy*, *36*(12), 1143–1154.
- Armstrong, L., & Rimes, K. A. (2016). Mindfulness-based cognitive therapy for neuroticism (stress vulnerability): A pilot randomized study. *Behavior Therapy*, *47*(3), 287–298.
- Bagby, R. M., Quilty, L. C., Segal, Z. V., McBride, C. C., Kennedy, S. H., & Costa, P. T., Jr. (2008). Personality and differential treatment response in major depression: A randomized controlled trial comparing cognitive-behavioural therapy and pharmacotherapy. *The Canadian Journal of Psychiatry*, *53*(6), 361–370.
- Barlow, D. H., Ellard, K. K., Fairholme, C., Farchione, T. J., Boisseau, C., Allen, L., & Ehrenreich-May, J. (2011). *Unified protocol for the transdiagnostic treatment of emotional disorders*. Oxford University Press.
- Barlow, D. H., Bullis, J. R., Comer, J. S., & Ametaj, A. A. (2013). Evidencebased psychological treatments: An update and a way forward. *Annual Review of Clinical Psychology*, *9*, 1–27.
- Barlow, D. H., Sauer-Zavala, S., Carl, J. R., Bullis, J. R., & Ellard, K. K. (2014). The nature, diagnosis, and treatment of neuroticism: Back to the future. *Clinical Psychological Science*, *2*(3), 344–365.
- Baumrind, D. (1967). *Child care practices anteceding three patterns of preschool behavior*. Genetic psychology monographs.
- Beaumont, E. A., Durkin, M., McAndrew, S. L., & Martin, C. (2016). Using Compassion Focused Therapy as an adjunct to Trauma-Focused CBT for fire service personnel suffering with symptoms of trauma. *Cognitive Behaviour Therapist*, *9*, e34.
- Belsky, J. (1984). The determinants of parenting: A process model. *Child Development*, *55*(1), 83–96.

- Belsky, J., Fish, M., & Isabella, R. A. (1991). Continuity and discontinuity in infant negative and positive emotionality: Family antecedents and attachment consequences. *Developmental Psychology*, 27(3), 421.
- Blatt, S. J. (1974). Levels of object representation in anaclitic and introjective depression. *The Psychoanalytic Study of the Child*, 29, 107–157. <https://doi.org/10.1080/00797308.1974.11822616>
- Blatt, S. J. (2004). *Experiences of depression: Theoretical, clinical, and research perspectives*. American Psychological Association.
- Blatt, S. J., D'Afflitti, J. P., & Quinlan, D. M. (1976). Experiences of depression in normal young adults. *Journal of Abnormal Psychology*, 85(4), 383.
- Blatt, S. J., & Luyten, P. (2009). A structural–developmental psychodynamic approach to psychopathology: Two polarities of experience across the life span. *Development and Psychopathology*, 21(3), 793–814.
- Blatt, S. J., & Zuroff, D. C. (1992). Interpersonal relatedness and self-definition: Two prototypes for depression. *Clinical Psychology Review*, 12(5), 527–562.
- Blatt, S. J., Schaffer, C. E., Bers, S. A., & Quinlan, D. M. (1992). Psychometric properties of the depressive experiences questionnaire for adolescents. *Journal of Personality Assessment*, 59(1), 82–98.
- Blatt, S. J., Zuroff, D. C., Bondi, C. M., Sanislow, C. A., III, & Pilkonis, P. A. (1998). When and how perfectionism impedes the brief treatment of depression: Further analyses of the National Institute of Mental Health Treatment of Depression Collaborative Research Program. *Journal of Consulting and Clinical Psychology*, 66(2), 423.
- Blatt, S. J., Zuroff, D. C., Hawley, L. L., & Auerbach, J. S. (2010). Predictors of sustained therapeutic change. *Psychotherapy Research*, 20(1), 37–54.
- Bornstein, M. H. (2016). Determinants of parenting. In *Development and psychopathology* (pp. 180–270). John Wiley & Sons.
- Brown, T. A., & Rosellini, A. J. (2011). The direct and interactive effects of neuroticism and life stress on the severity and longitudinal course of depressive symptoms. *Journal of Abnormal Psychology*, 120(4), 844.
- Bukh, J. D., Andersen, P. K., & Kessing, L. V. (2016). Personality and the long-term outcome of first-episode depression: A prospective 5-year follow-up study. *The Journal of Clinical Psychiatry*, 77(6), 704–710.
- Burcusa, S. L., & Iacono, W. G. (2007). Risk for recurrence in depression. *Clinical Psychology Review*, 27(8), 959–985.
- Burke, J. D., Pardini, D. A., & Loeber, R. (2008). Reciprocal relationships between parenting behavior and disruptive psychopathology from childhood through adolescence. *Journal of Abnormal Child Psychology*, 36(5), 679–692.
- Carl, J. R., Gallagher, M. W., Sauer-Zavala, S. E., Bentley, K. H., & Barlow, D. H. (2014). A preliminary investigation of the effects of the unified protocol on temperament. *Comprehensive Psychiatry*, 55, 1426–1434.
- Caspi, A., & Shiner, R. (2008). Temperament and personality. *Rutter's Child and Adolescent Psychiatry*, 5, 182–199.
- Chmielewski, M., & Watson, D. (2009). What is being assessed and why it matters: The impact of transient error on trait research. *Journal of Personality and Social Psychology*, 97(1), 186.
- Chow, P. I., & Roberts, B. W. (2014). Examining the relationship between changes in personality and changes in depression. *Journal of Research in Personality*, 51, 38–46.
- Clark, L. A., & Watson, D. (1999). Temperament: A new paradigm for trait psychology. In L. A. Pervin & O. P. John (Eds.), *Handbook of personality* (2nd ed., pp. 399–423). Guilford Press.
- Clark, L. A., McEwen, J. L., Collard, L. M., & Hickok, L. G. (1993). Symptoms and traits of personality disorder: Two new methods for their assessment. *Psychological Assessment*, 5(1), 81.
- Combs-Ronto, L. A., Olson, S. L., Lunkenheimer, E. S., & Sameroff, A. J. (2009). Interactions between maternal parenting and children's early disruptive behavior: Bidirectional associations across the transition from preschool to school entry. *Journal of Abnormal Child Psychology*, 37(8), 1151.

- Cornish, P. (2020). *Stepped care 2.0: A paradigm shift in mental health*. Springer Nature.
- Costa, P. T., & McCrae, R. R. (1992). Normal personality assessment in clinical practice: The NEO Personality Inventory. *Psychological Assessment, 4*(1), 5.
- Cuijpers, P., & Smit, F. (2004). Subthreshold depression as a risk indicator for major depressive disorder: A systematic review of prospective studies. *Acta Psychiatrica Scandinavica, 109*(5), 325–331.
- Cuijpers, P., van Straten, A., Smit, F., Mihalopoulos, C., & Beekman, A. (2008). Preventing the onset of depressive disorders: A meta-analytic review of psychological interventions. *American Journal of Psychiatry, 165*(10), 1272–1280.
- De Fruyt, F., Van Leeuwen, K., Bagby, R. M., Rolland, J. P., & Rouillon, F. (2006). Assessing and interpreting personality change and continuity in patients treated for major depression. *Psychological Assessment, 18*(1), 71.
- De Graaf, R., Bijl, R. V., Ravelli, A., Smit, F., & Vollebergh, W. A. M. (2002). Predictors of first incidence of DSM-III-R psychiatric disorders in the general population: Findings from the Netherlands Mental Health Survey and Incidence Study. *Acta Psychiatrica Scandinavica, 106*(4), 303–313.
- Dinger, U., Barrett, M. S., Zimmermann, J., Schauenburg, H., Wright, A. G., Renner, F., Zilcha-Mano, S., & Barber, J. P. (2015). Interpersonal problems, dependency, and self-criticism in major depressive disorder. *Journal of Clinical Psychology, 71*(1), 93–104.
- Dunkley, D. M., Blankstein, K. R., Halsall, J., Williams, M., & Winkworth, G. (2000). The relation between perfectionism and distress: Hassles, coping, and perceived social support as mediators and moderators. *Journal of Counseling Psychology, 47*(4), 437.
- Dunkley, D. M., Mandel, T., & Ma, D. (2014). Perfectionism, neuroticism, and daily stress reactivity and coping effectiveness 6 months and 3 years later. *Journal of Counseling Psychology, 61*(4), 616.
- Dunkley, D. M., Sanislow, C. A., Grilo, C. M., & McGlashan, T. H. (2009). Self-criticism versus neuroticism in predicting depression and psychosocial impairment for 4 years in a clinical sample. *Comprehensive Psychiatry, 50*(4), 335–346.
- Dunkley, M., Zuroff, D. C., & Blankstein, K. R. (2006). Specific perfectionism components versus self-criticism in predicting maladjustment. *Personality and Individual Differences, 40*(4), 665–676.
- Egeland, B., Weinfield, N., Hiester, M., Lawrence, C., Pierce, S., Chippendale, K. (1995). *Teaching tasks administration and scoring manual*. Minneapolis, MN: University of Minnesota.
- Ellard, K. K., Fairholme, C. P., Boisseau, C. L., Farchione, T. J., & Barlow, D. H. (2010). Unified protocol for the transdiagnostic treatment of emotional disorders: Protocol development and initial outcome data. *Cognitive and Behavioral Practice, 17*(1), 88–101.
- Elliott, R., Watson, J., Goldman, R., & Greenberg, L. (2004). *Learning emotion-focused therapy: The process-experiential approach to change*. American Psychological Association.
- Fairbrother, N., & Moretti, M. (1998). Sociotropy, autonomy, and self-discrepancy: Status in depressed, remitted depressed, and control participants. *Cognitive Therapy and Research, 22*(3), 279–297.
- Fanous, A. H., Neale, M. C., Aggen, S. H., & Kendler, K. S. (2007). A longitudinal study of personality and major depression in a population-based sample of male twins. *Psychological Medicine, 37*(8), 1163–1172.
- Fergusson, D. M., & Woodward, L. J. (2002). Mental health, educational, and social role outcomes of adolescents with depression. *Archives of General Psychiatry, 59*(3), 225–231.
- Ferrari, A. J., Charlson, F. J., Norman, R. E., Patten, S. B., Freedman, G., Murray, C. J., Vos, T., & Whiteford, H. A. (2013). Burden of depressive disorders by country, sex, age, and year: Findings from the global burden of disease study 2010. *PLoS Medicine, 10*(11), e1001547.
- Festen, H., Hartman, C. A., Hogendoorn, S., de Haan, E., Prins, P. J., Reichart, C. G., Moorlag, H., & Nauta, M. H. (2013). Temperament and parenting predicting anxiety change in cognitive behavioral therapy: The role of mothers, fathers, and children. *Journal of Anxiety Disorders, 27*(3), 289–297.

- Franche, R. L., & Dobson, K. (1992). Self-criticism and interpersonal dependency as vulnerability factors to depression. *Cognitive Therapy and Research*, 16(4), 419–435.
- Gilbert, P., & Irons, C. (2005). Focused therapies and compassionate mind training for shame and self-attacking. In *Compassion: Conceptualisations, research and use in psychotherapy* (pp. 263–325). Routledge.
- Gilbert, P., & Procter, S. (2006). Compassionate mind training for people with high shame and self-criticism: Overview and pilot study of a group therapy approach. *Clinical Psychology & Psychotherapy*, 13(6), 353–379.
- Goldberg, L. R. (1993). The structure of phenotypic personality traits. *American Psychologist*, 48(1), 26.
- Government of Canada (2020). *Government of Canada connects Canadians with mental wellness supports during COVID-19*. <https://www.canada.ca/en/healthcanada/news/2020/04/government-of-canada-connects-canadians-with-mental-wellness-supports-during-covid-190.html#shr-pg0>
- Granic, I., & Patterson, G. R. (2006). Toward a comprehensive model of antisocial development: a dynamic systems approach. *Psychological Review*, 113(1), 101.
- Greenberg, L. (2008). The clinical application of emotion in psychotherapy. In *Handbook of emotions* (3rd ed., pp. 88–101). Guilford Press.
- Greenberg, L. S., & Foerster, F. S. (1996). Task analysis exemplified: The process of resolving unfinished business. *Journal of Consulting and Clinical Psychology*, 64(3), 43.
- Greenberg, L. S., & Malcolm, W. (2002). Resolving unfinished business: Relating process to outcome. *Journal of Consulting and Clinical Psychology*, 70(2), 406.
- Greenberg, L. S., & Watson, J. C. (2006). *Emotion-focused therapy for depression*. American Psychological Association.
- Greenberg, L. S., Rice, L. N., & Elliot, R. (1993). *Facilitating emotional change: The moment-by-moment process*. Guilford Press.
- Hakulinen, C., Elovainio, M., Pulkki-Råback, L., Virtanen, M., Kivimäki, M., & Jokela, M. (2015). Personality and depressive symptoms: Individual participant meta-analysis of 10 cohort studies. *Depression and Anxiety*, 32(7), 461–470.
- Hammen, C. (2006). Stress generation in depression: Reflections on origins, research, and future directions. *Journal of Clinical Psychology*, 62(9), 1065–1082.
- Hankin, B. L. (2010). Personality and depressive symptoms: Stress generation and cognitive vulnerabilities to depression in a prospective daily diary study. *Journal of Social and Clinical Psychology*, 29(4), 369–401.
- Hardt, J., & Rutter, M. (2004). Validity of adult retrospective reports of adverse childhood experiences: review of the evidence. *Journal of Child Psychology and Psychiatry*, 45(2), 260–273.
- Hawes, D. J., Dadds, M. R., Frost, A. D., & Hasking, P. A. (2011). Do childhood callous-unemotional traits drive change in parenting practices? *Journal of Clinical Child & Adolescent Psychology*, 40(4), 507–518.
- Hawley, L. L., Ho, M. H. R., Zuroff, D. C., & Blatt, S. J. (2006). The relationship of perfectionism, depression, and therapeutic alliance during treatment for depression: Latent difference score analysis. *Journal of Consulting and Clinical Psychology*, 74(5), 930.
- Hengartner, M. P., Ajdacic-Gross, V., Wyss, C., Angst, J., & Rössler, W. (2016). Relationship between personality and psychopathology in a longitudinal community study: A test of the predisposition model. *Psychological Medicine*, 46(8), 1693.
- Hewitt, P. L., & Flett, G. L. (1991). Dimensions of perfectionism in unipolar depression. *Journal of Abnormal Psychology*, 100(1), 98.
- Hewitt, P. L., & Flett, G. L. (1993). Dimensions of perfectionism, daily stress, and depression: A test of the specific vulnerability hypothesis. *Journal of Abnormal Psychology*, 102(1), 58.
- Hewitt, P. L., Flett, G. L., & Mikail, S. F. (2017). *Perfectionism: A relational approach to conceptualization, assessment, and treatment*. Guilford Press.
- Hirschfeld, R. M., Klerman, G. L., Clayton, P. J., Keller, M. B., McDonald-Scott, P., & Larkin, B. H. (1983). Assessing personality: effects of the depressive state on trait measurement. *The American Journal of Psychiatry*.

- Hirschfeld, R. M., Klerman, G. L., Lavori, P., Keller, M. B., Griffith, P., & Coryell, W. (1989). Premorbid personality assessments of first onset of major depression. *Archives of General Psychiatry*, *46*(4), 345–350.
- Hops, H., Davis, B., & Longoria, N. (1995). Methodological issues in direct observation: Illustrations with the Living in Familial Environments (LIFE) coding system. *Journal of Clinical Child Psychology*, *24*(2), 193–203.
- Jeronimus, B. F., Kotov, R., Riese, H., & Ormel, J. (2016). Neuroticism's prospective association with mental disorders halves after adjustment for baseline symptoms and psychiatric history, but the adjusted association hardly decays with time: A meta-analysis on 59 longitudinal/prospective studies with 443 313 participants. *Psychological Medicine*, *46*(14), 2883–2906.
- John, O. P., & Srivastava, S. (1999). The Big Five trait taxonomy: History, measurement, and theoretical perspectives. *Handbook of personality: Theory and research*, *2*(1999), 102–138. Guilford Press
- John, O. P., Naumann, L. P., & Soto, C. J. (2008). Paradigm shift to the integrative big-five trait taxonomy: History, measurement, and conceptual issues. In O. P. John, R. W. Robins, & L. A. Pervin (Eds.), *Handbook of personality: Theory and research* (pp. 114–158). New York, NY: Guilford Press.
- Kampman, O., & Poutanen, O. (2011). Can onset and recovery in depression be predicted by temperament? A systematic review and meta-analysis. *Journal of Affective Disorders*, *135*(1–3), 20–27.
- Kannan, D., & Levitt, H. M. (2013). A review of client self-criticism in psychotherapy. *Journal of Psychotherapy Integration*, *23*(2), 166.
- Kelly, A. C., & Carter, J. C. (2015). Self-compassion training for binge eating disorder: A pilot randomized controlled trial. *Psychology and Psychotherapy: Theory, Research and Practice*, *88*(3), 285–303.
- Kendall, A. D., Zinbarg, R. E., Mineka, S., Bobova, L., Prenoveau, J. M., Revelle, W., & Craske, M. G. (2015). Prospective associations of low positive emotionality with first onsets of depressive and anxiety disorders: Results from a 10-wave latent trait-state modeling study. *Journal of Abnormal Psychology*, *124*(4), 933.
- Kendler, K. S., Gatz, M., Gardner, C. O., & Pedersen, N. L. (2006). Personality and major depression: A Swedish longitudinal, population-based twin study. *Archives of General Psychiatry*, *63*(10), 1113–1120.
- Kendler, K. S., Kuhn, J., & Prescott, C. A. (2004). The interrelationship of neuroticism, sex, and stressful life events in the prediction of episodes of major depression. *American Journal of Psychiatry*, *161*(4), 631–636.
- Kendler, K. S., Neale, M. C., Kessler, R. C., Heath, A. C., & Eaves, L. J. (1993). A longitudinal twin study of personality and major depression in women. *Archives of General Psychiatry*, *50*(11), 853–862.
- Kendler, K. S., Sham, P. C., & MacLean, C. J. (1997). The determinants of parenting: An epidemiological, multi-informant, retrospective study. *Psychological Medicine*, *27*(3), 549–563.
- Kennedy, S. H., Farvolden, P., Cohen, N. L., Bagby, R. M., & Costa, P. T., Jr. (2005). The impact of personality on the pharmacological treatment of depression. In *Depression and personality: Conceptual and clinical challenges* (pp. 97–119). American Psychiatric Publishing.
- Kennedy, S. J., Rapee, R. M., & Edwards, S. L. (2009). A selective intervention program for inhibited preschool-aged children of parents with an anxiety disorder: Effects on current anxiety disorders and temperament. *Journal of the American Academy of Child & Adolescent Psychiatry*, *48*(6), 602–609.
- Kercher, A. J., Rapee, R. M., & Schniering, C. A. (2009). Neuroticism, life events and negative thoughts in the development of depression in adolescent girls. *Journal of Abnormal Child Psychology*, *37*(7), 903–915.
- Kessler, R. C., Amminger, G. P., Aguilar-Gaxiola, S., Alonso, J., Lee, S., & Ustun, T. B. (2007). Age of onset of mental disorders: A review of recent literature. *Current Opinion in Psychiatry*, *20*(4), 359.

- Kiff, C. J., Lengua, L. J., & Zalewski, M. (2011). Nature and nurturing: Parenting in the context of child temperament. *Clinical Child and Family Psychology Review*, 14(3), 251.
- Klein, D. N., & Allmann, A. E. S. (2014). Course of depression: Persistence and recurrence. In I. H. Gotlib & C. L. Hammen (Eds.), *Handbook of depression* (pp. 64–83). Guilford Press.
- Klein, D. N., Finsaas, M. C., Goldstein, B. L., Kessel, E. M., Kopala-Sibley, D. C., & Kotov, R. (2018). Personality and depression. In V. Zeigler-Hill & T. K. Shackelford (Eds.), *The SAGE handbook of personality and individual differences: Applications of personality and individual differences* (pp. 36–62). Sage Reference.
- Klein, D. N., Kotov, R., & Bufferd, S. J. (2011). Personality and depression: Explanatory models and review of the evidence. *Annual Review of Clinical Psychology*, 7, 269.
- Klein, D. N., Shankman, S. A., Lewinsohn, P. M., & Seeley, J. R. (2009). Subthreshold depressive disorder in adolescents: Predictors of escalation to full-syndrome depressive disorders. *Journal of the American Academy of Child & Adolescent Psychiatry*, 48(7), 703–710.
- Kolubinski, D. C., Nikčević, A. V., & Spada, M. M. (2020). The effect of state and trait self-critical rumination on acute distress: An exploratory experimental investigation. *Journal of Rational-Emotive & Cognitive-Behavior Therapy*, 39, 306–321.
- Kopala-Sibley, D. C., Chartier, G. B., Bhanot, S., Cole, J., Chan, P. Y., Berlim, M. T., & McGirr, A. (2020). Personality trait predictive utility and stability in transcranial magnetic stimulation (rTMS) for major depression: Dissociation of neuroticism and self-criticism. *The Canadian Journal of Psychiatry*, 65(4), 264–272.
- Kopala-Sibley, D. C., Danzig, A. P., Kotov, R., Bromet, E. J., Carlson, G. A., Olino, T. M., Bhatia, V., Black, S. R., & Klein, D. N. (2016b). Negative emotionality and its facets moderate the effects of exposure to Hurricane Sandy on children's postdisaster depression and anxiety symptoms. *Journal of Abnormal Psychology*, 125(4), 471.
- Kopala-Sibley, D. C., Dougherty, L. R., Dyson, M. W., Laptook, R. S., Olino, T. M., Bufferd, S. J., & Klein, D. N. (2017c). Early childhood cortisol reactivity moderates the effects of parent-child relationship quality on the development of children's temperament in early childhood. *Developmental Science*, 20(3), e12378.
- Kopala-Sibley, D. C., Jelinek, C., Kessel, E., Frost, A., Allmann, A. E., & Klein, D. N. (2017a). Parental depressive history, parenting styles, and child psychopathology over six years: The contribution of each parent's depressive history to the other's parenting styles. *Development and Psychopathology*, 29(4), 1469.
- Kopala-Sibley, D. C., Klein, D. N., Perlman, G., & Kotov, R. (2017b). Self-criticism and dependency in female adolescents: Prediction of first onsets and disentangling the relationships between personality, stressful life events, and internalizing psychopathology. *Journal of Abnormal Psychology*, 126(8), 1029.
- Kopala-Sibley, D. C., Kotov, R., Bromet, E. J., Carlson, G. A., Danzig, A. P., Black, S. R., & Klein, D. N. (2016a). Personality diatheses and Hurricane Sandy: Effects on post-disaster depression. *Psychological Medicine*, 46(4), 865.
- Kopala-Sibley, D. C., & Zuroff, D. C. (2014). The developmental origins of personality factors from the self-definitional and relatedness domains: A review of theory and research. *Review of General Psychology*, 18(3), 137–155.
- Kopala-Sibley, D. C., & Zuroff, D. C. (2020). The self and depression: Four psychological theories and their potential neural correlates. *Journal of Personality*, 88(1), 14–30.
- Kopala-Sibley, D. C., Zuroff, D. C., Hankin, B. L., & Abela, J. R. (2015). The development of self-criticism and dependency in early adolescence and their role in the development of depressive and anxiety symptoms. *Personality and Social Psychology Bulletin*, 41(8), 1094–1109.
- Kopala-Sibley, D. C., Zuroff, D. C., & Koestner, R. (2012). The determinants of negative maternal parenting behaviours: Maternal, child, and paternal characteristics and their interaction. *Early Child Development and Care*, 182(6), 683–700.
- Kopala-Sibley, D. C., Zuroff, D. C., Russell, J. J., & Moskowitz, D. S. (2014). Understanding heterogeneity in social anxiety disorder: Dependency and self-criticism moderate fear responses to interpersonal cues. *British Journal of Clinical Psychology*, 53(2), 141–156.

- Korten, N. C., Comijs, H. C., Lamers, F., & Penninx, B. W. (2012). Early and late onset depression in young and middle aged adults: Differential symptomatology, characteristics and risk factors? *Journal of Affective Disorders, 138*(3), 259–267.
- Kotov, R., Gamez, W., Schmidt, F., & Watson, D. (2010). Linking “big” personality traits to anxiety, depressive, and substance use disorders: A meta-analysis. *Psychological Bulletin, 136*(5), 768.
- Krueger, R. F., & Johnson, W. (2008). Behavioral genetics and personality: A new look at the integration of nature and nurture. In O. P. John, R. W. Robins, & L. A. Pervin (Eds.), *Handbook of personality: Theory and research* (pp. 287–310). Guilford Press.
- Kushner, S. C. (2015). A review of the direct and interactive effects of life stressors and dispositional traits on youth psychopathology. *Child Psychiatry & Human Development, 46*(5), 810–819.
- Lahey, B. B. (2009). Public health significance of neuroticism. *American Psychologist, 64*(4), 241.
- Lee, F. S., Heimer, H., Giedd, J. N., Lein, E. S., Sestan, N., Weinberger, D. R., & Casey, B. J. (2014). Adolescent mental health—Opportunity and obligation. *Science, 346*(6209), 547–549.
- Lipscomb, S. T., Leve, L. D., Harold, G. T., Neiderhiser, J. M., Shaw, D. S., Ge, X., & Reiss, D. (2011). Trajectories of parenting and child negative emotionality during infancy and toddlerhood: A longitudinal analysis. *Child Development, 82*(5), 1661–1675.
- Luby, J. L., Svrakic, D. M., McCallum, K., Przybeck, T. R., & Cloninger, C. R. (1999). The Junior Temperament and Character Inventory: Preliminary validation of a child self-report measure. *Psychological Reports, 84*(3_Suppl), 1127–1138.
- Luyten, P., Sabbe, B., Blatt, S. J., Meganck, S., Jansen, B., De Grave, C., Maes, F., & Corveleyn, J. (2007). Dependency and self-criticism: Relationship with major depressive disorder, severity of depression, and clinical presentation. *Depression and Anxiety, 24*(8), 586–596.
- Malatesta, C. Z., & Haviland, J. M. (1982). Learning display rules: The socialization of emotion expression in infancy. *Child Development, 53*, 991–1003.
- Mandel, T., Dunkley, D. M., & Moroz, M. (2015). Self-critical perfectionism and depressive and anxious symptoms over 4 years: The mediating role of daily stress reactivity. *Journal of Counseling Psychology, 62*(4), 703.
- Markon, K. E., Krueger, R. F., & Watson, D. (2005). Delineating the structure of normal and abnormal personality: An integrative hierarchical approach. *Journal of Personality and Social Psychology, 88*(1), 139.
- Marshall, M. B., Zuroff, D. C., McBride, C., & Bagby, R. M. (2008). Self-criticism predicts differential response to treatment for major depression. *Journal of Clinical Psychology, 64*(3), 231–244.
- McGrath, D. S., Sherry, S. B., Stewart, S. H., Mushquash, A. R., Allen, S. L., Nealis, L. J., & Sherry, D. L. (2012). Reciprocal relations between self-critical perfectionism and depressive symptoms: Evidence from a short-term, four-wave longitudinal study. *Canadian Journal of Behavioural Science/Revue Canadienne des Sciences du Comportement, 44*(3), 169.
- Middeldorp, C. M., Cath, D. C., Beem, A. L., Willemsen, G., & Boomsma, D. I. (2008). Life events, anxious depression and personality: A prospective and genetic study. *Psychological Medicine, 38*(11), 1557.
- Mongrain, M., Lubbers, R., & Struthers, W. (2004). The power of love: Mediation of rejection in roommate relationships of dependents and self-critics. *Personality and Social Psychology Bulletin, 30*(1), 94–105.
- Morey, L. C., Shea, M. T., Markowitz, J. C., Stout, R. L., Hopwood, C. J., Gunderson, J. G., Grilo, C. M., McGlashan, T. H., Yen, S., Sanislow, C. A., & Skodol, A. E. (2010). State effects of major depression on the assessment of personality and personality disorder. *American Journal of Psychiatry, 167*(5), 528–535.
- Morris, B. H., Bylsma, L. M., & Rottenberg, J. (2009). Does emotion predict the course of major depressive disorder? A review of prospective studies. *British Journal of Clinical Psychology, 48*(3), 255–273.
- Morris, M. C., Ciesla, J. A., & Garber, J. (2008). A prospective study of the cognitive-stress model of depressive symptoms in adolescents. *Journal of Abnormal Psychology, 117*(4), 719.

- Mulder, R. T. (2002). Personality pathology and treatment outcome in major depression: A review. *American Journal of Psychiatry*, *159*(3), 359–371.
- Muñoz, R. F., Cuijpers, P., Smit, F., Barrera, A. Z., & Leykin, Y. (2010). Prevention of major depression. *Annual Review of Clinical Psychology*, *6*, 181–212.
- Naragon-Gainey, K., Gallagher, M. W., & Brown, T. A. (2013). Stable “trait” variance of temperament as a predictor of the temporal course of depression and social phobia. *Journal of Abnormal Psychology*, *122*(3), 611.
- Ormel, J., Oldehinkel, A. J., & Brilman, E. I. (2001). The interplay and etiological continuity of neuroticism, difficulties, and life events in the etiology of major and subsyndromal, first and recurrent depressive episodes in later life. *American Journal of Psychiatry*, *158*(6), 885–891.
- Ormel, J., Oldehinkel, A. J., & Vollebergh, W. (2004). Vulnerability before, during, and after a major depressive episode: A 3-wave population-based study. *Archives of General Psychiatry*, *61*(10), 990–996.
- Paivio, S. C., & Greenberg, L. S. (1995). Resolving “unfinished business”: efficacy of experiential therapy using empty-chair dialogue. *Journal of Consulting and Clinical Psychology*, *63*(3), 419.
- Pardini, D. A., Fite, P. J., & Burke, J. D. (2008). Bidirectional associations between parenting practices and conduct problems in boys from childhood to adolescence: The moderating effect of age and African-American ethnicity. *Journal of Abnormal Child Psychology*, *36*(5), 647–662.
- Patterson, G. R. (1982). *Coercive family process* (Vol. 3). Castalia.
- Patterson, G. R., DeBaryshe, B. D., & Ramsey, E. (1989). A developmental perspective on antisocial behavior. *American Psychologist*, *44*, 329–335.
- Payne, L. A., Ellard, K. K., Farchione, T. J., Fairholme, C. P., & Barlow, D. H. (2014). Emotional disorders: A unified transdiagnostic protocol. In D. H. Barlow (Ed.), *Clinical handbook of psychological disorders: A step-by-step treatment manual* (5th ed.). Guilford Press.
- Perls, FS (1969) *Gestalt therapy verbatim*. Moab, UT: Real People Press.
- Priel, B., & Shahar, G. (2000). Dependency, self-criticism, social context and distress: Comparing moderating and mediating models. *Personality and Individual Differences*, *28*(3), 515–525.
- Quilty, L. C., De Fruyt, F., Rolland, J. P., Kennedy, S. H., Rouillon, P. F., & Bagby, R. M. (2008). Dimensional personality traits and treatment outcome in patients with major depressive disorder. *Journal of Affective Disorders*, *108*(3), 241–250.
- Raine, A. (2002). Biosocial studies of antisocial and violent behavior in children and adults: A review. *Journal of Abnormal Child Psychology*, *30*(4), 311–326.
- Rapee, R. M., Kennedy, S., Ingram, M., Edwards, S., & Sweeney, L. (2005). Prevention and early intervention of anxiety disorders in inhibited preschool children. *Journal of Consulting and Clinical Psychology*, *73*, 488–497.
- Rapee, R. M., Kennedy, S. J., Ingram, M., Edwards, S. L., & Sweeney, L. (2010). Altering the trajectory of anxiety in at-risk young children. *American Journal of Psychiatry*, *167*, 1518–1525.
- Rector, N. A., Bagby, R. M., Segal, Z. V., Joffe, R. T., & Levitt, A. (2000). Self-criticism and dependency in depressed patients treated with cognitive therapy or pharmacotherapy. *Cognitive Therapy and Research*, *24*(5), 571–584.
- Roberts, B. W., & DelVecchio, W. F. (2000). The rank-order consistency of personality traits from childhood to old age: A quantitative review of longitudinal studies. *Psychological Bulletin*, *126*(1), 3.
- Roberts, B. W., Walton, K. E., & Viechtbauer, W. (2006). Patterns of mean-level change in personality traits across the life course: A meta-analysis of longitudinal studies. *Psychological Bulletin*, *132*(1), 1.
- Robinson, C. C., Mandleco, B., Olsen, S. F., & Hart, C. H. (2001). The parenting styles and dimensions questionnaire. In B. F. Perlmutter, J. Touliatos, & G. W. Holden (Eds.), *Handbook of family measurement techniques: Vol. 3. Instruments & index* (pp. 319–321). Thousand Oaks, CA, USA: Sage.
- Rogers, C. (1951). *Client-centered therapy: Its current practice, implications, and theory*. Houghton Mifflin.

- Rohde, P., Lewinsohn, P. M., & Seeley, J. R. (1990). Are people changed by the experience of having an episode of depression? A further test of the scar hypothesis. *Journal of Abnormal Psychology, 99*(3), 264.
- Rohde, P., Lewinsohn, P. M., & Seeley, J. R. (1994). Are adolescents changed by an episode of major depression? *Journal of the American Academy of Child & Adolescent Psychiatry, 33*(9), 1289–1298.
- Rost, F., Luyten, P., & Fonagy, P. (2018). The Anaclitic–Introjective Depression Assessment: Development and preliminary validity of an observer-rated measure. *Clinical Psychology & Psychotherapy, 25*(2), 195–209.
- Rothbart, M. K., Ahadi, S. A., Hershey, K. L., & Fisher, P. (2001). Investigations of temperament at three to seven years: The Children’s Behavior Questionnaire. *Child Development, 72*(5), 1394–1408.
- Rothbart, M. K., Bates, J. E., Damon, W., & Eisenberg, N. (2006). Temperament. In *Handbook of child psychology* (Social, emotional, and personality development) (Vol. 3, pp. 99–166).
- Sauer-Zavala, S., Wilner, J. G., & Barlow, D. H. (2017). Addressing neuroticism in psychological treatment. *Personality Disorders: Theory, Research, and Treatment, 8*(3), 191.
- Schaefer, E. S. (1965). Children’s reports of parental behavior: An inventory. *Child Development, 41*–424.
- Schludermann, E., & Schludermann, S. (1970). Replicability of factors in children’s report of parent behavior (CRPBI). *The Journal of Psychology, 76*(2), 239–249.
- Schiller, M., Hammen, C. C., & Shahar, G. (2016). Links among the self, stress, and psychological distress during emerging adulthood: Comparing three theoretical models. *Self and Identity, 15*(3), 302–326.
- Segal, Z. V., Teasdale, J. D., Williams, J. M., & Gemar, M. C. (2002). The mindfulness-based cognitive therapy adherence scale: Inter-rater reliability, adherence to protocol and treatment distinctiveness. *Clinical Psychology & Psychotherapy, 9*(2), 131–138.
- Shahar, B., Carlin, E. R., Engle, D. E., Hegde, J., Szepeswol, O., & Arkowitz, H. (2012). A pilot investigation of emotion-focused two-chair dialogue intervention for self-criticism. *Clinical Psychology & Psychotherapy, 19*(6), 496–507.
- Shahar, G. (2015). *Erosion: The psychopathology of self-criticism*. Oxford University Press.
- Shahar, G., Blatt, S. J., Zuroff, D. C., Krupnick, J. L., & Sotsky, S. M. (2004a). Perfectionism impedes social relations and response to brief treatment for depression. *Journal of Social and Clinical Psychology, 23*(2), 140–154.
- Shahar, G., & Henrich, C. C. (2019). Role of adolescent exposure to rockets in the links between personality vulnerability and psychopathology. *Development and Psychopathology, 31*(4), 1367–1380.
- Shahar, G., Joiner, T. E., Jr., Zuroff, D. C., & Blatt, S. J. (2004b). Personality, interpersonal behavior, and depression: Co-existence of stress-specific moderating and mediating effects. *Personality and Individual Differences, 36*(7), 1583–1596.
- Shahar, G., & Priel, B. (2003). Active vulnerability, adolescent distress, and the mediating/suppressing role of life events. *Personality and Individual Differences, 35*(1), 199–218.
- Shea, M. T., Leon, A. C., Mueller, T. I., Solomon, D. A., Warshaw, M. G., & Keller, M. B. (1996). Does major depression result in lasting personality change? *The American Journal of Psychiatry, 153*(11), 1404–1410.
- Sherry, S. B., Richards, J. E., Sherry, D. L., & Stewart, S. H. (2014). Self-critical perfectionism is a vulnerability factor for depression but not anxiety: A 12-month, 3-wave longitudinal study. *Journal of Research in Personality, 52*, 1–5.
- Shih, J. H., Abela, J. R., & Starrs, C. (2009). Cognitive and interpersonal predictors of stress generation in children of affectively ill parents. *Journal of Abnormal Child Psychology, 37*(2), 195.
- Snijders, T. A. B., & Bosker, R. J. (2002). *Multilevel analysis: An introduction to basic and advanced multilevel modeling* (Reprint. ed.). Sage Publications. ISBN 978-0761958901.
- Sommers-Spijkerman, M., Trompetter, H., Schreurs, K., & Bohlmeijer, E. (2018). Pathways to improving mental health in compassion-focused therapy: Self-reassurance, self-criticism and affect as mediators of change. *Frontiers in Psychology, 9*, 2442.

- Spinhoven, P., Elzinga, B. M., Hovens, J. G. F. M., Roelofs, K., Van Oppen, P., Zitman, F. G., & Penninx, B. W. J. H. (2011). Positive and negative life events and personality traits in predicting course of depression and anxiety. *Acta Psychiatrica Scandinavica*, *124*(6), 462–473.
- Spinhoven, P., Huijbers, M. J., Ormel, J., & Speckens, A. E. (2017). Improvement of mindfulness skills during mindfulness-based cognitive therapy predicts long-term reductions of neuroticism in persons with recurrent depression in remission. *Journal of Affective Disorders*, *213*, 112–117.
- Starrs, C. J., Abela, J. R., Zuroff, D. C., Amsel, R., Shih, J. H., Yao, S., Zhu, X. Z., & Hong, W. (2017). Predictors of stress generation in adolescents in mainland China. *Journal of Abnormal Child Psychology*, *45*(6), 1207–1219.
- Tang, T. Z., DeRubeis, R. J., Hollon, S. D., Amsterdam, J., Shelton, R., & Schalet, B. (2009). Personality change during depression treatment: A placebo-controlled trial. *Archives of General Psychiatry*, *66*(12), 1322–1330.
- Treadway, M. T., & Leonard, C. V. (2016). Isolating biomarkers for symptomatic states: Considering symptom–substrate chronometry. *Molecular Psychiatry*, *21*(9), 1180.
- Uliaszek, A. A., Zinbarg, R. E., Mineka, S., Craske, M. G., Griffith, J. W., Sutton, J. M., Epstein, A., & Hammen, C. (2012). A longitudinal examination of stress generation in depressive and anxiety disorders. *Journal of Abnormal Psychology*, *121*(1), 4.
- Van Os, J., & Jones, P. B. (1999). Early risk factors and adult person–environment relationships in affective disorder. *Psychological Medicine*, *29*(5), 1055–1067.
- Vinkers, C. H., Joëls, M., Milaneschi, Y., Kahn, R. S., Penninx, B. W., & Boks, M. P. (2014). Stress exposure across the life span cumulatively increases depression risk and is moderated by neuroticism. *Depression and Anxiety*, *31*(9), 737–745.
- Wichers, M. C., Myin-Germeys, I., Jacobs, N., Peeters, F., Kenis, G., Derom, C., Vlietinck, R., Delespaul, P., & Van Os, J. (2007). Evidence that moment-to-moment variation in positive emotions buffer genetic risk for depression: A momentary assessment twin study. *Acta Psychiatrica Scandinavica*, *115*(6), 451–457.
- Wiersma, J. E., van Oppen, P., van Schaik, D. J., Van Der Does, A. W., Beekman, A. T., & Penninx, B. W. (2011). Psychological characteristics of chronic depression: A longitudinal cohort study. *The Journal of Clinical Psychiatry*, *72*(3), 288–294.
- Wilson, S., DiRago, A. C., & Iacono, W. G. (2014). Prospective interrelationships between late adolescent personality and major depressive disorder in early adulthood. *Psychological Medicine*, *44*(3), 567–577.
- Zaslow, M. J., Weinfield, N. S., Gallagher, M., Hair, E. C., Ogawa, J. R., Egeland, B., ... & De Temple, J. M. (2006). Longitudinal prediction of child outcomes from differing measures of parenting in a low-income sample. *Developmental Psychology*, *42*(1), 27.
- Zinbarg, R. E., Uliaszek, A. A., & Adler, J. M. (2008). The role of personality in psychotherapy for anxiety and depression. *Journal of Personality*, *76*(6), 1649–1688.
- Zuroff, D. C., Blatt, S. J., Sanislow, C. A., III, Bondi, C. M., & Pilkonis, P. A. (1999). Vulnerability to depression: Reexamining state dependence and relative stability. *Journal of Abnormal Psychology*, *108*(1), 76.
- Zuroff, D. C., Blatt, S. J., Sotsky, S. M., Krupnick, J. L., Martin, D. J., Sanislow, C. A., III, & Simmens, S. (2000). Relation of therapeutic alliance and perfectionism to outcome in brief outpatient treatment of depression. *Journal of Consulting and Clinical Psychology*, *68*(1), 114.
- Zuroff, D. C., Igraja, I., & Mongrain, M. (1990). Dysfunctional attitudes, dependency, and self-criticism as predictors of depressive mood states: A 12-month longitudinal study. *Cognitive Therapy and Research*, *14*(3), 315–326.
- Zuroff, D. C., Mongrain, M., & Santor, D. A. (2004). Conceptualizing and measuring personality vulnerability to depression: Comment on Coyne and Whiffen (1995). *Psychological Bulletin*, *130*(3), 489–511.
- Zuroff, D. C., Sadikaj, G., Kelly, A. C., & Leybman, M. J. (2016). Conceptualizing and measuring self-criticism as both a personality trait and a personality state. *Journal of Personality Assessment*, *98*(1), 14–21.

Chapter 12

Nurturance, Structure, and Child Externalizing Behaviors: Working with Parents to Support Children and Families



Jen Theule

Abstract Utilizing the parenting styles literature and attachment theory (as well as family systems theory and resilience theory) as a **guiding framework**, this chapter explores familial, or parenting, influences on externalizing behavior and how to intervene using this perspective. There are four major parenting styles: authoritarian, authoritative, permissive, and neglectful, which can be placed along two dimensions: responsiveness/warmth and control (Baumrind, *Child Development* 37:887–907, 1966; Maccoby and Martin, *Handbook of Child Psychology*, 4:1–101, 1983). Along with attachment theory, which holds that parent-child relationships are key to helping children regulate their emotions and behaviors (Cassidy, *Monographs of the Society for Research in Child Development* 59:228–249, 1994), my **clinical reasoning approach** sees children as having two core relational needs: nurturance and structure. Nurturance can be understood as warmth, and includes constructs such as affection and responsiveness (sensitively reacting to a child's needs); while structure can be understood as the setting of appropriate and firm limits, boundaries, and rules, which are applied consistently and predictably. Consistent with attachment theory, I see externalizing behaviors as a sign of emotional dysregulation. My **approach to mental health assessment** focuses on gaining a comprehensive understanding of the problem and determining its function (or what need it satisfies). I accomplish these goals through a combination of interviews and parent-child observations, paying special attention to nurturance and structure, as well as the parents' families of origin and any potential developmental issues in the child. My **approach to intervention** focuses on working with the parents of children with externalizing behavior problems, who typically benefit from support in one or both of nurturance and structure, including seeing the behavior as a communication. This is often accomplished through building up positive connections and helping parents set firm clear limits. A **case study** applying these constructs to a family who struggles with both limit-setting and nurturance is provided.

J. Theule (✉)

Department of Psychology, University of Manitoba, Winnipeg, MB, Canada
e-mail: Jen.Theule@umanitoba.ca

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Externalizing behaviors, such as disruptive and aggressive behaviors, are traditionally thought of as behaviors that involve the child negatively acting on their external world (Eisenberg et al., 2001; Liu, 2004). These are often contrasted with “internalizing” problems, such as anxiety or depression, which have negative impacts on a child’s internal world. At their extremes, externalizing behaviors may result in diagnoses of oppositional defiant disorder and/or conduct disorder (American Psychiatric Association, 2013). Exact manifestations of externalizing behaviors vary by child age. In very young children (ages 0–6 years) we see behaviors such as biting, tantruming, hitting, and screaming. In school-age children (ages 6–12 years), we tend to see greater impulsivity, as well as continued aggression and tantruming; while in adolescents (ages 12–18 years), we tend to see more delinquency (law-breaking), substance use, and impulsivity, in addition to aggression and difficulties with emotion regulation. Externalizing behaviors are some of the most common reasons for referrals to children’s mental health agencies (Georgiades et al., 2019). It is important to note, however, that some level of externalizing behaviors is developmentally appropriate and normative. For example, preschoolers tantrum once a day on average (Potegal & Davidson, 2003), many school-age children continue to be aggressive at times (although it declines with age; Lee et al., 2007), and among American ninth-grade students, more than 20% report binge drinking (Kann et al., 2000).

There are a number of contributing factors to externalizing behaviors, including both genetic and environmental factors (Liu, 2004). In terms of genetic factors, we have temperamental factors, such as a tendency to respond to threats with high levels of negative emotion, to seek out daring activities, as well as to increased levels of impulsivity (Lahey & Waldman, 2017). Lower language skills are also considerable predictors of externalizing behaviors, even after other risk factors, such as family income and intelligence, are considered (Chow & Wehby, 2018). In addition, we see elevated rates of adult manifestations of externalizing behaviors, such as antisocial behavior (Bornovalalova et al., 2010) and substance use disorders (Marmorstein et al., 2009) in parents of children with externalizing behavior problems. That said, we also see elevated rates of externalizing behaviors in children of mothers (Goodman et al., 2011) and fathers (Cheung & Theule, 2019) with depression, an internalizing disorder. It is unclear whether links to parental psychopathology, whether internalizing or externalizing problems, are related to genetic or parenting factors, or some combination of the two. That said, the evidence to date suggests that parenting plays a key role in the relationship between parental psychopathology and child externalizing behavior problems (e.g., Kane & Garber, 2009). Additionally, child sex and/or gender seem to play a role as well, with boys demonstrating higher levels of externalizing behaviors than girls (Lahey et al., 2006). Like parental psychopathology, this likely reflects complex interactions between internal (e.g., hormonal) and external (i.e., gender socialization) factors. Environmental factors, such as culture, and neighborhood variables, including monitoring, also play significant roles (Beyers et al., 2003; White & Renk, 2012).

Guiding Framework

Clearly, externalizing behaviors have many overlapping contributors. My focus in this chapter will be on modifiable factors, especially parenting factors given their centrality. There are a number of different parenting variables one could consider with respect to externalizing behaviors in children, but one of the clearest ways to conceptualize these factors is using attachment theory, and relatedly, Baumrind's parenting styles theory. Attachment theory originated to address the presentation of "spoiled" children, as well as juvenile delinquents (Bretherton, 1992)—two populations that are clearly relevant to our discussion in this chapter. In his work with these populations, Bowlby noticed that many of these children, both those with histories of delinquency and those who were deemed spoiled, had very poor parenting histories, characterized by significant separations from their primary caregivers (Bowlby, 1955). Building on this, attachment theory posits that children use their parents as a safe base from which to explore and a safe haven to return to when scared. Based upon their experiences with their primary caregivers, children develop *internal working models*, or expectations, about relationships. For example, they might develop internal working models that people are reliable and kind, or that they are usually distracted, but safe. A key component in the development of a secure attachment is parental sensitivity (De Wolff & van Ijzendoorn, 1997), that is, a parent's ability to recognize their child's needs by observing the child's behaviors, and to then respond accordingly.

Ainsworth described styles of attachment, delineated by infant responses to separation from their primary caregiver (Ainsworth et al., 1978). She first identified three different attachment styles: secure, insecure-ambivalent, and insecure-avoidant. Main and Solomon (1990) later identified a fourth style, disorganized attachment. Securely attached infants seek proximity to their caregiver and are comforted by their presence. Insecure-ambivalently attached infants are very distressed when separated from their caregiver and difficult to soothe upon return. Insecure-avoidantly attached infants tend to ignore their caregiver and rarely seek proximity. Infants with disorganized attachments behave inconsistently, appearing disoriented in their responses to their caregiver. Although there are some differences in rates of the two insecure styles of attachment cross-culturally, the research overwhelmingly suggests that attachment is a universal concept and that secure attachment is the norm around the world (Clayton, 2019; Mesman et al., 2016).

Styles of attachment develop as a result of a parent's typical ways of reacting to a child over time. Securely attached children have parents who are predictably sensitive and responsive to their needs. Insecurely attached children have parents who are predictably intrusive (resulting in insecure-ambivalent attachment) or distant (resulting in insecure-avoidant attachment). Children with disorganized attachments tend to have parents who are unpredictable—they alternate between sensitivity and insensitivity and/or behave in frightened or frightening ways. As a result of this unpredictability and fear, children behave in a less organized or cohesive ("dys-regulated") way, and will sometimes simply freeze. What freezing looks like can

vary based on child age, but most often includes stalling (freezing mid pose, typically with an unfocused gaze) or dissociating (becoming unresponsive to the situation—this often looks like daydreaming or “zoning out”). We typically see these behaviors in children with disorganized attachments when they do not know what to expect (e.g., in novel situations), or when their parents are dysregulated (i.e., when their parents are very upset and thus might act in unpredictable ways, such as crying, becoming aggressive, or leaving). Children with disorganized attachments become dysregulated as a result of their conflicting needs for attention from their caregiver (for safety) and their uncertainty about whether their caregiver can provide that safety. Disorganized attachments are highly related to externalizing behaviors, with a meta-analysis noting a large effect between both insecure and disorganized attachments and rates of conduct and oppositional defiant disorders (Theule et al., 2016).

Oftentimes, children engage in externalizing behaviors due to problems regulating their emotions, and thus behavior. Emotion regulation is the process of monitoring and modifying one’s emotional reactions to achieve their goal (Thompson, 2008). Although dysregulation is far more common in children with disorganized attachments, all children, and many adults have moments of dysregulation. Dysregulation is a major contributor to externalizing behaviors (Halligan et al., 2013; Macklem, 2008). The attachment relationship is a major driver of the development of emotion regulation, although temperament also plays a role (Cassidy, 1994).

Baumrind’s parenting styles research has a great deal in common with the attachment literature discussed earlier. Baumrind described three parenting styles: authoritarian parenting, authoritative parenting, and permissive parenting (Baumrind, 1966). Later researchers added a fourth style, neglectful, and noted that each of these styles varied on two factors: responsiveness (warmth) and control (Maccoby & Martin, 1983). Authoritarian parenting is characterized by low responsiveness and high control. It typically involves a focus on obedience and rule-following. Authoritative parenting is characterized by both high responsiveness and high control. It typically involves structure and rules, but parents balance this structure with negotiation and explanation. Levels of expressed affection are also high. Permissive (indulgent) parenting is characterized by high responsiveness combined with low control. In this style of parenting, parents are very affectionate and clearly loving but set few limits on their child. Finally, neglectful parenting is characterized by both low responsiveness and control. Neglectful parenting is typified by extremely low levels of involvement with parenting in any form. Research has concluded that children raised by authoritative parents have the most positive outcomes in terms of academic success, behavior, and psychosocial development (Lamborn et al., 1991), while children raised by authoritarian parents are more likely to conform to adult standards, but have more difficulty with self-concept. Children of permissive-indulgent parents tend to have higher self-confidence, but increased rates of substance abuse and school problems. Finally, children of neglectful parents have the lowest rates of psychosocial competence and the highest rates of psychological and behavioral problems (Lamborn et al., 1991). Like attachment, most research

suggests that the child outcomes associated with Baumrind's parenting styles are applicable across cultures (for a review, see Sorkhabi, 2005).

Children do not have the abilities to communicate in the ways that adults do, but they do have a highly-tuned set of evolutionary behaviors they use to ensure their needs are met. Children need food, drink, shelter, warmth, and all of their basic physical needs met, but they also *need* love, physical touch, feelings of safety, and attention. The best example of these complex needs comes from studies of children raised in Romanian orphanages (see Nelson et al., 2014). Children provided with food, shelter, regular diaper changes, and baths still struggled tremendously. Many developed concerning stereotypical behaviors (e.g., headbanging), health problems, social interaction deficits, developmental delays, reduced brain volumes, and impaired cortisol functioning. We now know that these negative outcomes were related in large part to the absence of a consistent, predictable relationship with a caregiver.

Oftentimes, externalizing behaviors are a way for a child to have their needs for attention, feelings of safety, and even physical touch met. Externalizing behaviors tend to pull parental attention. Although most children would prefer positive attention, the need for attention is so strong in most children that even negative attention is reinforcing (rewarding). Parental attention also increases feelings of safety. Children evolved to survive in very different circumstances than most find themselves in now. In traditional settings, a parent's attention ensured that the child would be protected from predators and other risks.

Externalizing behaviors are also a way for children to add control and predictability to their environment when it feels out of control. Indeed, disorganized attachments in the preschool period are often called "controlling attachments" for just this reason. These youngsters attempt to control their caregivers through either punitive or caregiving strategies (Vallance, 2004) to make the world feel more predictable and thus safer. Unfortunately, in the long run, a child feeling like they are in control often backfires and increases anxiety as this level of control is overwhelming to a child. One popular attachment-based prevention and intervention approach, the Circle of Security, indeed notes that the primary roles of caregivers are to be "bigger, stronger, wiser, and kind" (Marvin et al., 2002).

We know that children use a variety of behaviors—crying, cooing, yelling, hitting, and tantruming, to name a few—to communicate with caregivers. Sometimes they are communicating a problem (e.g., "I'm hurt") and other times, a need (e.g., "I'm overwhelmed and need you to regulate me."). It can be hard to "read" these behaviors at times, as children who engage in externalizing behaviors often miscue their parents by pushing them away, yelling at them, or calling them names, but these too are communication attempts. Often these children are trying to communicate a distrust that they are loved unconditionally (i.e., even if they are misbehaving). Some children, as a result of the internal working models they have developed over years, also lack more adaptive communication strategies, such as snuggling in for a hug when sad or overwhelmed, or asking for help with their homework when they feel stressed.

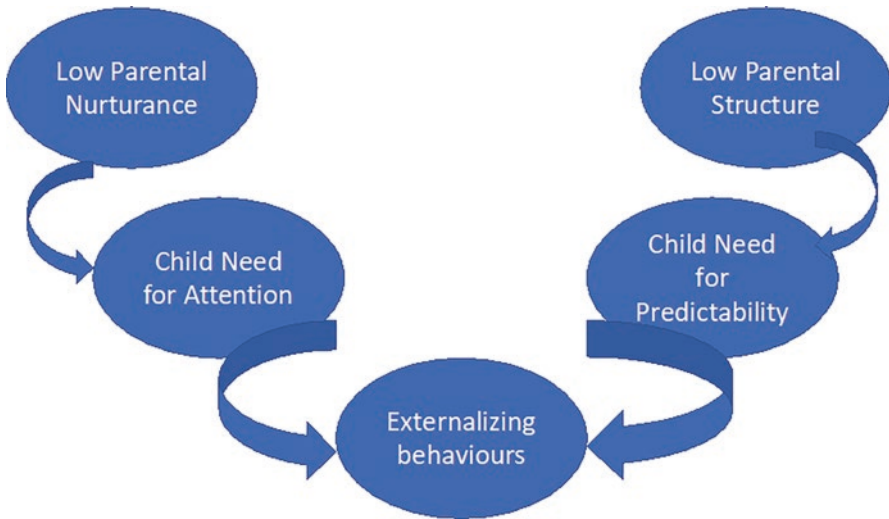


Fig. 12.1 The development of externalizing behavior problems

Clinical Reasoning Approach

In my clinical experience, and supported by the research and theoretical literature, I find that children with externalizing behavior problems tend to have parents who struggle with nurturance (warmth) and/or structure (control) and that conceptualizing children’s needs along these two simple factors lets me quickly and easily identify where and how to intervene, and also provides parents with a clear road map for our work together. Furthermore, as these patterns recur, they become more engrained and common. To put it another way, children with disorganized attachments are more likely to become dysregulated as a result of the unpredictability they experience, and as a result, are more likely to engage in externalizing behaviors (Theule et al., 2016), both as communication, and because they cannot regulate well enough to prevent these behaviors. Over time, these “states” become “traits” (Perry et al., 1995). That is, over time, these temporary behaviors become engrained patterns or default ways of being. Please see Fig. 12.1 for an illustration of these relationships.

Despite exposure to known risk factors, we know that many children do not develop externalizing behavior problems. That is, they are “resilient.” Some of this resilience is likely related to genetic factors, and some due to a variety of other largely unmodifiable factors, such as IQ (Condly, 2006). It is also important to keep in mind that at times, the externalizing behaviors we may think of as “maladaptive” are in fact, incredibly adaptive in certain situations, for certain children and families, and at certain times (Perry et al., 1995). Many children with externalizing behavior problems use these behaviors to have their needs for safety, attention, connection, physical touch, and communication met. Strong programs for building

resilience to externalizing behaviors take into account these needs and find other ways to ensure children's needs are met (Ungar, n.d.). Returning to our earlier example about Romanian orphans, it is clear that simply ignoring these needs is not the path to supporting optimal child development.

Approach to Mental Health Assessment

Before we can intervene effectively, a thorough assessment is essential. The first step in any good assessment is to get a fulsome description of the concern. We need to find out what the externalizing behavior looks like—does the child tantrum, become aggressive, or yell, for example? How long does the behavior last? Does it happen in all settings (e.g., school, home, soccer, with grandparents), or just some? Children who only engage in externalizing behaviors at home (or in other family-like settings) have acquired some emotion regulation skills, and also know that the people at home love them regardless of their behaviors, whereas they know that the care of coaches, teachers, and others is contingent on their actions. Children who engage in externalizing behaviors in all contexts have not had that experience and likely have very little emotion regulation capacity.

Next, we need to consider the *function* of the behavior. I consider functions quite broadly and try to think of them in three major classes: communication, instrumental, and regulatory. To make things a bit more complicated, we can't know the function of the behavior without knowing the typical outcome of the child's behavior on the adults around them. For example, a child tantruming at the grocery store for a lollipop might be trying to express their desire for it, but lacks better communication skills; might be trying to embarrass their parents into getting them a lollipop (instrumental), or might be just so overwhelmed with their desire that they cannot manage their emotions and tantrum (regulatory). Figuring out which function is present in this example, one needs to know what the parent *usually* or even sometimes does, as well as the child's developmental level. A child who is simply communicating will typically demonstrate communication deficits in other domains, and will also calm relatively quickly (10 min or less) after leaving the store without a lollipop. The child who is tantruming for instrumental reasons will have often been "rewarded" or reinforced with a lollipop for tantruming in the past. In this case, the parent has accidentally trained the child to tantrum to obtain their goals. This child will also typically calm relatively quickly. Frankly, neither of these scenarios is the most likely. Most children tantrum because they are simply overwhelmed with emotion. To some children, desires and disappointments over even seemingly minor issues can be quite dysregulating or upsetting—especially if they are already stressed in some way, by hunger, fatigue, illness, or other emotions earlier in the day. Children also come to these moments with varying degrees of reactivity, due to their history, including trauma history, and their temperamental make-up. When caregivers consistently set firm, empathetic limits, the child experiences both control and nurturance, and over time this predictability leads a child to have expectations about the

world (in attachment jargon, “internal working models”) that include that limits are firm, and people are kind to them, resulting in a default (although not absolute) state of emotional regulation. On the other hand, a child whose caregiver sometimes caves in, sometimes firmly says no, and sometimes screams at the child, cannot develop consistent expectations and as a result, is more easily dysregulated. It is thus the role of the assessment to figure out the default pattern so we know how to intervene.

Given the three functions of externalizing behaviors mentioned earlier (communication, instrumental, and regulatory), we have to determine what is driving the majority of the externalizing behaviors. Within regulatory tantrums and other externalizing behaviors, we have both children who engage in externalizing behaviors (e.g., aggression, tantrums) because they feel out of control, and children who engage in externalizing behaviors because their attention needs are not met. Many children are also meeting a combination of these needs through their externalizing behaviors. Children who feel out of control may have experienced parenting that did not set firm limits, was inconsistent, and/or had weak or absent boundaries. Children who need their attention needs met may have found that the most consistent or predictable way to have their needs met is through engaging in “unacceptable” or “naughty” behaviors, such as physical or verbal aggression. This ensures they receive predictable parental attention.

Our first step in most assessments is a thorough interview. Here we can start to determine a behavior’s function. As stated earlier, the majority of externalizing behaviors are due to regulatory problems, which of course interact with temperamental and other genetic factors, as well as development, along with a host of other factors. Learning more about regulatory behaviors requires special attention to the entire family system. It is important to learn if the child’s behavior has a function within the family system. For example, does it distract from marital conflict, a family member’s illness, or another issue? We also need to learn more about boundaries. Does the parent have authority in the system? The attachment system requires children to feel like there is someone more capable than them who can take charge to protect them. We also need to learn if the parent shows affection. It is important to examine both the verbal content (what is said) of what one learns in the interview, as well as the context, discourse (how it is said), and nonverbal signals. For example, do both parents attend in two-parent families, do they make eye contact with one another, how close or far apart do they sit? Inquiring about how parents met, and how well their relationship is functioning currently is often helpful. It is also important to attend to what they do not say. Do they name any strengths in their child or their family? Can they name their child’s interests and closest friends? Do they demonstrate empathy for their child’s position? Can they show empathy and compassion for their own mistakes? Knowing if the child was planned, any health complications in pregnancy, and prenatal substance exposure is also helpful.

The last major family issue to consider is the parent’s own family of origin. There is strong evidence for the intergenerational transmission of attachment (van IJzendoorn & Bakermans-Kranenburg, 2019). We also know that parents are often impacted by the “ghosts in the nursery” or their own experience being parented

when reacting to their children (Fraiberg et al., 1975). That is, often (but not always) unconsciously, parents parent their children the way they were parented. There are some parents who also actively choose to parent differently than they were parented, but in these cases knowing the parent's history is helpful as they are often indiscriminately reacting in an opposite manner to how they were parented, or are trying to meet the needs they assume their child has, based on their own unmet needs, rather than sensitively and responsively responding to their child's needs.

In addition to these family issues, it is necessary to screen for developmental disorders that may alter a child's ability to be regulated and/or may make it harder for parents to read their child's signals. Developmental issues, including intellectual disorders, language disorders, attention-deficit/hyperactivity disorder (ADHD), fetal alcohol spectrum disorders, and autism spectrum disorders can all affect the development of emotion and behavior regulation, parental expectations for child behavior, and child needs. Similarly, asking about family history of psychiatric difficulties can provide a window into other needs the parents and/or child may have (e.g., a family history of ADHD may suggest that ADHD is part of the child's needs, a history of maternal depression may suggest some difficulties in the development of the attachment system). It is also helpful to learn about the child's medical history as medical issues may impact the dyad directly (e.g., a child with poorly controlled asthma may need to be watched more carefully) or indirectly (e.g., a prior condition requiring surgery may have resulted in some anxiety in the parent about child well-being).

There are a number of ways to assess all of these constructs. As indicated earlier, an interview is often a very strong first step. The Working Model of the Child Interview (Zeanah et al., 1986/1993) is one strong interview for these purposes, as are the Adult Attachment Interview (George et al., 1996), and Circle of Security Interview (Powell et al., 2014). Figure 12.2 has a list of possible interview questions. Observations are also key. Observing parents' affect, their interactions with one another (in cases of two-parent families), and most importantly the parent-child dyad is essential. A brief separation can provide useful information as well, as long as parents and child are willing and the child does not become too distressed.

Observations of the dyad, triad, or whole family can occur in a number of ways. For children from toddlerhood through around the developmental age of 8, a play observation is often helpful. I typically provide a small selection of role-playing toys (e.g., dolls, cooking utensils, toy animals, doll house people, puppets, etc.) on a defined space in my office and ask the family to first play as they usually would. After approximately 10 min, I will ask parents to try to specifically follow the child's lead in play. After approximately another 10–20 min, I will ask the family to tidy up the toys. These three phases, based on the model used by Muir et al. (1999), enable me to observe the family's typical way of interacting. These practices also let me observe affection and role reversals through the child's play. Affection can be observed in fairly typical ways, such as hugs, kisses, consensual tickling, and cuddling. Role reversals occur when the parent asks the child for advice in developmentally-inappropriate ways (e.g., asking their opinion on the parent taking a new job), pleads with the child, or cries. We are also looking in a play assessment

Remember to ask these questions flexibly and as-needed. I rarely ask them all and even more rarely in this order. This is a guideline and not a script. The objective is to get a comprehensive understanding of what is happening. Use the questions to the extent that they help you reach those goals.

1. Tell me about the behaviours you're concerned about.
 - How often does the behaviour happen?
 - How long has this been a problem? That is, has there ever been a time when this wasn't a problem?
 - Where does it happen (home, school, grandparents, park, mall)?
 - Who is there when it happens (just immediate family, extended family, community members, friends)?
 - What happens before the behaviours?
 - How long does the behaviour last?
 - How does the behaviour end?
 - What do you do when this happens?
2. What is your relationship like with ___ now? How would you describe it? *After obtaining the description, ask for examples of times when the child behaved in ways that fit the description.*
3. What was ___ like as a baby? *Looking for whether the parent experienced the child as "difficult."*
 - How did ___ eat? Sleep?
 - Many new parents feel overwhelmed, stressed, sad, or anxious after the birth. How did you feel? Did you seek any treatment for these needs? Can you tell me about the treatment?
 - Tell me about how you were with the baby during this period? *Looking for distancing, ability to meet baby's physical and emotional needs.*
 - How long did these feelings go on?
4. I know it's been a long time, but can you recall when ___ first walked? Talked? *Check other milestones as needed.*
5. How is ___ doing with their milestones now?
6. How does ___ sleep and eat now?
7. How about ___'s health? Any surgeries? Hospitalizations? Injuries?
 - Is ___ on any medications now?
 - *As applicable*, tell me what that hospitalization was like for ___? How long were they in hospital? How often were you able to be there?
8. Is there any history of mental disorders in the family? *Gather information on both genetically-related family members and those involved in childrearing. Also double-check here that you have an accurate understanding of the family constellation.*
9. Who else supports you and your family? Friends, extended family, coworkers, other service providers?
10. Now, we're going to move back to the very beginning. Can you tell me about your pregnancy with ___?
 - *Note: If the child is related to the caregivers in another way, obtain as much detail about the pregnancy etc. as possible and ask the questions about feelings in relation to adoption or fostering, etc.*
 - How was the pregnancy for you?
 - Was the pregnancy planned?
 - How far along was the pregnancy when you found out you were expecting?
 - Did you use any fertility treatments or interventions?
 - How did you feel about the pregnancy?
 - Was any alcohol, drugs, or medications used during the pregnancy, especially before you knew you were pregnant?
 - How was the delivery? Was it vaginal or caesarean? Was it induced? How did you feel about the delivery?
 - Was the child born at term?

Fig. 12.2 Parent interview questions

11. *As applicable*: How is ____ doing in school/daycare?
 - How do they get along with other kids?
 - How are they doing academically? Are they reading?
 - How is their behaviour in school/daycare?
 - How is their attention there?
12. Have you been separated from ____ for any time? *We are looking for separations of a night or more. The younger the child when these occurred, the more of an issue these might be.*
13. Has there been any trauma, abuse, losses, or child welfare involvement? Tell me about these.
14. Is there any stress at home? For example, marital issues, financial stress, loss of a family pet, new sibling? Tell me about these.
15. What do you in regards to discipline?
16. What are the child's strengths?
17. What does ____ like to do for fun? Do they participate in any extra-curricular activities?
18. What are ____'s interests? Favourite TV show? Book? Activity?
19. Tell me about ____'s play? Do they pretend play? Tell me about that.
20. Changing gears a little, can you tell me about your marriage? How did you two meet? How are things going in your relationship?
21. What was your family like growing up?
22. Are there things you are trying to do differently with your child than how you were raised?
23. Is there anyone your child reminds you of? Why?
24. Can you tell me about some hopes and wishes you have for your child as they grow up?
25. What are your goals for our work together?

Fig. 12.2 (continued)

for moments where the parent and child “check-in” with one another (often through shared eye contact), and moments where they share in an activity, emotion, or sight (some clinicians call this joint attention or intersubjectivity)—for example, laughing together over a fallen block tower, looking out the window at a bird, baking a pretend cake. On the other hand, we are looking to see if we observe withdrawal or distancing between parent and child (e.g., parent backing away from a child, child creating boundaries between themselves and the parent). It is also very important to stay attuned to moments of frightening or frightened behavior on behalf of the parent, as we know these are so closely related to disorganized attachment (see above). Examples of frightening behaviors include trying to “spook” or scare a child or using a “creepy” voice in play. Manifestations of frightened behavior, include wide, startled eyes and a high-pitched voice in the parent. We also want to see if the parent can let the child lead the play (an appropriate amount of autonomy for a child). Observers should also attend to parental intrusiveness (i.e., if the parent is in the child's space or is not able to read the child's signals for disengagement) and negativity (e.g., teasing, mocking). Another factor I look for is invalidating messages, such as laughing at or minimizing a child's distress. The tidy-up portion lets one observe parental limit-setting (or the absence thereof). Here we are looking for whether the parent can sensitively direct the child to clean up *with* them and if the child will follow the direction. We want to see both if the parent is in charge, and if the parent can communicate that in a noncoercive way. Many of these points to consider are based on those elucidated by Zeanah et al. (2011), based on Benoit (2000). It is important to note that we may expect some differences in families of children with developmental disabilities—especially around tidy up. That said, as

the majority of the phenomena we are observing are around adult behavior, the major constructs stay the same. What we most need to attend to is if the parent(s) can sensitively respond to the child's needs while acknowledging that some children may have greater or fewer needs, or may demonstrate their needs in different ways (e.g., by engaging in self-stimulatory behaviors when overwhelmed). Certainly, parents of children with developmental disabilities may have a harder time being sensitive as their children's cues are often harder to read, but the child's needs for sensitive responding are the same.

In instances where both parents (and potentially siblings) will be involved, I use the Lausanne Family Play/Reflective Play model (see Philipp, 2012), a slight variation on the above, which has each parent play independently with the child(ren) before seeing how they can come together as a family. This setup provides us with more information about the larger family system and can be helpful when larger family system factors (e.g., triangulation) are suspected factors in the child's externalizing behaviors, or there are multiple children with externalizing behaviors in the family.

For children older than 8 years old, a family talk session is oftentimes helpful. Here we are looking for similar issues. Do parents and children demonstrate affection (through eye contact, joint laughter, comments, or physical touch), shared attention, respect? Is there any sign of intrusiveness or invalidation (e.g., telling a child that is how they do or do not feel)? Is the family very negative? We are also looking to see if the parent can allow the child some age-appropriate autonomy (e.g., where they sit, when they speak). On the other hand, role reversals can also be evident here. Parents need to be able to take charge in appropriate contexts (e.g., school attendance). At times, and depending on the developmental level of the child, a structured play session is still helpful with older children. This is most easily accomplished through a simple board game.

It is also important to note that although I have been mentioning parents and children to now, we would expect these same processes to be involved in any system that defines itself as a family. I have seen families comprised of a mother, child, aunt, and grandmother, and others of a father, two grandparents, a set of cousins, and the identified child, and still another comprised of a great-aunt and a child alone. What matters most is who lives in the home relatively consistently (approximately half-time or more) and that the child identifies as a caregiver (if adult) or in a sibling-like relationship (whether child or adult). The biological relationships are not typically relevant. That said, we are looking for relationships that are experienced as family relationships. As a result, we are not concerned here with friendships or school relationships, which, although certainly important, do not meet the same needs as family relationships.

Once one has gathered all of this information, it is imperative to develop a solid conceptualization. I find it helpful to write this conceptualization out—in an intake note, in the file, or where ever makes sense to you (and complies with appropriate confidentiality expectations). It can be quite simple (bullet form is usually sufficient), but having this clear road map is a helpful tool to revisit when one is feeling lost or overwhelmed in their clinical work with a family. In a somewhat simplified

way, it is also often helpful to share this conceptualization (or “roadmap”) with the parents. First, this adds transparency to your work. It also conveys respect for parents as leaders of their families. It increases treatment acceptability by underscoring the logic of your intervention(s). Finally, sharing this information is in itself an intervention. Some families can take this morsel of therapeutic support and independently see where they need to go and what they need to do. It is often helpful to share this road map as the last step of the assessment and obtain a verbal commitment for six to eight sessions or so. This roadmap, combined with the commitment, helps parents continue with treatment through the difficult process of change. Please see the case study below for a sample road map.

Prevention

The evidence suggests that the best efforts at prevention (or “resilience-building”) focus on multiple systems and coordination between them, and are culturally tailored (for an excellent overview see Ungar, [n.d.](#)). One of the most powerful protective factors we know of for children is a strong relationship with a safe adult. The Kauai Longitudinal study, which started in the 1950s was a seminal indicator of this important factor (Werner, [1993](#)). This study, which followed the entire birth cohort born on the Hawaiian island of Kauai in 1955, found that even among very high-risk populations, approximately one-third of individuals succeeded in school, and managed well outside of school as well. These children were characterized by their formation of strong family bonds outside of their relationships with parents (e.g., with a sibling or grandparent), as well as strong community ties (e.g., with an elder, clergy person, or teacher). Although the major concepts discussed earlier (i.e., attachment and parenting styles) have been shown to be applicable across cultures, exact manifestations vary, and the evidence suggests that culturally-tailored efforts are more acceptable, resulting in increased retention (Kumpfer et al., [2002](#)).

Based on everything discussed so far, it should be clear that prevention of externalizing behavior problems will require a multifaceted approach, but should especially target relationships—parent–child relationships, as well as the relationships children have with others in their community, and the relationships parents have with others. Efforts should also target parental well-being, and the knowledge parents and other caregivers have about optimal parenting.

Culturally-appropriate community supports, including Boys & Girls Clubs, Big Brothers & Sisters, sports groups, faith-based groups, homework clubs, and similar organizations have the potential to provide children with outside relational supports they can use to thrive. Strong schools and consistent teacher relationships can be similarly supportive. Parent supports are critically important. This is another place where faith-based and cultural groups may be especially relevant. Groups that enhance parental connection, provide parents with social supports, and may even provide parents with information on parenting and facilitating connection are important. Support for parental mental health is essential. Low-cost or no-fee

options for locally-available psychotherapy and addiction support help reduce parental risk factors by enabling parents to address their mental health and substance abuse problems that increase risks to their parenting.

A number of attachment-based preventative efforts, including Infant/Toddler-Parent Psychotherapy, Circle of Security Parenting, and home visiting programs have been developed to improve the attachment relationship between parent and child, and thus reduce the risk for externalizing behaviors (for a meta-analysis see Hurl et al., 2014/2015). Other parenting programs, such as the Incredible Years have also been shown to reduce externalizing behaviors through improvements in parenting (O'Neill et al., 2013).

Ideally, to prevent the onset of externalizing behavior problems, we integrate all of these ideas. That is, we make available culturally appropriate mental health and addiction support to parents, provide safe, stable schools, provide community supports to children, and integrate these community supports for children with community supports for parents. We also provide parents with the knowledge they need and support them in developing the confidence required to be warm, affectionate, and nurturant, while also providing appropriate limits, structures, and setting appropriate expectations. And all of this is done in a manner that reflects the cultural, economic, and other diverse needs of families.

Intervention

Once we have our road map from our assessment and have shared it with parents we can begin to intervene with the family. Again, the simplest way to share this road map is through a focus on nurturance (warmth), and/or structure (limit-setting/boundaries). As suggested throughout this chapter, I focus my work on parents (or other primary caregivers), although I do sometimes include children with parents, in what would be referred to as a “parent–child” therapy or “family therapy.” Parent work alone is often referred to simply as “parenting support,” but when the difficulties are in the realm of setting limits (and the parents are able to set those limits), it is sometimes referred to as “parent management training.” Part of the reason I focus intervention on parents is to help support the formation of the foundational concept of hierarchies in families—that is, that parents are in charge and that changes come from the parents. This helps parents see their roles as leaders more clearly. That role identification alone helps regulate children as it takes the pressure for big decisions off of them. That said, many children at first object to parental limit-setting given their lack of experience with it. Based on previous experiences, they are also often anxious about this change, and uncertain it will be maintained. They are also understandably, upset by a change in control over their day-to-day life, and are not typically developmentally ready to understand that the change is in their best interests.

Before addressing structure if needed, I find it is helpful to start with concerns around nurturance. Beginning interventions this way is typically more pleasant for families—especially children. Indeed, it will tend to reduce the need for structural

interventions, as children who are having their nurturance needs met, are more motivated to comply. As stress in the family decreases, parents are often able to see their children's need for structure and implement the strategies they may have known all along were needed. In families where nurturance or warmth is a problem, I start by trying to build up a positive connection through dedicated one-on-one time. I often do this with younger children by helping families plan "special play time." In school-age children, I often focus on outings or games. In adolescents, I usually try to negotiate for a "date."

Special play time is an idea borrowed from filial therapy. The essential aim of filial therapy is to teach a parent how to engage in child-centered play therapy with their child (Guerney Jr., 1964). This approach builds on and improves on the benefits of child-centered play therapy, by also improving the parent-child relationship, and by being available for a longer term in a less intrusive fashion than therapy facilitated by a clinician. Although the exact procedures vary by age, the essential objectives of all the ways of engaging in "special time" one-on-one with a child are (1) Build up positive connection; (2) Meet the child's attention needs in a positive and predictable noncontingent way (i.e., not dependent on whether the child has been "good" or "bad"); (3) Increase a parent's ability to take their child's perspective; and (4) Provide the child with developmentally-appropriate opportunities to take control.

To use special play time, I have parents schedule a regularly-occurring predictable time to play with their child (e.g., every Saturday after lunch). During this period of 20–60 min/week (or 5 min daily), parents are encouraged to focus on the "target" child, leaving other children to the care of someone else, leaving aside chores, ringing doorbells, and their cell phone, to follow the child's lead. Where there are multiple children in a family, I often encourage parents to find an equal amount of time to spend with each child weekly. If no other caregivers are available, it is often worthwhile to have children in the family rotate staying up late or getting up early to facilitate this focused time without interruption, despite the incredible value of sleep to children.

During special play time, parents are encouraged to sit on the floor with their child and engage in (preferably imaginative) play, if invited by the child. Use of an external timer (e.g., an egg timer) is strongly encouraged to provide an objective end to the time. When not invited, parents are encouraged to observe their child and reflect on how what their child is thinking and feeling is reflected in their child's play. This particular setup for special play time helps children know their attention needs will be met and when (thus reducing the need for externalizing behaviors to obtain attention), and helps increase the positive connection between parents and children through shared positive experiences. It is also specifically designed to increase parental reflective functioning; that is, a parent's ability to see the relationship between their child's thoughts and feelings and their behavior (Luyten et al., 2017). Parental reflective functioning is intrinsically linked to sensitive and responsive parenting, a key underpinning of the development of a secure attachment relationship (Bowlby, 1969). Moreover, parental reflective functioning is key for increasing parents' ability to "read" their child's behavior or cues. Given the

reflective components of this intervention, I try to discourage video games, watching TV, structured games (e.g., sports or board games), crafts, or even reading books together (although these are all beneficial activities for other times). Through play, children often play out issues, emotions, or topics that are impacting them, making this a particularly fruitful activity for parental observation. It is important to note that this approach is often quite difficult for parents. Many parents who struggle with warmth or nurturance find playing with their child quite difficult or even aversive, and some have spent years avoiding it. Processing and discussing this issue with parents in parent-only sessions are often necessary.

We make some alterations to these procedures for children from about 8–11 years (although the exact age varies based on child characteristics). Many children this age are no longer engaging in significant pretend play and as a result, pretend play-based activities are obviously less appropriate. That said, pretend play is almost always present through at least a child's seventh birthday. Many parents who struggle with warmth may not have observed this type of play even if present, which may be partly because pretend play makes them quite uncomfortable, likely related to some of the issues that have brought the family to your attention. Encourage them to try the above approach before moving on to the procedures for children in middle childhood.

For children in middle childhood, parents should continue to set regularly occurring scheduled times to connect with their child, again for 20–60 min at a time, again using an external timer in most instances. By the age of 8 years, many children will enjoy planning out the activity they will engage in with their parents, sometimes even days in advance. Setting some ground rules around costs (e.g., the activity has to use materials we already have at home, or has to cost less than \$5) is often helpful to reduce limit-testing and conflict. Like with younger children, parents should wait to be invited in to join their child. The idea here is that parents are in control in many spheres (see below), but that play is an opportunity for the child to be in control. Many children appreciate simply the chance to be seen and watched lovingly by their parents. Others like the opportunity to be in control. Here we hope that providing the child with an appropriate opportunity for control will decrease their attempts at control at other times. Children can select a wide variety of activities from going out for doughnuts, to bike riding, to board games, street hockey, or baking together. Some children, when the relationship is particularly strained, will decline to pick an activity. I usually reassure parents that that is fine and is the child's prerogative. In these instances, it is the parent's role to still be available and empathetic. That is, I encourage parents to sit with the child for the period selected just providing their attention and availability. That said, it may be beneficial for all involved to start these connection times at only 20 min in these instances. That may be all the dyad can handle at first. Over time, the duration can be increased as the parent and child become more comfortable. At times, there is a temptation to have dyads continue past the agreed upon time if all is going well. In general, it is much better to stop the play at the end of the planned time. This increases the chances that the entire time was positive, leaving both parent and child looking forward to the next special time. It is also a good example of a clear limit that is consistently

applied, which helps provide certainty to children (and will be discussed further below).

Depending on parental readiness, as well as youth openness, we usually set some ground rules for “dates” with adolescent children. Oftentimes, I will ensure we work out all the details in my office, where I can help everyone stay regulated. Here we negotiate the potential financial costs of the date (i.e., Starbucks or doughnut shop coffee?), the time, and often the topics of conversation. It is important that parents feel that the date is not simply a chance for their adolescent to take advantage of them, so a mutually agreeable location is necessary. It also should not be a financial burden for families. That said, it is important that the parent bears any financial costs as that also reinforces the idea that they are more capable than their child. Many teens and parents have such fraught relationships that almost any conversation devolves into arguing. In these families, encouraging parents to sit back and listen is helpful (much like special play time for younger youth). That gives their adolescent child an opportunity to express themselves without fear of judgment or consequence. Many times, parents are surprised by how much they learn about their older child in these moments. Some parent-child pairs cannot manage that dynamic though. In those cases, I encourage them to stay in the moment and talk about only those things they observe or are experiencing at the moment (e.g., “Did you see that huge dog?” or “This is a great cappuccino.”). Some families can handle a little more freedom and can talk about music or sports (but not the child’s performance in these domains). In families where any financial costs will be a burden, a walk, bike ride, or simple card game (e.g., War) can be helpful. That said, these are not my first choices, as there is often little incentive for the youth in these situations to join their parent that they don’t get along with on a walk or bike ride, and card games can devolve into conflict quickly.

At all ages, sessions with parents often focus on the development of parental reflective functioning and empathy through discussions with the clinician. I also often try to coach parents to help their children name their emotions and to demonstrate empathy for their child’s feelings in a manner quite analogous to Gottman’s emotion-coaching approach (Gottman et al., 1996).

Once any nurturance needs in a family have been addressed, one can move on to “structure” work. Under the heading of structure, I include topics such as limit-setting, control, boundaries, consequences, and rewards. As we saw earlier, based on Baumrind’s work, children of parents who show high levels of both nurturance and control have the most positive outcomes. Using attachment theory ideals, our goal is to provide children with feelings of predictability and safety.

The first topic we need to consider under the banner of structure is where parents’ gaps in terms of structure are located. Do parents lack the skills to provide structure (i.e., do they not know how to set limits, provide consequences, or give out rewards), or are they unable to use those skills as a result of other issues (e.g., ghosts in the nursery, parental depression, or others). Some parents lack both the skills and the capacity to engage in them. In the majority of cases, parents have at least a passable knowledge of limit-setting; however, they are unable to fully use this knowledge. Limit-setting is so often part of basic parenting programs and embedded in

day-to-day life that although many parents will benefit from improvements to their skills, they often have the basic idea. That is, they understand that ideally parents set a limit (rule) and follow through on their statements (whether consequences or rewards). The ideas that most often make parents stumble in this realm are (1) Their children should like them; (2) People are judging them for their parenting; (3) That only the child who did something “wrong” should experience negative consequences for the behavior; (4) That all undesired behavior needs a “consequence” (which has become synonymous with punishment in day-to-day speech); (5) That demonstrating empathy for their child’s situation is a reward; (6) That they are “mean” if they provide a consequence; (7) That rewards are “bribes” and unfair, wrong, or should not be needed; (8) That time-outs or removal or privileges, such as the use of an iPad, are the best way to teach a child right from wrong; and (9) Their children should just know how to comply.

One other issue that often comes up along the way is that parents often have trouble seeing stepwise progress. That is, children’s behavior does not improve overnight. It is a process with small improvements along the way. For these reasons, I often encourage parents to track the concerning behaviors. Through weekly or monthly reviews of these tracking forms, parents can often see improvements that are difficult to observe in day-to-day life. I often use the analogy of watching a child’s physical growth to help parents see how hard it can be to notice a change when one is in the midst of it. Figure 12.3 is a graphic I often use with parents to help illustrate this process of change and prepare them for it. That helps them recognize the progress their family is making even when things do not yet seem to be on track.

Before focusing on the “how” of structure, we need to ensure that parents are able to engage in limit-setting and control. The most common impediments to these issues are feelings lingering from the parent’s past, and a parent’s lack of capacity to regulate their emotions. As mentioned earlier in the “Approach to Mental Health Assessment” section, the Adult Attachment Interview and Working Model of the Child Interview are often quite helpful. These interviews can help identify sensitive or painful areas in parenting that might need to be addressed either in your therapy with the family, or in a parent’s individual therapy.

Setting limits, taking control, and remaining firm are quite demanding requests to make of parents. To ensure that parents can do these things, it is essential that they are relatively regulated and have sufficient emotional resources. The phrase we often use with parents is, “You can’t give what you don’t have.” Here we need to ascertain that any mental health needs of the parent are being addressed (through psychotherapy, community supports, and/or medication) and that they are able to engage in sufficient self-care. Sometimes the most impactful thing we can do to reduce child externalizing disorders is to help a parent set aside time for themselves to read, run, or have fun. These moments of self-care enable parents to be better regulated and thus let them “lend” their emotion regulation capacity to their child. Parents who engage in better self-care are often more settled generally, which makes them more available in terms of attachment, and reduces household stress. At times, it also pays to be mindful of the couple’s relationship for similar reasons. Figure 12.4 is the illustration of these issues I often use with parents. The objective of what I call

Stage 1: When the child is upset, they will:

- Engage in physical aggression by hurting themselves or others, or
- Run away

Stage 2: When the child is upset they will break things (property damage)

Stage 3: When the child is upset they will engage in verbal aggression (swear/curse or call people names)

Stage 4: When the child is upset they will:

- Slam doors
- Cry a lot

Stage 5: When the child is upset, they will pout, stamp their feet, or shout/say they are mad. This is usually our goal!

Stage 6: When an **adult** is upset, they will say, “I am angry” and calm themselves down. They may cry.

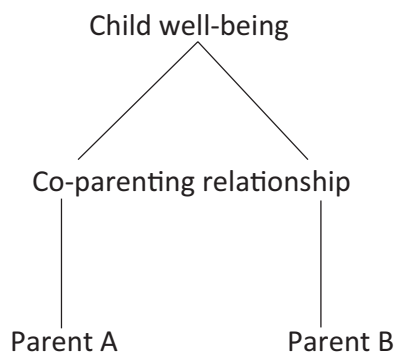
*It is important to remember that everyone gets upset and that it is okay to be sad, disappointed, or angry.

*Some children may skip some steps, and in times of stress, some children may regress to earlier stages. What we are looking for is a general progression to higher stages.

*As a child develops better emotion regulation capacity, the outburst may become shorter or less frequent. This is another way for a child to show progress.

Fig. 12.3 Learning to control feelings: Stages in learning to react calmly when disappointed or angry

Fig. 12.4 The parents and couple as the foundation for child well-being



the “House metaphor” is that children need strong, well parents, and their parents to have a stable relationship for them to do well. Note that that does not mean that the parents need to be married or together; simply that they have a stable co-parenting relationship (which can be, and often is, independent of the marital relationship).

Once the groundwork for structure has been set, we can move on to working on behavior management principles with parents. Of note, this is where my approach is both similar to and different from most approaches to externalizing behaviors in children. Most behavioral approaches would have started here, and indeed, there exist a large number of very good books and programs to address externalizing behaviors using behavioral or parent management techniques. Most of my comments in this area will be consistent with the major programs in this domain (and thus are relatively brief given the numerous, strong programs available). Where my approach differs, is that behavior management is the final step in my approach to dealing with externalizing behaviors, and is typically a very small portion of my work, if addressed at all. A great deal of the time, once we have increased connection, a child is more motivated to comply or please their parents. Once we have met a child's attention needs, they no longer need to engage in externalizing behaviors to have their attention needs met. Once a parent can take a child's perspective, they can see what the child needs (including limits, structure, and boundaries) and can provide it. And when a child has a developmentally-appropriate outlet for taking control, they may be somewhat less likely to attempt to take control at other times. Furthermore, once parents have realized how their past affects their parenting, they may be able to figure out what to do from there independently. Finally, emotionally-well parents are often able to provide the sense of safety a child needs to regulate better.

Sometimes, further work is needed. Parents may still lack basic behavior management skills, or the patterns that developed over time may be so entrenched that support is still needed for the family to learn new ways of being. In these instances, I start by reviewing the basics of behavior management with parents. That is, parents need to set limits and follow through. That said, not all behaviors need to be addressed. For example, behaviors outside of a child's control (i.e., regulatory tantrums), and behaviors designed to be attention-seeking (e.g., "sassy" attitude) likely need empathy and co-regulation, not consequences (good resources on these topics include Gottman & Declaire, 1998 and Weininger, 2002).

Once we have covered the ideas that some behaviors need empathy (and how to do that) and that some behaviors can be ignored, I usually move on to basic behavior management techniques. Unsurprisingly, I try to start with the positive here too. Oftentimes, the errorless compliance approach is helpful (Ducharme & Popynick, 1993). This evidence-based approach holds that compliance is a skill that some children have not yet mastered, and seeks to build it up through a series of small steps. It starts with requests that a child will almost always comply with (e.g., "Get yourself a cookie."), and praises that compliance, before moving up a ladder of increasingly more demanding requests.

At other times, I will start with building up the desired behaviors through token economies (rewards). Here the idea is to reward positive behaviors (e.g., "using gentle hands"), rather than provide consequences for negative ones (e.g., hitting). Kazdin's book on parenting defiant children provides an excellent, well-explained and clear process for how to both reward desired behaviors and provide consequences for undesired behaviors (Kazdin, 2008), which can be a complex topic.

Finally, we start to work on consequences. Ideally, consequences are natural or logical (Mullis, 1999). As alluded to above, good consequences may negatively impact the parent (e.g., leaving the restaurant when a child is struggling there) and may be embarrassing (e.g., waiting out a tantrum at the mall), but ideally are related to the issue. This helps reduce tension in the parent-child relationship by depersonalizing consequences, and is more analogous to what a child will experience in the “real world.” I almost always avoid time-out as a consequence. I do this because time-out can be experienced as rejecting for many children. It can inadvertently send the message that a child is not loved or acceptable when misbehaving. It is also rarely related to the behavioral concern at hand. Instead, if parents need time-outs for their well-being I encourage them to take time-outs. Parents can go to their bedroom or bathroom to cool down if needed. This also sets a good model for a child about one adaptive way to manage emotion dysregulation.

Case Study

The family described here is a somewhat fictionalized amalgam of the many families of children with externalizing behavior problems I have seen in my practice. The family we will consider are called the Goldsteins, and they are a two-parent heterosexual couple with a son, aged 8, and a daughter, aged 10. Their reasons for seeking support were around their son’s externalizing behaviors, some anxiety in their daughter, and high levels of physically aggressive sibling conflict. The majority of the background information presented here was obtained during a comprehensive background interview.

The Goldsteins were a somewhat religious family, attending synagogue weekly. Their children attended a private school affiliated with the synagogue. The father worked full time as an engineer and the mother 1–3 days a week as an auditor. Financially, they were somewhat stressed given that they were managing on 1.5 salaries, while also paying for private school.

In terms of background, both sets of grandparents were involved with the family, but often in what was described as a judgmental fashion. For example, the grandparents often seemed disappointed in the children’s behavior, even when quite age-typical (e.g., the son leaving the table when he was finished eating, although others were not yet finished). Neither of the Goldsteins had much experience with children before they had their own, likely further distancing them from knowledge of child development. Mr. Goldstein quietly shared that he had long struggled with an anxiety disorder and did not seek treatment for it. Although the family had ties to the school and synagogue, the parents feared being judged by potential supports in these communities and thus did not reach out for help. Of note, both children managed their behavior better in these settings. That said, neither the synagogue nor the school offered any parenting supports, such as groups or classes.

The son’s externalizing behaviors were mostly comprised of tantruming behaviors. These tantrums, which could last from 10 min to 2 h, involved swearing,

throwing things, and, at times, hitting or kicking. These behaviors only occurred around parents and grandparents. Sibling conflict was often triggered by the daughter teasing or taunting her brother (note: this was likely her attempt to create some predictability around her brother's outbursts). The Goldsteins responded to both the tantrums and the sibling conflict with yelling and threats. It was clear that the tantrums were dysregulating for the parents as well. At times the Goldsteins "gave in" to their son's behaviors, but he usually could not calm down when they did so. This pattern suggests that the son was dysregulated and was seeking parental attention and control to help him better regulate. There were some indications of ADHD in the son, but if present, the disorder was mild.

The family also had numerous strengths: they were involved with the community, were well-educated, and had sufficient financial resources to provide for their children. They had a number of family and individual friends (although few very close or intimate friends that they could rely on for support). They were able to identify strengths in their children and clearly loved them. They had never been physically aggressive toward the children. That said, they struggled with empathy for their children and could rarely take their children's perspectives.

When asked to participate in a play session, both parents, but especially Ms. Goldstein, were quite anxious and uncomfortable. Mr. Goldstein consistently tried to create opportunities to play sports in the play, while Ms. Goldstein tried to use every available moment to teach. The children did each look toward the parents when unsure (e.g., on entering the room), and complied when in the office. Both children sought physical closeness with Ms. Goldstein for the first 10–15 min in the office, suggesting that they saw her as their primary caregiver and an attachment figure.

My formulation for the Goldstein family was that this was a family with a lot of love and affection. The parents were struggling to show positive attention as they were distracted by their mental health issues, anxiety about parenting, and the legacy of their parenting that made them feel that children should be perfect. The Goldsteins also struggled to set clear and consistent limits, which left their children feeling overwhelmed and anxious.

I shared the following road map with the parents to help them understand my formulation and plan for our work together:

Taken all together I can see that you are a family who loves each other very much. I see that in how safe your kids feel to express their emotions, snuggle into you, and know that they will be loved even after a big tantrum. It seems though that your son becomes dysregulated pretty easily at home. In part, he's likely made that way, but there are some things we can do to reduce the amount of time he spends dysregulated. "Dysregulated" means he has a really hard time managing his emotions and behaviour when upset. I think the tantrums he has are really hard for your daughter too, and so sometimes she bugs her brother, which will start a tantrum, just so that at least she feels like she has some control around when the tantrums happen. It's also a way she has learned to get her needs for attention met. Your kids, like everybody, have a need for attention. It makes them feel safe and loved. So, even if the attention is negative, your kids will do almost anything to have that need met. Your attention is also especially regulating for your son when he's upset. His emotions feel out of control and scary when he's tantruming, and when you yell, he actually feels safer and

calmer as then he knows he has your attention and that you're in charge. What I hope to do together, is meet your kids' needs for attention through some positive, predictable special play time. That will also maybe give you a bit of a window to what is going on in their hearts and minds. That will later help you as we move on to learning some ways to "co-regulate" your kids through talking about feelings, empathy, and sitting with them when they're upset. We'll finish up therapy by working to build up positive moments through some rewards, rather than focusing on ending behaviours we don't like to see. Does that make sense to you? What do you think about that plan?

The first step with the Goldstein family was the establishment of special time with each child. We negotiated that on Saturdays one parent took each child, and on Sundays, they switched. The children looked forward to these times and planned rollerblading outings, craft time, and games of soccer in the basement. When parents were able to consistently engage in special play time, externalizing behaviors dropped by about half. Over time, Ms. Goldstein started to find playing easier. That said, Mr. Goldstein struggled with whether to have a special time when the children had been misbehaving earlier in the day. A great deal of time was spent processing this issue with him.

We also worked on the parental expression of empathy and time-in when the children were dysregulated. At times, both parents needed space to calm down, and so *they* were encouraged to take time-outs when needed. Finding time for each parent to meet their own needs (self-care) was the eventual key to helping them engage in a noncontingent way in the special time and show greater empathy for their children's emotions.

A few weeks into our work on the special time, we started working on structure. We first started with a token economy (star chart). We also spent a brief amount of time discussing following through on consequences, as well as whether and when consequences were needed. The token economy worked to great effect, especially for the son, and the behaviors were basically under control in a couple of months. That said, the Goldsteins were stressed soon after we ended sessions by the loss of a close family member and stopped both the special time and the star chart. For the first couple weeks, the children coped well, but when parental attention remained unpredictable and unavailable, the behavior problems returned and the Goldsteins returned to my office. This time we only resumed the special time and the behaviors dropped off again. Given the parents' own issues this is a family that might return to services a few times in the future to provide them with the nurturance that they need so that they can provide nurturance to their children.

Conclusion

Externalizing behaviors are draining, disheartening, and stressful for everyone in a family. Here I have provided a very simple two-faceted approach, focusing on parental nurturance and structure to better meet children's needs and prevent children from becoming dysregulated to reduce externalizing behaviors. It is important

to keep in mind that children's needs for nurturance and structure are universal, but the exact manner that families provide for these needs may vary based on a variety of diverse factors. Of note, my approach focuses almost entirely on the prevention of externalizing behaviors in families where these behaviors are a problem, and not on intervention during or after a tantrum or other externalizing behavior. I take this approach as I see externalizing behaviors as meeting children's needs, and so our goals are to meet those needs in ways that are more adaptive for the whole family. This approach also has the advantage of impacting an entire family system, rather than a single child, who can otherwise carry a heavy burden as the identified "problem child," when we know that children's behavior is often a response to the totality of a family's situation. To this end, it is also critical that all clinicians work toward creating opportunities for the entire family system to have their needs met. Parents provide to children what they have to give, and as a society, it is our job to ensure that all parents have the (emotional, financial, social, time, and cultural) resources they need so that they can be present for their children. This means that at times our work will focus on advocating for better support for parents, families, and communities, and working with colleagues in education, health, social supports, and other cultural and community groups to ensure that the needs of all family members are met. Ultimately, freely available and accessible social and cultural supports are the key to stronger families and the prevention of externalizing behaviors so that all children receive the nurturance and structure they need to thrive.

References

- Ainsworth, M. D. S., Blehar, M. C., Waters, E., & Wall, S. (1978). *Patterns of attachment*. Erlbaum.
- American Psychiatric Association (APA). (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Author.
- Baumrind, D. (1966). Effects of authoritative parental control on child behavior. *Child Development, 37*, 887–907.
- Benoit, D. (2000). Atypical caregiver behaviours and disorganized infant attachment. *Newsletter of the Infant Mental Health Promotion Project (IMP), 29*, 1–3.
- Beyers, J. M., Bates, J. E., Pettit, G. S., & Dodge, K. A. (2003). Neighborhood structure, parenting processes, and the development of youths' externalizing behaviors: A multilevel analysis. *American Journal of Community Psychology, 31*, 35–53. <https://doi.org/10.1023/A:1023018502759>
- Bornovalalova, M. A., Hicks, B. M., Iacono, W. G., & McGue, M. (2010). Familial transmission and heritability of childhood disruptive disorders. *The American Journal of Psychiatry, 167*, 1066–1074.
- Bowlby, J. (1955). The growth of independence in the young child. *Journal of the Royal Society of Health Great Britain, 76*(9), 587–591. <https://doi.org/10.1177/146642405507600912>
- Bowlby, J. (1969). *Attachment and loss* (Attachment) (Vol. I, pp. 1–401). The Hogarth Press and the Institute of Psycho-Analysis.
- Bretherton, I. (1992). The origins of attachment theory: John Bowlby and Mary Ainsworth. *Developmental Psychology, 28*, 759–775.
- Cassidy, J. (1994). Emotion regulation: Influences of attachment relationships. *Monographs of the Society for Research in Child Development, 59*(2–3), 228–249.

- Cheung, K., & Theule, J. (2019). Paternal depression and child externalizing behaviors: A meta-analysis. *Journal of Family Psychology, 33*, 98–108. <https://doi.org/10.1037/fam0000473>
- Chow, J. C., & Wehby, J. H. (2018). Associations between language and problem behavior: A systematic review and correlational meta-analysis. *Educational Psychology Review, 30*, 61–82. <https://doi.org/10.1007/s10648-016-9385-z>
- Clayton, H. (2019). *A meta-analysis on the rate of attachment classifications of infants in the strange situation paradigm: Distribution across cultures and demographic variables*. Unpublished doctoral dissertation.
- Condly, S. J. (2006). Resilience in children: A review of literature with implications for education. *Urban Education, 41*(3), 211–236. <https://doi.org/10.1177/0042085906287902>
- De Wolff, M. S., & van Ijzendoorn, M. H. (1997). Sensitivity and attachment: A meta-analysis on parental antecedents of infant attachment. *Child Development, 68*, 571–591. <https://doi.org/10.1111/j.1467-8624.1997.tb04218.x>
- Ducharme, J. M., & Popynick, M. (1993). Errorless compliance to parental requests: Treatment effects and generalization. *Behavior Therapy, 24*, 209–226.
- Eisenberg, N., Cumberland, A., Spinrad, T. L., Fabes, R. A., Shepard, S. A., Reiser, M., et al. (2001). The relations of regulation and emotionality to children's externalizing and internalizing problem behavior. *Child Development, 72*, 1112–1134. <https://doi.org/10.1111/1467-8>
- Fraiberg, S., Adelson, E., & Shapiro, V. (1975). Ghosts in the nursery. *Journal of the American Academy of Child Psychiatry, 14*(3), 387–421. [https://doi.org/10.1016/s0002-7138\(09\)61442-4](https://doi.org/10.1016/s0002-7138(09)61442-4)
- George, C., Kaplan, N., & Main, M. (1996). *Adult attachment interview*. Unpublished manuscript, Department of Psychology, University of California, Berkeley (3rd ed.). Retrieved from <http://library.allanschore.com/docs/AAIProtocol.pdf>
- Georgiades, K., Duncan, L., Wang, L., Comeau, J., & Boyle, M. H. (2019). Six-month prevalence of mental disorders and service contacts among children and youth in Ontario: Evidence from the 2014 Ontario Child Health Study. *The Canadian Journal of Psychiatry, 64*(4), 246–255. <https://doi.org/10.1177/0706743719830024>
- Goodman, S. H., Rouse, M. H., Connell, A. M., Broth, R. B., Hall, C. M., & Heyward, D. (2011). Maternal depression and child psychopathology: A meta-analytic review. *Clinical Child and Family Psychology Review, 14*, 1–27. <https://doi.org/10.1007/s10567-010-0080-1>
- Gottman, J. M., & Declaire, J. (1998). *Raising an emotionally-intelligent child: The heart of parenting*. Simon & Schuster.
- Gottman, J. M., Katz, L. F., & Hooven, C. (1996). Parental meta-emotion philosophy and the emotional life of families: Theoretical models and preliminary data. *Journal of Family Psychology, 10*(3), 243–268. <https://doi.org/10.1037/0893-3200.10.3.243>
- Guernsey, B., Jr. (1964). Filial therapy: Description and rationale. *Journal of Consulting Psychology, 28*(4), 304–310. <https://doi.org/10.1037/h0041340>
- Halligan, S. L., Cooper, P. J., Fearon, P., Wheeler, S. L., Crosby, M., & Murray, L. (2013). The longitudinal development of emotion regulation capacities in children at risk for externalizing disorders. *Development and Psychopathology, 25*(2), 391–406. <https://doi.org/10.1017/S0954579412001137>
- Hurl, K., Lee, J. B., & Theule, J. (2014/2015). Preventative interventions based in attachment theory: A meta-analysis of efficacy. *The Newsletter of Infant Mental Health Promotion, 63*, 4–10.
- Kane, P., & Garber, J. (2009). Parental depression and child externalizing and internalizing symptoms: Unique effects of fathers' symptoms and perceived conflict as a mediator. *Journal of Child and Family Studies, 18*, 465–472. <https://doi.org/10.1007/s10826-008-9250-x>
- Kann, L., Kinchen, S. A., Williams, B. I., Ross, J. G., Lowry, R., Grunbaum, J. A., Kolbe, L. J., & State and Local YRBSS Coordinators. Youth Risk Behavior Surveillance System (2000). Youth risk behavior surveillance—United States, 1999. *MMWR. CDC surveillance summaries: Morbidity and mortality weekly report. CDC Surveillance Summaries, 49*(5), 1–32.
- Kazdin, A. E. (2008). *The Kazdin Method for parenting the defiant child: With no pills, no therapy, no contest of wills*. Mariner Books.

- Lahey, B. B., Van Hulle, C. A., Waldman, I. D., Rodgers, J. L., D'Onofrio, B. M., Pedlow, S., Rathouz, P., & Keenan, K. (2006). Testing descriptive hypotheses regarding sex differences in the development of conduct problems and delinquency. *Journal of Abnormal Child Psychology*, *34*, 737–755.
- Kumpfer, K., Alvarado, R., Smith, P., & Bellamy, N. (2002). Cultural sensitivity and adaptation in family-based prevention interventions. *Prevention Science*, *3*(3), 241–246. <https://doi.org/10.1023/A:1019902902119>
- Lahey, B. B., & Waldman, I. D. (2017). Oppositional defiant disorder, conduct disorder, and juvenile delinquency. In T. P. Beauchaine & S. P. Hinshaw (Eds.), *Child and adolescent psychopathology* (3rd ed., pp. 449–496). Wiley.
- Lamborn, S., Mants, N., Steinberg, L., & Dornbusch, S. (1991). Patterns of competence and adjustment among adolescents from authoritative, authoritarian, indulgent, and neglectful families. *Child Development*, *62*(5), 1049–1065.
- Lee, H., Baillargeon, R., Vermunt, J., Wu, H., & Tremblay, R. (2007). Age differences in the prevalence of physical aggression among 5- to 11-year-old Canadian boys and girls. *Aggressive Behavior*, *33*(1), 26–37. <https://doi.org/10.1002/ab.20164>
- Liu, J. (2004). Childhood externalizing behavior: Theory and implications. *Journal of Child and Adolescent Psychiatric Nursing*, *17*, 93–103. <https://doi.org/10.1111/j.1744-6171.2004.tb00003.x>
- Luyten, P., Mayes, L. C., Nijssens, L., & Fonagy, P. (2017). The parental reflective functioning questionnaire: Development and preliminary validation. *PLoS One*, *12*(5), e0176218.
- Maccoby, E., & Martin, J. (1983). Socialization in the context of the family: Parent-child interaction. *Handbook of Child Psychology*, *4*, 1–101.
- Macklem, G. L. (2008). Emotional dysregulation. In *Practitioner's guide to emotion regulation in school-aged children*. Springer. https://doi.org/10.1007/978-0-387-73851-2_2
- Main, M., & Solomon, J. (1990). Procedures for identifying infants as disorganized/disoriented during the Ainsworth Strange Situation. In M. T. Greenberg, D. Cicchetti, & E. M. Cummings (Eds.), *Attachment in the preschool years: Theory, research, and intervention* (pp. 121–160). University of Chicago Press.
- Marmorstein, N., Iacono, W., & McGue, M. (2009). Alcohol and illicit drug dependence among parents: Associations with offspring externalizing disorders. *Psychological Medicine*, *39*(1), 149–155. <https://doi.org/10.1017/S0033291708003085>
- Marvin, R., Cooper, G., Hoffman, K., & Powell, B. (2002). The circle of security project: Attachment-based intervention with caregiver-pre-school child dyads. *Attachment and Human Development*, *4*(1), 107–124. <https://doi.org/10.1080/14616730252982491>
- Mesman, J., van Ijzendoorn, M. H., & Sagi-Schwartz, A. (2016). Cross-cultural patterns of attachment: Universal and contextual dimensions. In J. Cassidy & P. R. Shaver (Eds.), *Handbook of attachment: Theory, research, and clinical applications* (3rd ed., pp. 852–877). Guilford Press.
- Muir, E., Lojkasek, M., & Cohen, N. (1999). *Watch, wait and wonder: A manual describing a dyadic infant-led approach to problems in infancy and early childhood*. Hincks-Dellcrest Institute.
- Mullis, F. (1999). Active parenting: An evaluation of two Adlerian parent education programs. *Individual Psychology*, *55*, 225.
- Nelson, C. A., Fox, N. A., & Zeanah, C. H. (2014). *Romania's abandoned children: Deprivation, brain development, and the struggle for recovery*. Harvard University Press.
- O'Neill, D., McGilloway, S., Donnelly, M., Bywater, T., & Kelly, P. (2013). A cost-effectiveness analysis of the Incredible Years parenting programme in reducing childhood health inequalities. *The European Journal of Health Economics*, *14*(1), 85–94. <https://doi.org/10.1007/s10198-011-0342-y>
- Perry, B. D., Pollard, R. A., Blakley, T. L., Baker, W. L., & Vigilante, D. (1995). Childhood trauma, the neurobiology of adaptation, and “use-dependent” development of the brain: How “states” become “traits”. *Infant Mental Health Journal*, *16*, 271–291.

- Philipp, D. (2012). Reflective family play: A model for whole family intervention in the infant and preschool clinical population: Reflective Family Play. *Infant Mental Health Journal*, 33(6), 599–608. <https://doi.org/10.1002/imhj.21342>
- Potegal, M., & Davidson, R. (2003). Temper tantrums in young children: 1. Behavioral composition. *Journal of Developmental and Behavioral Pediatrics*, 24(3), 140–147. <https://doi.org/10.1097/00004703-200306000-00002>
- Powell, B., Cooper, G., Hoffman, K., & Marvin, B. (2014). *The circle of security intervention: Enhancing attachment in early parent-child relationships*. Guilford Press.
- Sorkhabi, N. (2005). Applicability of Baumrind's parent typology to collective cultures: Analysis of cultural explanations of parent socialization effects. *International Journal of Behavioral Development*, 29(6), 552–563. <https://doi.org/10.1080/01650250500172640>
- Theule, J., Germain, S., Cheung, K., Hurl, K., & Markel, C. (2016). Conduct disorder/oppositional defiant disorder and attachment: A meta-analysis. *Journal of Developmental and Life-Course Criminology*, 2, 232–255. <https://doi.org/10.1007/s40865-016-0031-8>
- Thompson, R. (2008). Emotion regulation: A theme in search of definition. *Monographs of the Society for Research in Child Development*, 59(2–3), 25–52. <https://doi.org/10.1111/j.1540-5834.1994.tb01276.x>
- Ungar, M. (n.d.). *What works: A manual for designing programs that build resilience*. Retrieved from <https://resilienceresearch.org/files/WhatWorks-Ungar-WebVersion.pdf>
- Vallance, D. D. (2004). Using theory and research on controlling attachments to inform the clinical assessment of pre-school children. *Clinical Child Psychology and Psychiatry*, 9, 227–240.
- van IJzendoorn, M., & Bakermans-Kranenburg, M. (2019). Bridges across the intergenerational transmission of attachment gap. *Current Opinion in Psychology*, 25, 31–36. <https://doi.org/10.1016/j.copsyc.2018.02.014>
- Weininger, O. (2002). *Time-in parenting*. Rinascente Books.
- Werner, E. (1993). Risk, resilience, and recovery: Perspectives from the Kauai Longitudinal Study. *Development and Psychopathology*, 5(4), 503–515. <https://doi.org/10.1017/S095457940000612X>
- White, R., & Renk, K. (2012). Externalizing behavior problems during adolescence: An ecological perspective. *Journal of Child and Family Studies*, 21, 158–171. <https://doi.org/10.1007/s10826-011-9459-y>
- Zeanah, C. H., Benoit, D., & Barton, M. (1986/1993). *Working model of the child interview*. Unpublished manuscript. Retrieved from <https://www.advantagebhs.org/skins/userfiles/files/WORKING%20MODEL%20OF%20THE%20CHILD%20INTERVIEW.PDF>
- Zeanah, C. H., Berlin, L. J., & Boris, N. W. (2011). Practitioner Review: Clinical applications of attachment theory and research for infants and young children. *Journal of Child Psychology and Psychiatry*, 52, 819–833. <https://doi.org/10.1111/j.1469-7610.2011.02399.x>

Chapter 13

Thematic Integration of Child and Youth Mental Health Practice in Clinical Psychology



Carly A. McMorris

Abstract The clinical psychology section consists of five chapters in which the authors integrate their clinical knowledge and skills, theory, and existing evidence to effectively assess, treat, and prevent mental health issues, such as attention-deficit hyperactivity disorder (ADHD), depression and anxiety, and externalizing behaviors, in children and youth. Although each author outlines their unique clinical approach to addressing child and youth mental health, they all incorporate these essential components of clinical psychology. Together, the authors in this section underscore that the mental health of children and youth is determined by the interaction of a multitude of factors and contexts across the lifespan, all of which are consistent with the key assumptions of the developmental psychopathology framework.

Introduction

Clinical psychology incorporates clinical knowledge and skills, theory, and science to understand and assess, prevent, and treat mental health issues, as well as build on an individual's strengths to promote positive well-being and quality of life. According to the American Psychological Association, a clinical psychologist's role can involve "mental and behavioural health care for individuals and families, consultation to agencies and communities, training, education and supervision, and research-based practice" (American Psychological Association, n.d.). The scope of clinical psychology is broad and comprehensive, in which psychologists may see individuals experiencing a wide range of severity of mental health issues, as well as individuals of all cultural, socioeconomic backgrounds, diversities, and ages.

Sixteen percent of the global burden of injury and disease among individuals between 10 and 19 years of age is due to mental health issues. While approximately

C. A. McMorris (✉)

Werklund School of Education, University of Calgary, Calgary, AB, Canada

Alberta Children's Hospital Research Institute, Calgary, AB, Canada

e-mail: camcmorr@ucalgary.ca

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half of the mental health issues emerge by 14 years of age; most cases are undetected and untreated (World Health Organization, n.d.). Unmet mental health needs can result in poor quality of life for the youth and their family, frequent referrals to mental health services, academic/employment challenges, emergency room visits, and inpatient hospitalization, contributing to a financial burden on education and health care services. These consequences extend into adulthood, with untreated mental health issues leading to significant impairments in physical and mental health issues and limiting opportunities for individuals to become healthy contributing members of society. Thus, determining effective, appropriate, and timely assessment, prevention, and treatment efforts of mental health issues in children and youth is essential in preventing lifelong issues.

Guiding Framework/Theoretical Approach for Mental Health Assessment, Prevention, and Intervention

Developmental psychopathology, or the study of the development of psychological disorders within a life course perspective, arose out of the recognition of the value of combining developmental psychology and clinical psychology in understanding atypical and typical development (Rutter & Sroufe, 2000). Since its conception, developmental psychopathology approaches have been central in clinical psychology's understanding of *how and why mental health issues develop*. The primary assumptions of the developmental psychopathology framework include: (1) understanding typical and atypical development is reciprocally informative, that is, determining underlying mechanisms for atypical development (e.g., mental health issues) is beneficial in conceptualizing typical development, and vice versa; (2) consideration must be given to the continuities and discontinuities in development, that is, the age-related variations in the onset and life course of psychopathology is important; (3) the development of psychopathology is influenced by a multitude of factors, including biological (genetic and physiological), psychological (i.e., cognitive and emotional), and social (i.e., peer relationships and cultural influences) that interact both directly and indirectly across the life course; (4) a pathway approach to psychopathology is critical, recognizing both equifinality (e.g., many different pathways or risks may result in the same outcome) versus multifinality (e.g., a specific risk factor may result in various outcomes); and (5) development occurs within nested contexts, that is, a child's social-emotional well-being and development is a complex system of nested relationships affected by multiple systems of influence (e.g., microsystem, mesosystem, exosystem, and macrosystem) (Rutter & Sroufe, 2000; Cicchetti, 2013). These guiding principles are key in conceptualizing the development and maintenance of mental health issues in children and youth, and consequently underly many clinical decision-making processes related to assessment, prevention, and intervention.

Another essential component that often guides a clinical psychologist's assessment, treatment, and prevention of mental health issues is evidence—evidence is a critical component in clinical practice. Science and data inform our choices for effective and appropriate assessment tools and intervention methods. Clinical psychologists integrate science with practice, such that clinical practice is informed by evidence, and research is informed by practice. Clinical psychology also produces a field that encourages a rigorous, ongoing process of scientific discovery and clinical application. Using the scientist practitioner model, clinical training focuses on training future psychologists to administer objective assessment methods, as well as utilize evidence-based clinical practices. Along with our clinical conceptualization of an individual and their environment, it is this evidence and data that drive many of our decisions regarding the best approach to treat existing symptoms, promote positive well-being, and prevent lifelong psychopathology.

In the legacy chapter, Dr. Catherine L. Costigan emphasizes the critical role a child's context plays in shaping their mental health and well-being. She combines principals from developmental psychopathology and family systems theory, a along with her clinical expertise, to help identify appropriate and effective supports and interventions to meet the unique mental health needs of vulnerable children, youth, and their families, such as those with intellectual disabilities, newcomers to Canada, and those with severe mental illness. Similarly, Kopala-Sibley, Theule, and Mikami integrate existing evidence about the risk (e.g., temperament, parenting style) and protective factors (e.g., attachment, peer dynamics), along with various theories/guiding frameworks (e.g., diathesis-stress models, attachment theory) to shed light on the effective assessment, treatment and prevention approaches for children and youth experiencing depression and anxiety, and externalizing behaviours, respectively.

Clinical Reasoning Models for Mental Health Assessment, Prevention, and Intervention

A clinician's clinical reasoning model is central to the assessment and treatment processes, as it helps to guide their understanding of *what key mechanisms* underlie the mental health symptoms, and what aspects are important to address in treatment. Consistent with a developmental psychopathology framework, this section consisted of five chapters discussing various ways in which we, as clinical psychologists, conceptualize the risk and protective factors for the development of mental health issues in children and youth (Costigan; Kopala-Sibley), the importance of the child-caregiver relationship (Theule), and psychosocial relationships (Mikami) when treating such disorders, and how evidence-based practices can help guide our clinical decisions and practices (Drapeau) when working with children and youth. By identifying individual (e.g., temperament) and contextual (e.g., parental/caregiver nurturance, peer relationships) factors that may contribute to both the

development and maintenance of the child and adolescent mental health issues, these authors argue we can effectively treat the presenting symptoms and prevent lifelong challenges.

Perspectives and Approaches Relative to Mental Health Assessment, Treatment, and Prevention

Over the past several decades, clinical psychology has shifted away from understanding the individual in isolation and has moved toward conceptualizing the individual within their systems of influence. Consequently, it is believed that the mental health and well-being of a child and an adolescent is determined by a complex system of relationships as well as multiple levels of the surrounding environments, from immediate settings of family and school to broad cultural values and customs. It is through this systems lens, along with a clear knowledge of evidence-based practices, that clinical psychologists determine if a child is experiencing a mental health issue, and given their individual circumstances, what intervention efforts and prevention strategies would be the most effective and appropriate. Early detection of mental health issues in children and youth is key to preventing future distress and maximizing a child's period of healthy development. Undetected or undiagnosed mental health issues in children and youth, and subsequent delayed intervention, can have detrimental impacts on the child's emotional, social, and cognitive development.

Dr. Catherine L. Costigan is a Professor and Clinical Psychologist in the Clinical Psychology Department at the University of Victoria and the director of the BRANCH lab, provides the legacy chapter. Broadly, Dr. Costigan's research focuses on building relationships to advance newcomer and community health by enhancing and understanding the strengths of family members that may help to prevent the development of mental health issues. Dr. Costigan's work, particularly in the area related to immigrant and refugee families new to Canada, has been extremely influential in identifying appropriate and effective supports and interventions to meet the mental health needs of children, youth, and their families who are newcomers. This work has not only been recognized in Canada, but internationally. In her chapter titled "Factors Within Families and Their Ecological Contexts That Shape Their Health and Well Being: A Legacy Chapter," Dr. Costigan walks us through the journey of her education, clinical training, and establishing her program of research, and also the evolution of her thinking related to mental health issues in children, youth, and their families and how this has influenced her clinical skills (e.g., assessment instruments and intervention techniques). Guided by both family systems and developmental psychopathology theories, Dr. Costigan's research has focused on understanding family acculturation processes, parent-child relationship quality and psychological adjustment within immigrant families, identifying unique and shared risk and protective factors for mental health issues within vulnerable

families (e.g., children with intellectual disabilities, immigrant and refugee, and severe mental health issues), and the ecological contexts that can help to shape positive trajectories. Uniquely over the years, Dr. Costigan's research has begun to incorporate and address issues like social inequalities and oppressive attitudes that create barriers for newcomer families. Most recently, through a community-engagement framework, Dr. Costigan has partnered with community agencies to develop and evaluate strengths-based approaches to effectively support immigrant and refugee families.

In her chapter Dr. Costigan shares some core tenets related to how to think and conceptualize child and youth mental health, which have largely been shaped by her research and clinical work. For example, a key component to Dr. Costigan's clinical reasoning framework is her belief that children want to do well and be well and that a child cannot be understood separate from their environment. Rather, in addition to the biological and psychological contributions, clinicians need to recognize both direct and proximal, relational, contextual, and structural experiences. Dr. Costigan highlights the importance of within-group and individual diversity and dynamics, taking strengths-based approaches, community engagement, and emphasizes the conditions of risk and protection rather than specific diagnoses. She accentuates that the specific skills related to assessment and intervention techniques are just as important as the way we understand mental health. She goes on to describe key perspectives and principals that should guide our clinical skills and techniques, including self-reflection related to the centrality of culture, an awareness of our implicit biases and ways of thinking, and the recognition of cultural safety, anti-oppression, and social justice. Dr. Costigan concludes her chapter by outlining her future directions as well as for the field of clinical psychology and, encourages us to look beyond the traditional boundaries of psychological practice to ensure that we are meeting the mental health needs of children, youth, and their families.

Dr. Daniel C. Kopala-Sibley is an Assistant Professor and Clinical Psychologist in the Department of Psychiatry at the University of Calgary and examines the individual (e.g., personality, cognitive processes, and life stress) and contextual factors (e.g., parenting, peer relationships) that predict the onset of depression and anxiety in at-risk adolescents. Here, using a dynamic-interactionist framework, Dr. Kopala-Sibley discusses the existing literature on the complex transactional associations among parenting, child temperament/personality, and risk for emotional disorders (anxiety and depression). In particular, he describes various models (e.g., diathesis-stress, dual vulnerability, pathoplasty, and "scar" or "consequence") that have been proposed to describe how a child's early temperament may interact with their caregiver's style to buffer or enhance the risk for depression and anxiety. For example, the diathesis-stress model posits that when temperament vulnerability traits are low, the effect of stress on psychopathology is negligible. However, psychopathology is expected when both temperament vulnerability traits and stress are elevated. Considering the dynamic, transactional relations among temperament, parenting, and psychopathology, Dr. Kopala-Sibley provides an extensive rationale for the utility of a multi-informant, multi-method assessment of temperament, depending on

the age of the child. For example, in younger children, a parent/caregiver-report questionnaire alongside a lab or naturalistic observations are generally considered to be the gold standard in determining temperament traits—given some children’s limited insight into their personality traits and caregiver responsive styles. Related to intervention and prevention, Dr. Kopala-Sibley highlights the utility of transdiagnostic approaches of emotional disorders (e.g., Unified Protocol—UP) that addresses personality and temperament. By identifying and modifying strong negative emotions that often lead to problematic and avoidant coping across emotional disorders, transdiagnostic approaches may be beneficial in targeting temperamental traits that often underline the development of depression and anxiety. Dr. Kopala-Sibley concludes his chapter by providing a case example of an 18-year male with self-criticism personality traits who presented with depression and anxiety.

Dr. Jen Theule is an Associate Professor and Clinical Psychologist in the Department of Psychology at the University of Manitoba. Overall, the theme of Dr. Theule’s research is that families are systems and family members can impact one another in a variety of ways. Her chapter titled “Nurturance, Structure, and Child Externalizing Behaviours: Working with Parents to Support Children and Families” investigates the association between the parent-child attachment relationship and externalizing behaviours, including disruptive and aggressive behaviours. Guided by attachment theory and Baumrind’s parenting styles, Dr. Theule highlights that externalizing behaviour is associated with a disorganized (versus secure) attachment style as well as an authoritarian parenting style (characterized by both low responsiveness and high control). Consequently, externalizing behaviours are a way for children to add control and predictability to their environment when it feels out of control. Furthermore, to determine where and how to treat a child’s externalizing behaviours, Dr. Theule describes her clinical reasoning approach, which involves determining the child’s needs related to nurturance (warmth) and/or structure (control). Through a comprehensive assessment approach involving interviews with caregivers and observations of the parent-child relationship, Dr. Theule obtains an understanding of what the behaviour looks like, the function (e.g., communication, instrumental or regulatory) of the behaviour, and how the family typically interacts. It is this information, Dr. Theule describes, that will provide a roadmap for any intervention efforts that directly target the caregiver’s nurturance and structure, which she characterizes as modifiable parenting traits. Furthermore, Dr. Theule highlights that prevention of externalizing behaviours will require a multifaceted approach that should directly target the parent-child relationship, as well as other relationships the child has outside the home. At the conclusion of her chapter, she applies this approach to a clinical case example.

Dr. Amori Yee Mikami, along with Hongyuan Qi and Caroline Miller, provides a framework for understanding the peer relationships in children and youth with attention-deficit/hyperactivity disorder (ADHD). In their chapter titled “Psychosocial Interventions for Peer Relationship Problems in Children with Attention-Deficit/Hyperactivity Disorder,” Mikami and colleagues describe the peer relationship

difficulties (e.g., peer rejection and friendship problems) that children with ADHD often experience, and how these problems often exacerbate the risk for poor adjustment (e.g., academic failure, depression, and substance use). They further outline two overarching factors that in combination, contribute to peer relationship issues in school-aged children with ADHD. The first factor is that children with ADHD tend to exhibit several negative behaviours (e.g., impulsivity, hyperactivity, daydreaming, etc.) when interacting with peers, along with few positive behaviours (e.g., interest in peers and prosociality). The second factor involves the social dynamics of the peer group, such as behaviours that peers engaged in or the underlying biases/thoughts that peers have, which can negatively influence their acceptability of a child with ADHD. Taken together, Mikami and colleagues argue that clinicians need to understand both the problematic behaviours of children with ADHD and the social dynamics of the peer group when conceptualizing peer difficulties, and that these factors are essential for assessment and treatment. The authors provide a comprehensive description of various tools (e.g., questionnaires) and techniques (e.g., sociometric measures, observation, and interviews) typically used to assess for peer difficulties, problematic behaviours, and social dynamics. Followed by a discussion on behavioural management and social skills training, evidence-informed approaches for treating and preventing problematic social behaviours in children with ADHD. Next, they describe the creation of an innovative program (Making Socially Accepting Classrooms; MOSIAC) that trains teachers to use specific strategies to help model inclusiveness and acceptance of children with ADHD in the classroom. This guiding framework, assessment, and intervention techniques are demonstrated using a case example of a 9-year-old female with ADHD.

Dr. Martin Drapeau is an Associate Professor of Counselling Psychology and of Psychiatry at McGill University and a Clinical Psychologist. His research is focused on the psychotherapy process, research and treatment outcomes, as well as practice guidelines and best practices. Here, along with Hebert, Ciquier, and Stamoulos, Dr. Drapeau describes a guiding framework for practitioners and the use of clinical practice guidelines (CPGs) in his chapter titled “Best Mental Health Practices in Clinical Psychology: Does the Doctor Really Know What’s Best?” These authors start by outlining the evolving conceptualization of evidence-based practices (EBP) in the field of clinical psychology. Next, Drapeau and colleagues argue that while a core component of our clinical practice and decision-making is research evidence, very few clinicians consider research when delivering clinical services. They propose that CPGs would help to fill this gap between research and clinical practice. CPGs, as they describe, critically and empirically assess, or synthesize a body of scientific knowledge, and provide clinical recommendations for practitioners based on a critical analysis of the existing literature. These authors further describe the benefits of CPGs to individuals and their families, but also clinicians/practitioners, and the general public. Drapeau and colleagues go on to further discuss how clinicians can choose appropriate guidelines for their practice, and this approach is highlighted in a case study.

Overview, Future Directions, and Conclusion

Mental health issues in children and adolescents appear to be becoming increasingly more common. As clinical psychologists, we are trained to integrate clinical knowledge, research evidence, and theory to effectively assess and treat a range of mental health issues to prevent lifelong problems. The developmental psychopathology framework guides our understanding of the underlying mechanisms of mental health issues, as well as provides insight into the various pathways, factors, and nested systems that contribute to the development of psychopathology. In this section, the authors highlighted how recognizing the multiple systems in which a child is embedded is essential to understanding their psychopathology, and together with robust research evidence, can inform our assessment, treatment, and prevention of mental health issues in children and youth.

References

- American Psychological Association. (n.d.). *Clinical psychology*. American Psychological Association. Retrieved November 20, 2021, from <https://www.apa.org/ed/graduate/specialize/clinical>
- Cicchetti, D. (2013). An overview of developmental psychopathology. In *The Oxford handbook of developmental psychology* (Self and other. Essay) (Vol. 2). Oxford University Press.
- Rutter, M., & Sroufe, L. A. (2000). Developmental psychopathology: Concepts and challenges. *Development and Psychopathology, 12*, 265–296.
- World Health Organization. (n.d.). *Adolescent mental health*. World Health Organization. Retrieved November 20, 2021, from <https://www.who.int/news-room/fact-sheets/detail/adolescent-mental-health>

Part III
Counselling Psychology: Mental Health
Assessment, Prevention and Intervention—
Promoting Child and Youth Well-Being

Chapter 14

A Legacy of Counselling Psychology and Social Justice: Understanding and Promoting Mental Health Through Consultation and Systemic Change



Ada L. Sinacore

Abstract In this chapter, I present a snapshot of some of the highlights of my career and life's work—from my early career as a musician, to counsellor, to academic, researcher, and leader. The chapter predominantly highlights my theoretical work in the areas of feminism, multiculturalism, social justice and human rights. I have explored how one aspect of my work leads to the next and the importance of considering social justice and human rights in the field of psychology. As well, I discuss psychologists' role in bringing about organizational change and provide a brief description of the Integrated Social Justice Consultation Model, which includes an orientation to advocacy and outreach. I conclude the chapter with future directions, where I discuss where I hope to go with respect to my role as a leader in the profession.

It has been both an honor and daunting to write this chapter. To be considered someone who has a legacy that will be meaningful to the discipline weighs as a great deal of responsibility while simultaneously is humbling as I reflect on my life's work. That said each leader in counselling psychology who came before me and/or who worked with me makes whatever legacy I have to offer possible. I truly believe that the collaborations I have had with many members of both the counselling and broader psychology community has contributed to my career, what has been defined as my success and what has led to the invitation to write this chapter. Below I will try to describe what I believe has been my unique contribution through my scholarship, leadership and collaboration within the counselling and broader psychological community.

A. L. Sinacore (✉)
McGill University, Montreal, QC, Canada
e-mail: ada.sinacore@mcgill.ca

Research and Scholarly Journey

Ironically, my journey into psychology started in music. In high school, I played flute and piccolo in the band and symphony orchestra, sang in the acapella and madrigal choirs, and played piano in the Jazz band. Music was a central aspect of my everyday being. Originally, I considered a career in music therapy as I thought the combination of music and service to the community was something I would really enjoy. However, soon after I got into university I switched to music education as I believed it would open more opportunities on both the performance and educational fronts. Through my music training, I was exposed to music of many cultures where I was able to take courses specifically related to ethnomusicology and explore the importance of music within and across cultures. Simultaneously, as a music education major, I was required to complete a minor and so I decided to minor in psychology. As a result, I took a psychology of women course taught by Professor Rhoda Unger, a preeminent feminist psychologist at that time. This course was the first time I was exposed to academic feminism and it changed how I viewed all of my other academic courses and how I would pursue my analysis of scholarship and music.

In addition to the way academics influenced my thinking, I also had to be employed throughout my undergraduate degree, as I was putting myself through university. To this end, I took positions in student services. First, I worked in dormitory security where I encountered many of the drunk or high students who needed to be gently coached to be quiet and go to their room. In the following year, I was offered the opportunity to be a resident assistant or what in Canada is commonly called a floor don and then in my final year was an assistant resident director. For these positions, I was trained in a range of areas including, peer counselling, and crisis intervention, while all the time pursuing my career as a musician. During my time as a resident assistant and assistant director I dealt with a range problems and challenges faced by the students including but not exclusively, sexual violence and assault, relationship difficulties, academic difficulties, stress, and anxiety. As well, I was constantly confronted with issues of racism, sexism, and homophobia as at that time, these were not concerns that were explicitly addressed in the university or societal context as they have been recently.

Upon graduation, I decided that my work as an assistant resident director was an ideal position from which I could pursue my music career. It offered flexible hours, access to music libraries, as well as room and board. Initially, I took a resident director position at a small liberal arts college in New Jersey. While, in this position I was encouraged to take courses in counselling psychology in order to be better equipped to meet the counselling demands of the students. I registered as a special student at Rutgers University and took both individual and group counselling courses, all the while commuting into Manhattan pursuing my music career. Ultimately, I landed a position at Barnard College in New York City as a Resident Director and was encouraged to continue to take counselling psychology courses to further my professional development. However, Teachers College of Columbia University where the counselling psychology program was housed only allowed students accepted to

the program to register for courses. I applied to the master's program, got accepted—thinking that I was just going to take a few courses for my job, while remaining firm on continuing my music career. In fact, at the time I was planning on pursuing ethnomusicology—a career choice which was highly discouraged by my family and others. All that to say, once I began the program I became very interested and excited. There was a strong emphasis within the program on “cross-cultural” psychology and my master's advisor was a feminist scholar. In fact, I was the a graduate student assistant coordinator for the first “Cross-Cultural” roundtable to be held at Teachers College, a roundtable that continues each year; it has been renamed the “Multicultural Roundtable”. Nonetheless, given my work at Barnard College, a women's college affiliated with Columbia University, I was ever aware of the challenges faced by women especially those who did not identify as straight and those who came from minority social locations. Deeply in the closet myself, these issues were extremely important to me and as such I decided to complete the master's degree in counselling psychology.

Again, needing to fund my education, I continued my position as a Resident Director at Barnard College, which offered tuition benefits. I was fully engaged with my position and my academic program, while continuing to be active as a musician. In addition to feminist and cross-cultural psychology, over the course of the master's degree, I became very interested in research and measurement. As a result, I decided that I would pursue a PhD in Counselling Psychology with the hopes of being actively involved in research that addressed feminist concerns in psychology. I applied to eight programs across the country and I was only accepted into one. However, the American Psychological Association did not accredit the program in which I was accepted, so I decided to turn down the acceptance and pursue employment in the field of counselling psychology, finally forgoing my music career, which then became and remains an avocation.

Having completed my master's internship at the adolescent day treatment program at Mount Sinai Hospital in New York City, I decided to pursue a position at the Post-Graduate Center West. The center was a day treatment program for adults living in supportive housing—I offered individual and group counselling. My caseload was all women, mostly with histories of sexual assault and abuse, diagnosed with severe mental illnesses. While working at the center, I reapplied to the three counselling psychology programs in New York City and I was accepted to all three. I decided to pursue my PhD at Columbia University under the supervision of Professor Roger Myers—an esteemed scholar in counselling psychology in the United States. Professor Myers was extremely supportive of my interests in the intersections of feminist and cross-cultural psychology as well, he sparked my interests in career psychology specifically related to workplace challenges and abuses.

In the first year of my PhD, I took a position at Laguardia Community College as a part-time counsellor and I taught a course called “Freshman Seminar” which was a seminar where students explored their career development. The college was in Queens, with a highly diverse student body whose aspirations were to attend 4-year colleges or university. I worked at the college for 2 years followed by my APA accredited internship at the Pace University Counselling Center. I was particularly

attracted to Pace due to the diversity of the student population at the university and the fact that two of the supervisors identified their theoretical orientation as feminism. Upon completion of my internship, although I was ABD (all but dissertation) I secured a position as an Assistant Professor in the counselling psychology program at Western Michigan University in Kalamazoo, Michigan. It was there that I really began to explore from an academic versus clinical perspective the intersections of multiculturalism and feminism in psychology.

Growing up in New York and spending a short time in New Jersey did not prepare me for Michigan in general and Kalamazoo, in particular. Michigan was and remains a politically conservative state with a private militia. However, my colleagues at the university were progressive, liberal with four who shared my feminist theoretical, scholarly, and political convictions. Though I was working on my doctoral thesis, I had all the responsibilities and expectations of an assistant professor. I was expected to teach three graduate level courses, write scholar articles, and be an active and contributing citizen of the profession and university. As I did not have a PhD, I immediately applied for a license as a professional counselor so I could provide clinical supervision and simultaneously, I became a member of the Michigan Psychological Association. Next, there were two events that were foundational to the future of my career—while, at the time I would have not known how important these events might be.

The first course that I was assigned to teach was Assessment and Diagnosis. Though I harbored an enormous critique of the DSM and the diagnosis process, wanting to be viewed as a team player I agreed to teach the course. During my course preparations, I reviewed as many books, journal articles, and other materials that presented a multicultural and/or feminist critique of the assessment and diagnosis processes. I designed a course that presented the students both sides of the issues, traditional clinical models as well as the critiques. As such they read books and articles that offered traditional approaches to clinical interviewing such as Millon and Everly (1985), Benjamin (1993) and Othmer and Othmer (1994). In addition, they read feminist and political analyses of diagnosis and assessment such as, Brown and Ballou (1992), Caplan (1995) and Kirk and Kutchin (1992).

Developing this course and reviewing a range of materials resulted in the publication of my first journal article in 1995, entitled; *The Diagnostic Window: Cultural and Gender Sensitive Diagnosis and Training* (Sinacore-Guinn, 1995a). In this article, I posit there is a very small window in which mental illness as defined by the DSM occurs. Thus, in order to assess that window, the clinician must consider the cultural, familial, and societal systems, structures and values in which the client is situated. I suggest that through this type of assessment one can understand whether client's challenges are due to mental illness (internal) versus a normal and expected response to discrimination, oppression, and even violence. The model I proposed in this journal article laid the foundation for much of my future work related to mental health and the effects of violence, discrimination and oppression on individual functioning.

The second event that was foundational to my career was developing and co-teaching a psychology of women course with one of my colleagues, Karen Blaisure.

My colleague's expertise was in marriage and family therapy. We decided to develop the course using the ideas outlined within critical and feminist pedagogies. After developing and teaching the course we also submitted a presentation entitled, *Teaching from a feminist perspective* to the Annual Great Lakes Regional Meeting of the American Psychological Association in 1993 (Sinacore-Guinn & Blaisure, 1993). This presentation led to additional presentations and, ultimately, we secured a grant to conduct a qualitative study about the experiences of academics utilizing feminist pedagogy techniques in their classes. The study included academics from psychology, marriage and family therapy and related disciplines. In addition to several presentations, the research resulted in the publication of two journal articles in top tier journals; *Teaching of Psychology* (Sinacore et al., 1999) and *Feminism and Psychology* (Sinacore et al., 2002). Unbeknownst to me, at the 1993 presentation about feminist pedagogy there was a professor sitting in the audience who was profoundly affected by the presentation became influential in my future career. Her name was Linda Forrest, a professor in the counselling psychology program at Michigan State University and one of the foremost feminist counselling psychologists in the United States.

In the meantime, I completed my thesis and in 1994 took a job as an assistant professor at McGill University. I immigrated to Quebec, Canada, just before the referendum on separation. The cultural shock of moving to Quebec, combined with the challenging immigration process and the complexity of what I was learning about Quebec politics and history informed my thinking in profound ways requiring me to adjust my research on feminist pedagogy to include US as well as Canadian perspectives. After ensuring we included Canadian scholars in the research processes, in 1995, along with colleagues, I presented the preliminary findings from our research at the annual convention of the American Psychological Association (APA). Professor Forrest came to that presentation and invited me to join her and several of her distinguished colleagues to dinner. At dinner, we discussed the research and the importance she and her colleagues placed on it—they encouraged me to join a subgroup within the counselling psychology division of APA entitled, the *Section for the Advancement of Women*. I joined the section and became actively involved in the section's activities. Simultaneously, I became involved with the *Association of Women in Psychology* a feminist organization that worked diligently to integrate multicultural and feminist principles in their systems and structures. In 1998, Linda Forrest and Ruth Fassinger along with a small group of graduate students organized a conference entitled: *Advancing together: Centralizing feminism and multiculturalism in counseling psychology*. The conference was structured around working groups using a mentorship model, as a junior faculty member I was partnered with Carol Zerbe Enns, one of the most prolific feminist writers in counselling psychology at that time. We were charged with leading the feminist pedagogy workgroup. As well, I was asked to be one of the opening speakers at the conference—my opening remarks were called—"The Only". I was the only women professor in my program, only lesbian, the only person trained as a counselling psychologist, and the only feminist scholar—a position that was undeniably difficult. I ended my remarks highlighting that many scholars at that meeting were alone

in their work and that this conference was an opportunity to identify “The Only” and create coalitions, collaborations, and on-going support. It set a tone for the conference.

My work with Professors Zerbe Enns resulted in a number of presentations and journal articles, but most importantly it resulted in a co-edited book entitled: *Teaching and social justice: Integrating multicultural and feminist theories in the classroom* (Enns & Sinacore, 2005). In this book we provide an analysis of the common and divergent themes in multicultural and feminist theories. The multicultural education and pedagogy chapters reviewed approaches to teaching and discussed the theories implicated in each approach. That is, the multicultural counselling chapter reviewed the four main approaches to multicultural counselling training; existential/universal, ubiquitous, focused cultural, specific and race based. The multicultural pedagogy chapter identified five approaches culturally different, human relations, single studies, multicultural and social construction. The feminist chapters reviewed schools of thought within second wave feminisms (liberal, cultural, radical and socialist) and those within diversity feminisms (postmodern, Women-of-Color, lesbian, global and third wave). For each approach or school of thought, key concepts, goals, and methods were identified. Most importantly, in this work Professor Enns and I wrote a chapter that highlighted the common dimensions across multiculturalism and feminism, and how these dimensions can be employed to create a social justice pedagogy. This work laid the groundwork for the understanding of the intersections between multicultural and feminist psychology and how these intersections can lead to work embedded in social justice. Just as developing the diagnostic window was foundational to my theoretical understanding of mental health and human functioning, developing a social justice pedagogy was foundational to my understanding of counselling psychology teaching and training and the role of systems in these processes.

These early attempts to bring multiculturalism and feminism into my teaching and research were often met with dissent among colleagues, students and reviewers (both journal and grant). Feminist and multicultural psychology was not well embraced and considered political. The critiques highlighted the fact that many members of the psychological community were denying the political nature of the discipline. Moreover, at the time, feminism and multiculturalism in psychology was not well known, understood, or accepted as a legitimate area of inquiry. As an out lesbian professor, my interest in feminism as a core school of theories in psychology, was often viewed with suspicion and not considered as an appropriate intellectual endeavor but viewed as a political choice to support my decision to be openly queer. Thus, my work was often critiqued through the lens of heterosexism and misogyny. I would argue that in order to be a feminist psychologist one had to know the entire canon of traditional psychology intimately in order to defend an alternative point of view. However, those defending a traditional point of view did not have to learn about feminism—thus keeping feminist thought on the margins of the discipline.

In addition to theory, I have been very interested in research methodologies and as such, I have conducted studies using both qualitative and quantitative methods.

Early in my career, getting funding for qualitative research was very difficult, especially research related to feminist and multicultural topics, as a result with little funding—I pursued my research program. I was often given advice by more senior colleagues, to “tow the line” until I received tenure. Believing in academic freedom and intellectual development while understanding the need to address discrimination and oppression both within and outside of psychology I chose the opposite and continued to pursue my research using qualitative methods: methods that were not valued in psychology and difficult to get funding for or publish. As one can imagine my journey towards tenure was not an easy one, but I endured and was eventually tenured in 2000.

Perspectives and Implications of My Work: My Canadian Journey

After tenure, I took a brief leave of absence to evaluate whether or not I wanted to continue on what was a difficult road within the academic world. I returned to my music career and for a brief time was the music director for the *Dora Wasserman Yiddish Theatre in Montreal*. During this time, I realized that all the work I was doing as a lesbian feminist academic mattered to people outside of the academy who understood how oppression and discrimination fundamentally affected their families both historically and presently. The experiences and stories of the intergenerational trauma told through Yiddish plays and song reinforced my resolve to continue my work in feminism and multiculturalism. Armed with tenure I returned to the academy—this time turning my attention to the Canadian context while still staying connected to mentors and colleagues in the United States.

Since, I had lost 2 years of work on my research and scholarship it took a bit of time to jumpstart my program of research. Carol Zerbe Enns and I completed the book on social justice pedagogies and I started to consider the role of social justice beyond just the intersections of feminisms and multiculturalism. At the same time, I began to consider the identity of the profession of counselling psychology in Canada. In 2005, professors Derrick Truscott and Kevin Alderson asked me to present a discussion at the 2006 annual meeting of the Canadian Psychological Association (CPA) addressing accreditation criteria for Canadian Counselling Psychology (Truscott et al., 2006a, b). They had read an article I wrote, in 1995 entitled, *Counselling psychology: A look at the question of identity, roles and the future*. (Sinacore-Guinn, 1995b). I was invited to write this article when I began at McGill in order to shed light on counselling psychology as a discipline. After the presentation at CPA in 2006, it became apparent that there was a great deal of interest in Canada to expand and develop counselling psychology.

In 2007, I went on sabbatical and during that time a committee within the counselling psychology section of the CPA worked diligently to develop a definition of Canadian Counselling Psychology. Upon return from my sabbatical, I decided to

become more active in the CPA and in 2009 attended the counselling psychology section meeting where the definition was presented to members for approval. After attending the session, I was sitting in the lobby of the hotel with my students and felt empowered about the importance of developing counselling psychology in Canada—I said to my students, “we need a conference”. My idea was to hold conference that would solidify and operationalize the definition in the discipline. In that moment, I conceptualized the *Inaugural Canadian Counselling Psychology Conference*. The conference was structured based on the definition of counselling psychology and was the first of its kind in counselling psychology in Canada, I used a similar model to the one employed at the *Advancing Together Conference* held by the SAW of APA in 1998. My students and I created a spread sheet of all the counselling psychology programs and counselling centers in the country. I personally called as many people as I could on that list to invite them to be either a workgroup leader, speaker or attendee at the conference. Over 100 people from across Canada came to Montreal for what was referred to in the reviews as, “the best conference ever”. Resulting from this conference, in 2011, I edited the first Special Section of Canadian Psychology devoted to Counselling Psychology (Sinacore, 2011a). In 2015, I co-edited the first book devoted entirely to scholarship by Canadian Counselling Psychologists entitled: *Canadian counselling and counselling psychology in the 21st century*. (Sinacore & Ginsberg, 2015). This inaugural conference inspired a subsequent Canadian counselling psychology conference in 2018 that included two of my former students, Anusha Kassin and Kaori Wada, among the conference organizers.

My involvement in CPA did not end with the conference, in 2011 I became the Chair-Elect of the Counselling Section, then Chair, and each subsequent year took on additional leadership roles in CPA. I sat on the professional affairs committee, trained as a CPA site visitor, sat on the accreditation panel and subsequently became Chair of the panel. As well, in 2015, I was elected to be a Fellow and currently, I sit as a Director at Large on the CPA Board of Directors and I am the President-elect of the association. Each of these roles, responsibilities and opportunities emerged from my commitment to social justice and advocacy.

Perspectives and Implications of My Work: Contributions Outside of North America

Involvement in the CPA was foundational to restarting my career after I took the leave of absence, however, my interests in social justice, equity and diversity moved beyond Canadian borders. I became active in a range of international endeavors through professional associations and collaborating with professors from around the world. I have been a visiting scholar in a number of countries including Brazil, Israel, Taiwan, and Chile and I have collaborate with international organizations to address research questions related to gender equity and sexual diversity. Particularly, noteworthy is the collaborations with my colleagues in Taiwan and Chile. Over the

course of a number of years, I received several invitations to travel to Taiwan to work collaboratively with the Taiwan Counselling Association, as well as several universities, and public service agencies to address concerns related to gender equity education and gender-based violence. Ultimately, the Department of International Cooperation and Science Education, Ministry of Science and Technology, Taiwan invited me as an international scholar to collaborate several organizations around the country. I developed research collaborations, presented workshops, was a guest lecturer in classes at a number of universities, and had the opportunity to learn about the cultural context of Taiwan. Ultimately, this work resulted in a number of refereed presentations and publications (e.g. Sinacore et al., 2019) in both English and Chinese that address the implementation of the Taiwan's gender equity and bullying act. This research also assessed attitudes and beliefs about gender-based bullying and violence.

The second significant international contribution has been my collaborations with colleagues Chile. In 2019, I was invited to be an *Expert Speaker on Gender Studies, Global Affairs Canada in collaboration with the Canadian Embassy and University of Chile, Santiago, Chile* and to participate in the International Women's Day March. Over the course of the week leading up to the women's day March, I gave workshops and presentations to faculty and students at the University of Chile, met with business leaders in the community, addressed women entrepreneurs and gave workshops at the Canadian Embassy. The topics that I covered were predominantly focused on sexual harassment, sexual assaulted, gender based violence, and gender based discrimination. Since that time, I have continued to collaborate with the University of Chile and have invited to participate in their annual international scholars' week. In January 2021, I gave a 4-day course on equity, diversity and inclusion in the workplace.

In all of my international collaborations, I became very cognizant of the importance of having cultural brokers, such that the work being done does not reproduce colonizing and imperial western frameworks of conducting research and teaching courses. In addition, these collaborations made me highly aware of global issues (e.g. gender-based violence, sexual violence, health inequities) that require serious attention locally, nationally, and internationally. To this end, I co-authored an article with Kirby Huminuik entitled; *Internationalization of Canadian Counselling Psychology: A Collaborative Endeavour Grounded in Social Justice* (Sinacore & Huminuik, 2020). As well, I became active in the International Council of Psychologists (ICP) where I currently sit on the Board. I am also a member of the advisory council of the Global Network of Psychologists for Human Rights. My international work continues to inform my work in Canada. It highlights the important work that counselling psychologists in Canada can be doing to address societal inequities locally, nationally, and globally. My commitment to addressing social inequities has evolved from integrating multicultural and feminist approaches to using a social justice and human rights frameworks in my research, teaching, professional service and advocacy.

According to the American Psychological Association Task Force on Human Rights (2015), members of society have the right to access and benefit from

psychological services and knowledge. Psychological research and practice should protect all people from discrimination and mistreatment. Finally, psychologists are obligated to respect, advocate for and apply human rights to their practice, research and communication of knowledge. The CPA code of ethics (2011) echoes these sentiments in the following statements, “Psychologists do not engage in unjust discrimination based on such factors and promote non-discrimination in all of their activities” (CPA, 2017 p. 11) and “respect for peoples and person also includes the concepts of distributive and social justice” (CPA, 2017, p. 12). My emerging interest in human rights resulted imploring CPA to formalize human rights as a central part of its work. I brought this idea to the board and as a result, Kerri Ritchie and I are co-Chairs of the newly established board level Committee for Human Rights and Social Justice. Moreover, we co-edited a Special Issue of CPA’s magazine, *Psynopsis* (Sinacore & Richie, 2020) entirely devoted to human rights. My interest and commitment to human rights and social justice continues to grow and I have integrated these concepts in to a range of national workshops, which I have conducted. For example, I was asked to present workshop to the Canadian Council of Professional Psychology Programs (Sinacore, 2020b) and Association of Accrediting Agencies of Canada (Sinacore, 2020a) where I discussed the integration of human rights and social justice into both the training of psychologists and accreditation standards.

At this time in history, I think it is more important than ever that psychologists take on a human rights and social justice orientation to their work local, nationally, and/or globally. In a co-authored article with Anusha Kassan in CPA *Psynopsis* entitled, *Social inequities highlighted in the crux of the COVID-19 pandemic: A wake up call to our profession* (Sinacore & Kassan, 2020) we discuss the on-going societal disparities exacerbated by COVID-19. The pandemic has aggravated existing disparities in societal institutions such as health care, senior care, education, and access to safe housing. As well, throughout the pandemic we have seen a rise in domestic and sexual violence as well as cyberbullying within Canada and across the globe. These disparities are directly related to basic human rights. The UN Declaration of Human Rights (1948) clearly states that a fundamental human right is access to; “Economic, social, and cultural rights that encompass the right to an adequate standard of living, the right to health, the right to housing, the right to education, and the right to the benefits of science and culture” (Articles 22–28). Thus, I implore all psychology scholars and clinicians to consider their responsibility towards human rights and social justice in their teaching, research, clinical practice and professional activities.

Significant Learning and Developments

As a professor at a research intensive institution, I find it ironic that the scholarship that has informed my career and resulted in my being known both nationally and internationally has come less from my data-based research and more from my being

a theoretician, activist, and innovative leader. That is, the pillars of my research and scholarship are founded in my interest in the intersections of feminism and multiculturalism, social justice pedagogy, and counselling psychology identity. Each of the early theoretical pieces I produced (e.g., Diagnostic Window, Feminist/Social Justice Pedagogy Model, and Counselling Psychology Identity) laid the foundation for the models I have developed over the course of my career.

Throughout my work, I have applied a range of epistemological positions. Early in my career I focused predominately on epistemologies hailing from feminist theories, such as post-modernism, social constructionism and standpoint. Over time, I began to integrate a diversity of epistemological positions such as, critical theory, multicultural theories, critical race, anti-oppressive and queer theory. My interest in a diversity of epistemological positions continues to grow. Thus, the integration of these different epistemological models has resulted informed the ways I can address human rights and social justice in my work.

In addition to these epistemological positions, my research has been strongly influenced by applying qualitative methodologies. I worked tirelessly to learn about the range of qualitative methodologies such as grounded theory, phenomenology, narrative, and recently participatory action research. Fighting an uphill battle for these methodologies to be recognized as legitimate within the profession, I did not back away from applying the ontological, axiological, and methodological assumptions that were consistent with the epistemological positions I was incorporating into my work.

Given the evolution of my career and scholarship, I think of the most significant learning I can offer about my work is that it is equally important to participate in critical theoretical and methodological thinking, as it is to engage with the production of research and scholarship. As well, my career highlights the importance of interdisciplinary engagement when critically analyzing theories and methods. My engagement with feminist theory and thought required me to read broadly in a range of disciplines including, business, sociology, philosophy, education, law, and psychology to name a few. By critically reading and exploring knowledge from a wide range of disciplines, I was able to explore my areas of interest from a diversity of perspectives. Bringing these perspectives to psychological research has allowed me to interrogate the edges of psychology without losing insight into the center.

Being a critical consumer of theory and research allows us to consider ideas that otherwise would remain dormant. The idea that a scholar needs a program of research where one idea builds on the next in a linear process is antithetical to innovation. While it could be argued that my epistemological and methodological positions are what defines my research program, a careful review of the various topics I have studied (e.g. immigration, career development, gender-based violence, feminist pedagogy, sexuality) does not give the appearance of a traditional program of research. However, my willingness to employ a diversity of epistemologies (e.g. intersectionality, social constructivism) with a range of qualitative methods has resulted in my work being foundational to the current zeitgeist of equity, diversity and inclusion (EDI). Ironically, while at the beginning of my career these epistemological and methodological positions were criticised and marginalized, currently

with the impetus to integrate EDI into university systems and structures this work is moving from the margins towards the center.

That is, currently, there is a strong movement in education regarding the importance of considering equity, diversity and inclusion (EDI) in policies, curricula and processes. The theoretical, research, and political foundations for EDI have been around for a long time and have been on the edges of psychology since the mid-1980s. Scholars, myself included, have been producing scholarship related to equity, diversity and inclusion for many years and in my case over 25 years. As previously mentioned, in the beginning of my career, it was very difficult to get this work funded or published. Now these edges of psychology are finally moving to the center and there is much discussion about addressing EDI in universities, clinical training programs, accreditation standards and CPA policies and procedures. The irony is that feminist and multicultural scholars—scholars whose work historically has been under-valued, under-funded, and marginalized, have conducted much of the foundational research related to the current EDI zeitgeist. However, much of that research remains invisible, especially when there is an emphasis on citing the most recent work versus foundation scholarship in addition to more contemporary articles. Thus, an important learning from my career is that, it is equally important to understand the historical foundations of knowledge production such that innovative scholarship that may have been marginalized is not erased and the producers of that knowledge are given their due credit. In the keynote address I gave at the 2018, Canadian Counselling Psychology Conference I addressed this very concern. I implored counselling psychologists to recognize the discipline's historic role in attending to diversity and social justice and their current responsibility to celebrate that history, recognize the authors of that history, while, simultaneously centralizing social justice and diversity as core competencies within the discipline (Sinacore, 2019).

In addition to recognizing historic contributions, it is equally important to be aware of the knowledge that is moving from the margins towards the center while, at the same time, remaining cognizant of the innovative work that remains in the margins or continues to be marginalized. For example, as EDI moves to the center and begins to get integrated into psychology programs, we need to be cognizant of the ideas, research and practices that remain at the borders of the discipline such as an orientation towards human rights. Being aware of these movements from margins to center while reassessing and constantly re-evaluating the borders can result in developing innovative thinking and new interdisciplinary scholarship.

Insights from My Work: The Importance of Advocacy and Innovative Leadership

As I consider my research and the insights I can glean from the trajectory of my career, I cannot separate my commitment to research that attends to social justice, diversity, and human rights from being an activist and innovative leader. I believe

my research informs my advocacy and my advocacy informs my research. A central tenet of feminism, multiculturalism and social justice is advocacy. When your scholarship is focused on discrimination and oppression, it is important that the information gleaned from the research be applied outside of academic and professional circles in order to address the very things that need to change. As a person committed to improving the human condition locally, nationally, and globally, I think it is very important that we partner with local communities and organization to insure that we develop culturally informed knowledge. As well, it is very important as researchers we are actively involved in making what is learned through these collaborations accessible to organizations and communities who are our partners and would benefit from the knowledge.

In addition to advocacy, I believe being actively engaged with innovative leadership is essential to the discipline. Innovative leadership can take on many forms. It could be applying innovative methodologies (e.g. PAR), addressing inequities in our home institutions, or confronting inequities in the discipline through leadership roles. Innovative leadership requires one to be an inclusive leader who promotes diversity and inclusion within the discipline. Over the course of my career the leadership roles I have taken on such as the *Inaugural Canadian Counselling Psychology Conference*, have led to scholarship that promoted the discipline. To be an innovative and inclusive leader requires courage, the courage to address controversies, put forth new ideas and confront complacency, unconscious bias, and oppressive practices. Innovative leaders are humble and accept that others have important ideas to offer the process of innovation and social change. As well, innovative leaders mentor and support others such that they can become leaders and role models. Over the course of my career, I have mentored a diversity of students, supervised their theses, and provided them with guidance in their career development. My research and scholarship have informed their work and their work has informed my research. Being a scholar, advocate and leader has provided me with access to innovative thinkers who have contributed to me growing as a scholar and my continued commitment to creating and consuming new knowledge.

Practical Applications

Although I trained as a counselling psychologist and graduated from an APA-accredited program, I am not a licensed psychologist in Canada. Upon arriving in Quebec as a new scholar the prospect of pursuing tenure, while simultaneously becoming fluent in French was quite daunting. At the time, I believed that pursuing tenure was essential to my success as an academic; however, I did study French during that time. Overtime, as my interests evolved away from doing individual clinical work to theoretical, methodological and organizational areas of psychology pursuing a license as a psychologist became less important to my professional identity. As such, my interests moved into organization consultation specifically within schools and social service agencies. Thus, the practical applications I address are about

institutional and organizational change versus individual counselling or psychotherapy.

My work as a consultant has focused predominantly addressing systematic discrimination, bullying, gender-based violence and other oppressive practices that occur in institutions and schools. My work as a consultant has focused on policy development and implementation as well as, putting systems and structures in place to minimize discriminatory practices and maximize equity, diversity and inclusion through education, dialogue, and reflexivity.

In order for an institution to move toward a model of organizational social justice where in the components of EDI are addressed, there needs to be the involvement of members and all levels of the institution. That is, the approach to organizational development that I recommend requires that all members of the institution actively engage in dialogues about change processes. I typically employ a collaborative participatory model of engagement such that a committee with representation of the various stakeholders at all levels of the institution guides the work and provide feedback from across the institution. This model is participatory, iterative, and ongoing such that there is continuing evaluation of the effectiveness of the organizational change, while at the same time highlighting where growth and positive change is occurring. The success of this work as a consultant is evidenced by the fact that in recent years I have been invited to present several national and international workshops about how to bring about organizational and school wide change that is guided by the principles of human rights, social justice and EDI (Sinacore, 2020a, b). This work has culminated in a recent book chapter entitled: *Critical Diversity and Social Justice: Organizational and Systemic Considerations* (Sinacore, 2021) – that provides a case example of this type of consultative process.

Insights About Clinical Reasoning, Assessment and Practice in Organizational Consultation: The Integrated Social Justice Consultation Model

Over the years, I have expanded both the diagnostic window and social justice pedagogy into larger more comprehensive models. The diagnostic window evolved into the “Multicultural Case Conceptualization” model (Sinacore, 2011b) model and the pedagogical model was expanded into the “Integrated Social Justice Consultation Model” (ISJCM) (Sinacore, 2011c, 2021). My students and I have used these models as epistemological frameworks for our research. As well, I regularly use the ISJCM, as a guiding model for my work as an organizational consultant. To this end, I will discuss how to facilitate an organization change process where institutions work toward creating environments that attend to human rights, equity, diversity and inclusion. For the purposes of this discussion, institutions can be any organizational system such as educational institutes, social service agencies, public service organizations (e.g. police), or governmental agencies. The goal of this discussion is to highlight how through applying a social justice framework, institutions

can identify the systems, structures and policies that need to be changed or developed to establish more justice within an institution. This type of analysis is iterative and ongoing. It is not a onetime evaluation but a model of organizational development where the institution culture shifts such that justice work is central to its functioning.

The *Integrated Social Consultation Model* (ISJCM) can be employed to conduct an organizational assessment that address systems and structures that may contribute to inequities within the organization. To apply this model, one simply needs to take each principle and turn it into a series of questions. Each principle provides an overarching area to consider which then can be broken down into more finite categories, as is illustrated below.

Principle I: Inequities within institutions are bi-products of an organizational climate that reflects a broader socio-cultural context.

What is the broader socio-cultural context that may influence the organization climate and result in the marginalization of certain individuals or groups? The goal of this assessment is to address the challenges with society that are reflected in the institutions, such as systemic racism, discrimination, and oppression. For example, there have been a number of disparities highlighted by the COVID-19 pandemic, specifically with the scapegoating of immigrants, East Asians, LGBTQ+, Jewish and Indigenous communities in news media outlets (Sinacore & Kassan, 2020). Other socio-cultural factors can be systemic racism, anti-Semitism, sexism, Islamophobia, sexism, homophobia, or any number of ‘ism’ that are perpetuated in society and through the media. These socio-cultural disparities reflect a socio-cultural climate of discrimination, which may be replicated in organizations. As such, the question for organizations is, how are these socio-cultural factors influencing the interpersonal beliefs, intrapersonal interactions, environment messages (e.g. gender neutral bathrooms, media) and the overall working environment? What can the organization do or what systems and structures can be put in place to address challenges as they arise? Similarly, institutional policy needs to be assessed for broader socio-cultural influences. That is, are policies accessible, transparent and implemented with an orientation toward equity? (Note: Policy implementation will be discussed in more detail under Principle II.)

Principle II: Power dynamics contribute to and result in the silencing and marginalizing of certain individuals and groups.

How can power in the organization or system be inadvertently used to silence and marginalize certain individuals and groups? When conducting an assessment of power, institutions need to examine power at the individual and systemic levels. Power dynamics at the individual level includes addressing both informal and formal power, as well as ensuring that the models of leadership are inclusive, where diversity is valued and all employees regardless of social location are given power and voice and have the opportunity to thrive. In addition to power between members of the organization, structural power also needs to be considered. For example, how are decisions about the allocation of resources made and are they allocated in ways that attend to equity?

Principle III: Rules that govern social interactions and decision-making processes take into account individuals' multiple intersecting identities.

Are multiple intersecting identities ignored or taken serious in social interactions and decision-making processes? This principle attends to how people who represent a diversity of social locations are treated within the organization and whether some identities are valued more than others. An orientation towards equity in an organization requires that the organizational systems and structures are designed such that all members the institution are situated for success and are valued.

A second area this principle applies is related to how policies are implemented. That is, are policies being implemented in a way that considers intersecting identities? Policies that are rigidly implemented may disproportionately affect a range of employees such as, individuals with disabilities, single parents, and others who might need accommodations. This approach requires taking into account individual differences such that policies are implemented with an orientation toward equity versus equality resulting in an atmosphere that, simultaneously, values individual differences and group cohesion. Organizational practices that value accommodation and inclusion can strengthen group cohesion as all members of the institution feel valued as contributing members. Discriminatory practices can have the opposite effect and result in isolation, marginalization, and tensions within the organization.

Principle IV: Institutional, social, and structural change may result in controversy, which can productively lead to positive change through dialogue and education.

This principle values productive dialogues across different points of view. Organization change can be experienced as disruptive and members of the institution may be resistant or concerned about how the change will affect them and the work they do. As such, in order for change to be productive, on-going dialogue and education is essential so that members of the organization feel their voice is being considered and heard. As such, a change management plan that addresses ways in which controversy will be managed and addressed is essential for productive and growth producing outcomes. These ideas go back to Principle I, which addresses socio-cultural context. For example, if there is a great deal of polarization in society related to diversity and inclusion, that polarization might emerge in the organization and present as a controversy. Thus, controversy needs to be managed productively through being conscious of the on-going and emerging controversies in society. Develop a climate where controversy can be productively addressed, in ways that do not marginalize individuals and groups can bring about positive change and innovation.

Principle V: Advocacy and outreach are essential components of social justice.

Advocacy and outreach can include a range of areas and practices. These may include how employees are recruited, promoted, trained and offered professional development. It may also include attending to societal or political inequities that negatively affect employees. For example, in Quebec, Bill 21 does not allow government employees including teachers to where religious symbols. Arguably

this law negatively affects a range of individuals including religious Muslim women, Sikhs, and Jewish men. Organizations that are negatively affected by these types of laws can lobby the government for change to insure that their employees are protected. Thus, advocacy and outreach can include social and political actions that address inequitable laws and policies.

Future Research and Scholarship: Plans and Directions

In recent years, I have become very interested with psychology's role and responsibilities concerning human rights. I firmly believe that the pandemic has highlighted the many local, national and international inequities that result in poor mental health outcomes for certain individuals and groups. Currently, I am the principal investigator on a grant addressing the service provision needs to vulnerable youth as young adults. As well, I am coinvestigator, in year 3 of a 7-year grant, examining sexual violence on university campuses. This project is an interdisciplinary project with over 35 partners from a range of universities and institutions. I have just completed writing a book chapter about the role of applying a human rights framework to the understanding of sexual violence, which is a direct outcome of working with this team of researchers. The goal of this research is to put systems, structures, and policies in place to reduce sexual violence on university campus and develop effective intervention and adjudication processes.

Additionally, I have been invited to spend my sabbatical in Chile (2022–2023) to collaborate on studies related to sexual violence and gender equity. This project is currently being developed using a participatory model to address the systemic inequities faced by women, Indigenous, LGBTQ+ and other marginalized groups in Chile. The current goal is to lay the foundation for an on-going initiative that will bring about systemic changes within the collaborating institutions to minimize systemic discrimination.

Research aside, at this point in my career, I would like to consolidate much of the work I have done over the course of my career through taking on significant leadership and partnership roles. Recently I was elected to be the incoming president of the Canadian Psychological Association (2021–2022) and hope through that role to continue to develop the CPA's role in and commitment to psychology's responsibility towards human rights and social justice. I began this work by co-Chairing the first Board Committee devoted to Human Rights and Social Justice. As president, I hope to support the committee and organization to move this work forward through addressing policy both within CPA and in public forums.

Further, I would like to increase my involvement with the Psychology Coalition at the United Nations, the International Council of Psychologists and the Global Network of Psychologists for Human Rights such that, I can become more involved in the human rights work being done internationally. I hope to bring the lessons learned from these international initiatives back to Canada with the hopes that

Canadian psychology can increase its visibility, and contribution related to human rights, and social justice be it locally, nationally or internationally.

In sum, the world is changing very rapidly, and psychology needs to evolve with these changes and be at the forefront in confronting discrimination, oppression, and human rights offenses as they emerge. It is my hope that we can continue to work together and walk with those individuals and groups who would benefit from a partnership with psychologists and psychology in addressing societal inequities.

Conclusion

As I review this chapter, I am given pause. There are so many stories in one's career and paths we take towards achieving our goals. In this chapter, I have identified one or two of the multitude of pathways that have led me to where I currently am in my career and life's work. I suppose if I were to write this chapter in 6 months or a year from now I might tell a very different story—though one that would be equally true. As such, in considering my career at different points in time, different strengths, achievements, barriers and struggles come to the forefront. Here, I have provided a snapshot of what I hope will inspire the reader to consider the snapshots in their career that give them a sense of fulfillment, agency, and motivation to keep moving forward in their own work and in the support of others. Again, this task has been daunting and though humbled I am grateful for the opportunity.

References

- American Psychological Association. (2015). *Task force on human rights*. American Psychological Association. [Apa.org/topics/human-rights/offices-programs](https://www.apa.org/topics/human-rights/offices-programs)
- Benjamin, L. S. (1993). *Interpersonal diagnosis and treatment of personality disorder* (4th ed.). Guilford Press.
- Brown, L., & Ballou, M. (1992). *Personality and psychopathology: Feminist reappraisals*. Guilford Press.
- Canadian Psychological Association. (2017). *Canadian code of ethics for psychologists* (4th ed.). Canadian Psychological Association. https://cpa.ca/docs/File/Ethics/CPA_Code_2017_4thEd.pdf
- Caplan, P. (1995). *They say you're crazy: How the world's most powerful psychologists decide who's normal*. Addison-Wesley Publishing.
- Enns, C. Z., & Sinacore, A. L. (Eds.). (2005). *Teaching and social justice: Integrating multicultural and feminist theories in the classroom*. American Psychological Association. <https://doi.org/10.1037/10929-000>
- Kirk, S. A., & Kutchin, H. (1992). *The selling of the DSM: The rhetoric of the science of psychiatry*. Aldine de Gruyter.
- Millon, T., & Everly, G. S. (1985). *Personality and its disorders: A biosocial learning approach*. John Wiley & Sons.
- Othmer, E., & Othmer, S. (1994). *The clinical interview: Using the DMS-IV*. American Psychological Association.

- Sinacore, A. L. (2011a). Canadian counselling psychology coming of age: An overview of the special section. *Canadian Psychology*, 52(4), 245–247. <https://doi.org/10.1037/a0025331>
- Sinacore, A. L. (2011b). *Using social justice and multicultural perspectives in the development of international counseling psychology*. Paper presented at the Department of Guidance and Counselling, National Changhua University of Education, Changhua, Taiwan.
- Sinacore, A. L. (2011c). *Utilizing international, multicultural and social justice perspectives in developing gender equity educational initiatives*. Conference Proceedings from the International Conference on the Comparison and Development of Gender Equity Education, Taipei, Taiwan (pp. 61–72).
- Sinacore, A. L. (2019). *Counselling psychology at the crossroads: Discipline or social movement*. Conference Proceedings from the Canadian Counselling Psychology Conference, Calgary, AB. https://prism.ucalgary.ca/bitstream/handle/1880/111438/CCPC-Proceedings-Full-Document_Revised.pdf
- Sinacore, A. L. (2020a). *Equity, diversity and inclusion in an accreditation context*. Workshop presented to the Association of Accrediting Agencies of Canada, Ottawa, Ontario.
- Sinacore, A. L. (2020b). *Human rights and social justice in psychology*. Workshop presented at the Inaugural Seminar Series of the Canadian Council of Professional Psychology Programs.
- Sinacore, A. L. (2021). Critical diversity and social justice: An organizational and systemic considerations. In R. Moodley & A. Kassan (Eds.), *Diversity & social justice in counselling psychology and psychotherapy: A case study approach*. Cognella Press.
- Sinacore, A. L., Blaisure, K. R., Justin, M., Healy, P., & Brawer, S. (1999). Promoting reflexivity in the classroom. *Teaching of Psychology*, 26(4), 267–270. <https://doi.org/10.1207/S15328023TOP260405>
- Sinacore, A. L., Chao, S. C., & Ho, J. (2019). Gender Equity Education Act in Taiwan: The influences on the school community. *International Journal of Educational and Vocational Guidance*, 19, 293–312. <https://doi.org/10.1007/s10775-018-9381-6>
- Sinacore, A. L., & Ginsberg, F. (Eds.). (2015). *Canadian counselling and counselling psychology in the 21st century*. McGill-Queens Press. <http://www.jstor.org/stable/j.ctt1287h8v>
- Sinacore, A. L., Healy, P. A., & Justin, M. (2002). A qualitative analysis of the experiences of feminist psychology educators: The classroom. *Feminism and Psychology*, 12(3), 339–362. <https://doi.org/10.1177/0959353502012003007>
- Sinacore, A. L., & Huminuik, K. (2020). Internationalization of Canadian counselling psychology: A collaborative endeavor grounded in social justice. *Canadian Journal of Counselling and Psychotherapy*, 54(4), 661–667. <https://doi.org/10.47634/cjcp.v54i4.70675>
- Sinacore, A. L., & Kassan, A. (2020, August). Social inequities highlighted in the crux of the COVID-pandemic: A wake up call to our profession. *Psynopsis*, 42(3). https://cpa.ca/docs/File/Psynopsis/2020/References_Vol42-3.pdf
- Sinacore, A. L., & Richie, K. Guest-co-editors (2020, October). *Psynopsis Special issue—Human Rights and Social Justice*, 42(4). https://cpa.ca/docs/File/Psynopsis/2020/References_Vol42-4.pdf
- Sinacore-Guinn, A. L. (1995a). The diagnostic window: Cultural and gender sensitive diagnosis and training. *Counselor Education and Supervision*, 36(1), 18–31.
- Sinacore-Guinn, A. L. (1995b). Counselling psychology: A look at the question of identity, roles and the future. *McGill Journal of Education*, 30(3), 257–272. <https://doi.org/10.1002/j.1556-6978.1995.tb00206.x>
- Sinacore-Guinn, A. L., & Blaisure, K. R. (1993, April). *Teaching from a feminist perspective*. Paper presented at the Annual Great Lakes Regional Meeting of the American Psychological Association, Bloomington, IN.
- Truscott, D., Alderson, K., & Sinacore, A. L. (2006a). Toward counselling-specific accreditation criteria [Summary]. *Canadian Psychology*, 47(2A), 162.
- Truscott, D., Alderson, K., & Sinacore, A. L. (2006b, June). *Toward counselling-specific accreditation criteria*. Structured Conversation presented at the Annual Meeting of the Canadian Psychological Association, Calgary, AB.

Chapter 15

Humanistic Empirical Assessment with Children, Youth, and Families



Krista D. Socholotiuk

Abstract In this chapter, I outline a practice-based rationale for the inclusion of empirical assessment with children, youth, and families, and offer Messick's (Educational measurement, 13–104, 1989; American Psychologist, 50: 741–749, 1995) modern validity theory as a framework by which counseling psychologists can harmoniously integrate a contextual, client-centered, and socially responsible approach to empirical assessment in their counseling work. I also address some of the practical considerations in this approach to empirical assessment and conclude with a case illustrating the application of the tenets of modern validity theory with a 14-year-old adolescent.

Guiding Framework

Counseling psychology has a long history of using measurement activities to guide prevention and treatment efforts with clients (Duckworth, 1990; Goldman, 1971; Langland, 1960). It also has a unique approach to working with measurement based on its distinct values and scope of practice (Watkins & Campbell, 1989). In contemporary practice, most counseling psychologists view assessment, prevention, and intervention as interrelated and ongoing rather than sequential, and considerable freedom is exercised about whether or when assessment methods are used (Mahoney, 2003). While quantification is used by some counseling psychologists, others may hold disinterested or even skeptical dispositions toward this type of assessment given the limitations of numbers to capture client realities and personal meanings. To understand these dispositions, it helps to appreciate the philosophical tenets of humanism and postmodernism that tend to characterize counseling psychology and its practice (Davis et al., 2005; Haverkamp, 2013). The perceived incompatibility of quantifiable measures and the philosophical values of counseling psychology is

K. D. Socholotiuk (✉)
Simon Fraser University, Burnaby, BC, Canada
e-mail: krista_socholotiuk@sfu.ca

perhaps also reinforced by the popularity of traditional information-gathering models of empirical assessment. In these models, an objective, knowable reality is assumed where the assessor is a neutral, distant observer, and deficit-focused test scores are sometimes elevated in value and trusted more than other kinds of knowing. For counseling psychologists who seek authentic relational encounters that honors context, intersubjective knowing, the searching for possibilities, and “what is right” with clients (Watkins et al., 1990), it is easy to appreciate why some counseling psychologists might consider empirical assessment to be incompatible with their approach to practice.

With these tensions in mind, the aim of this chapter is to offer a counseling psychology approach to empirical assessment that is compatible with relational, humanistic, and collaborative practice. It is also written for those intrigued by the value of empirical assessment and wish to offer it more often in their prevention or intervention approach with children, youth, and families. In light of my position that assessment, prevention, and intervention are interconnected and ongoing in counseling psychology, this chapter deviates from the standard structure of the book in that there is no specific section in this chapter addressing prevention and intervention. Rather, I have embedded ideas about prevention and intervention throughout the other sections.

Clinical Reasoning Approach

In general counseling practice, the empirical assessment may serve a variety of clinical functions, such as information aids for decision making, highlighting opportunities for prevention, assisting in diagnostics and outcome evaluation, or the direct service of client-stated goals like increasing personal awareness or social identity (AERA, APA, NCME, 2014). Such functions have utility for clients across the lifespan, but empirical assessment with child and youth populations has some distinct value-added.

Assessing client concerns within the context of normative development is a core value of counseling psychology (Bedi et al., 2011). Likewise, attending to the achieved and emerging developmental processes shaping a young person features prominently in clinical reasoning and service planning for this population. From a developmental perspective, it is generally understood that children and youth are moving targets: their present-day development is like a snapshot in time reflecting an accumulation of age-related changes in physical, emotional, cognitive, and social functioning (Feldman, 2019). Accordingly, an important goal in working with young people is to consider the normal developmental processes that may have led to or are shaping their current functioning. Many norm-based measures developed for child and youth populations, such as the *Multidimensional Anxiety Scale for Children, second Edition* (March, 2012), are based on samples of typically developing children as well as clinical samples, meaning a young person’s score(s) can be interpreted, in part, based on how they compare to others within their developmental

stage (e.g., 8–11; 12–15; 16–19 years). Given some anxieties and fears are normal and expected childhood experiences that will change as the young person moves through subsequent stages, norm-based measures can be a helpful aid in identifying when some experiences are developmentally unexpected. Further, unlike the classification system of the *Diagnostic and Statistical Manual for Mental Disorders—fifth Edition* (DSM-5; APA, 2013), frequently critiqued for its imposition of a binary understanding of human experience (i.e., typical vs. disordered), norm-based measures are scored on a continuum of standard scores that recognizes the young person's problems and capacities are experienced in degrees and are not static experiences.

In addition to a developmental framework, Bronfenbrenner's (1977) ecological systems model and Sameroff's (1993) transactional theory of development remind us there are complex influences on child development. Both theories form an essential foundation for understanding a young person's behavior by highlighting what might have happened or is happening for the child in their particular familial, socio-cultural, and historical context. Bronfenbrenner's (1977) ecological systems model reminds us that what a child brings into the world (e.g., temperament) commingles with their past and immediate family, social environment (e.g., neighborhood, school, parent's occupation, peers), and general sociocultural context to shape developmental pathways and well-being. Sameroff's (1993) transactional theory adds that development must be viewed as the result of a complex interplay between a child's natural temperament and traits, and both the proximal (e.g., family experiences, parenting techniques) and distal influences (e.g., family income, type of community) in their lives. For example, parenting strategies and choices will certainly affect a young person, and likewise, a child's temperament and response to their caregiver's behavior will influence parenting approaches. The recognition of these complex forces on development constitutes an important foundation for a thorough understanding of why a child or youth's behavior occurs within its particular context.

Although not as prominent as measures addressing characteristics of an individual respondent, many inventories are available that focus specifically on the parent-child system (e.g., *Parenting Stress Index, fourth Edition*; Abidin, 2012) or the family system (e.g., *Family Adaptability and Cohesion Evaluation Scales, IV*; Olson et al., 2006). Additionally, many offer multi-informant options (e.g., *Child Behaviour Checklist*; Achenbach et al., 2004; *Behavior Assessment System for Children-3*; Reynolds & Kamphaus, 2015), meaning the young person's behavior may be assessed and understood from multiple perspectives (e.g., the young person, parents, teachers). Multi-informant measures offer several benefits, including a timely and efficient way to capture input from important others in the young person's life. Not only does this help to raise awareness of contextual variations in behavior, but the use of such measures can also be a good way to invite all to feel a sense of invested interest in the eventual findings (Brem & Peebles, 2014).

It is worth noting that low correspondence between informants' ratings on things like the frequency, duration, or intensity of behaviors and experiences is not uncommon (Achenbach, 2011). While this may represent a problem to researchers

attempting to estimate the prevalence of children's mental health concerns, it can in fact be an aid to the practicing psychologist. As Brem and Peebles (2014) note, discrepant results contain the details of nuance that a focus on the individual or a superficial look might miss. The ecological and transactional frameworks described above begin with the working assumption that a young person's behaviors are likely to vary across situations and relationships, and multi-informant measures often capture these perspectives and keep them at the forefront of our minds. Our commitment to work hard at understanding these variances will honor client complexity and often yield a more textured clinical picture. Indeed, when multi-informant measures are approached with the mindset that each person holds some part of the truth (Brem & Peebles, 2014), the measures themselves constitute a useful reminder to invoke ecological and transactional conceptual frameworks alongside our chosen counseling theory when making meaning of test scores.

In addition to offering an index of frequency or intensity on whatever construct is being evaluated, empirical assessment can sometimes do double duty. That is, empirical assessment can sometimes make visible other processes and challenges our clients to contend with that may provide useful information for case formulations (e.g., reading struggles, quality of attention span, response to perceived failure or success, perfectionism) and highlight opportunities for prevention efforts. While age-appropriate counseling interviews with the child and youth clients are essential to the assessment, there are many facets of a young person's day to day experience they may not be able to report (e.g., inattention or other executive functioning challenges) or which they may understandably not wish or be ready or able to verbalize (e.g., trauma, victimization, bullying). A young person's communicative ability in counseling interviews is also influenced by things such as developmental age, motivation, familiarity with the setting, relationship with the psychologist, and the psychologist's question-asking strategy. For these reasons and others, child and youth clients may sometimes benefit from the prompts of measure items to recollect and share experiences and, in some cases, may feel more comfortable first telling a measure something about themselves than communicating it directly to the psychologist. In these situations, empirical assessment can lay a foundation for productive exploration of important items and score meaning when reviewed collaboratively with an attuned professional.

Finally, psychoeducation is an important component of counseling with children and youth (Cummings & Fristad, 2007; Dahl et al., 2020). Whether as prevention or part of the intervention, psychoeducation can help families to understand the practical and emotional struggles faced by a young person, encourage participation and adherence with treatment, and sometimes alleviate misunderstandings and establish common ground when multiple systems are involved in a child's care (e.g., social workers, schools, community police). For psychologists with a collaborative orientation to empirical assessment, measures can be a valuable psychoeducational tool to teach our clients and important others involved in their care about what is happening, especially when we involve them in helping us to make sense of the scores. Functionally speaking, empirical assessment can also aid in the early identification of mental health concerns (e.g., screeners), constitute a therapeutic intervention in

itself (Finn & Tonsager, 1997), or be the means by which we advocate for our clients to access needed resources (Wood & D'Agostino, 2010), such as school-based programming or designations for educational support, access to youth support workers, or eligibility for more specialized assessment activities.

There is little question that empirical assessments are a well-demonstrated and trustworthy guide to facilitating clinical reasoning and guiding counseling psychology work. Nonetheless, it is worth highlighting the use of psychological measures presumes a legitimate client or organizational need that justifies the time and expense of the evaluation (AREA, APA, NCME, 2014). Consequently, the above rationales should not be taken as a blanket justification for the use of empirical assessment with all cases involving child or youth clients. When a purpose or need seems to exist, we can discuss the possibility of incorporating empirical assessment with our clients (See section below on Informed Consent for more on this topic).

Approach to Mental Health Assessment

With a foundation now established for the value added by the judicious use of empirical assessment with young people and their families, we come to the second and perhaps most challenging task: how do we humanize empirical assessment and harmonize the often-discordant value positions of counseling psychology with quantification? Like counseling theories or research methodologies, empirical assessment reflects a foundational belief system about what can be known and how things can be known. In other words, assessment reflect a philosophy of science, or a conceptual foundation, underlying the quest to know and understand something. Although philosophy of science is a subject more commonly found in discussions of research, insofar as research and assessment are both systematic quests for knowledge, the ideas held there also apply to assessment (Domene & Socholotiuk, 2018; Socholotiuk et al., 2016).

When Cronbach and Meehl (1955) first systematized notions of validity in measurement, the main philosophical force in psychology was logical positivism (Messick, 1989). Post-positivism, the successor to logical positivism, continues to be a dominant force in psychology today (Ponterotto, 2005). For the field of testing and measurement, compatibility with this philosophical position is strong because the presumption of a single, knowable reality that can be perceived (albeit imperfectly) is constituent to the work given its nomothetic aims. The main concern of measurement is with universal facets of human experience, and measures are the tool by which these realities are captured. For the field of counseling psychology, whose value commitments are more heavily influenced by postmodernism and idiographic aims (e.g., concern for the particular facets of human experience embedded in unique sociocultural contexts), the prospect of quantifying personal meanings through measurement should be a source of tension. However, hopefully, the following sections will reveal this tension need not be classified as incompatibility.

At the time of Cronbach and Meehl's (1955) seminal work, the measurability of unobservable human experiences, such as cognition or affect, was a precondition for legitimacy. Furthermore, as Hubley and Zumbo (1996) note, with measurement comes concerns of validity. Validity and reliability are commonly described as the "pillars of psychological assessment" (Gersten, 2013, p. 148) because they provide essential information about measurement consistency (i.e., reliability) and accuracy or truthfulness (i.e., validity). With Cronbach and Meehl's work as a foundation, the field moved in the direction of establishing types of reliability (e.g., test-retest, parallel forms, internal consistency) and types of validity (e.g., content, concurrent, predictive), with the corollary assumption that validity is a property of an observation or a measure itself (Hubley & Zumbo, 1996). Thus, if the evidence for the pertinent types of reliability and validity were strong, the measure itself was "valid".

Cronbach and Meehl's (1955) traditional view of validity and reliability is still the backbone of most present-day assessment textbooks in psychology, but in many ways, it has not kept pace with modern conceptions of validity (Cronbach, 1988; Messick, 1995). This is of significance to the field generally, but also to counseling psychologists specifically, because modern validity theory represents a vehicle for harmonizing the underlying values of empirical assessment with its concern for contextual knowing and sociocultural values.

In the traditional view of assessment, where validity became a property of the measure itself, only certain types of validity evidence were needed for a given purpose. In contrast, Messick's (1989) unified or modern theory of validity, endorsed by the American Psychological Association (AERA, APA, NCME, 2014), defines validity as "an integrative evaluative summary of the degree to which empirical evidence and theoretical rationales support the adequacy and appropriateness of inferences and actions based on test scores and other models of assessment" (Messick, 1989, p. 13). This definition is a major departure from traditional understandings of validity with which most psychologists are familiar. Also, perhaps not immediately obvious, but pertinent to this discussion, Messick's definition does not assume notions of validity are tied to any one philosophical position; rather, "philosophical foundations of validity and validation [may] combine elements from multiple philosophical...perspectives" (Messick, 1989, p. 30).

The shift in focus to validating the meaning of score interpretations rather than the measure itself is perhaps one of the most noteworthy bridges to humanistic empirical assessment offered by modern validity theory. As Messick (1995) notes, "validity is not a property of the test or assessment...but rather the meaning of the test scores" (p. 741). Accordingly, the *Standards for Educational and Psychological Testing* note, "it is incorrect to use the unqualified phrase 'the validity of the test'" (AREA, APA, NCME, 2014, p. 11). Psychological measures have always been imperfect exemplars of the constructs they purport to measure; they inevitably leave something out that should be included and include things that should be left out (Messick, 1989). However, the use of mathematics in measurement connotes precision and legitimacy, which elevates this kind of information as being irrefutable and without error. The emphasis modern validity theory places on validity judgments being an integrative, evaluative summary of empirical evidence and theoretical

rationales means it is understood that validity evidence will always be incomplete, and that validity is a matter of degree rather than all or nothing. A psychologist's task is to make the best-case justification for their inferences and actions. It is worth noting that foundational knowledge in psychometrics and measurement is still fundamental in modern validity theory. Psychologists must know how to select, use, and interpret measures given to clients in order to ascertain the accuracy and adequacy of their inferences (i.e., the *evidential* basis for test use and interpretation). However, the importance of other lines of validity evidence to support a psychologist's inferences means other considerations, inclusive of culture, the measurement situation, and the individual characteristics of the client must be considered as well (i.e., the *consequential* basis of test use and interpretation).

Consistent with the values of counseling psychology, modern validity theory recognizes the danger of unexposed and unexplored values in score interpretation, bringing legitimacy to the role of values and social consequences as a foundational consideration in the validity. As Cronbach (1988) stressed, the professional's validation argument "must link concepts, evidence, social and personal consequences, and values" (p. 4), and test users are obligated to consider whether "a practice has appropriate consequences for individuals and institutions, and especially to guard against adverse consequences" (p. 6). A note of clarification is warranted here. Concern for the wellbeing and growth of young people and their families is paramount to our work, and the impossibility of knowing all the positive or negative consequences that might arise from testing and measurement should give us all pause. Indeed, improper test use has been and continues to be a vehicle by which groups of people have been discriminated against (Taylor & Payne, 1983), excluded from services and programming (Bersoff & Hofer, 1995), and colonized (Smith, 2012). Modern validity theory offers some helpful guidance for counseling psychologists seeking to conduct mental health assessments in a way that aligns with the justice values of our specialization. In measure selection and interpretation, psychologists need to consider the potential negative consequences of using a measure if those negative consequences are likely to result from some element of invalidity linked to the test, the test situation, or the context. For example, a highly elevated general anxiety score on a child's self-report measure is one aspect of evidence we might consider in an assessment of a possible anxiety disorder. However, if the child repeatedly asked us about word meaning and their motivation lagged noticeably in the last half of the administration, then the potential negative consequences to the child (e.g., a diagnosis, the need for ongoing treatment, possibly medication) can and should be factored into a psychologist's evaluative judgments of the adequacy and appropriateness of inferences about the validity of the child's scores on the measure. This is quite a different situation from a scenario where, for example, we might be providing family counseling for a youth's low mood and notice the parents and the young man have developed the habit of explaining the youth's low mood as a problem located within himself. As most measures of depression are based on *DSM-5* (APA, 2013) criteria, which are largely individualistic and decontextualized, administering the measure to the young man carries a risk of potentially reinforcing the family's views of the young man and what can be done to help him at the

expense of shifting perspectives to include relational, sociocultural, or systems-based explanations. The psychologist's choice about whether to administer the measure could have negative consequences vis-à-vis their counseling goals with the family, but these are not consequences that would necessarily bear on the validity of score interpretations, were they to decide to administer the measure.

As a matter of practice, psychologists will find it useful to mitigate or prevent negative consequences to clients by pausing to consider the degree to which the assessment construct(s) as understood and operationalized by the test developers carry equivalent meaning and value for the client. Construct equivalence should not be the starting assumption, and it can be of great value for psychologists to consider questions such as, "to what extent does this test measure something that really exists for my client?" before moving ahead. The modern theory of validity recognizes that constructs ascribe reality to the world, and measures are the tools by which these realities are discerned and captured. It makes room for the possibility that some theories and constructs will clash with, impinge upon, and even deny our clients' realities.

In sum, when the focus shifts to validating interpretations of score meaning in measurement, where the values and consequences of score meaning are important aspects of validity evidence, the psychologist's practice falls more in line with both modern validity theory and the values of counseling psychology. Considering the role of values is virtually mandatory in all areas of inquiry, whether in assessment or research, the pressing issue is no longer whether to take values into account, but how to do this (Messick, 1989).

Integrating Empirical Assessment into the Process of Counseling: Therapeutic Opportunities

The approach to empirical assessment outlined below represents an application of modern validity theory. It also draws inspiration from Fisher's (1970) groundbreaking approach to psychological evaluation as a relational encounter and Finn and Tonsager (1997) and Tharinger et al. (2013)'s work in therapeutic assessment. The approach is presumed to hold therapeutic opportunities, whether the aim is to enhance and promote growth or support problem-focused interventions.

The Referral Question

More so than adult clients, child and youth clients tend to arrive at their first counseling appointments with problems pre-identified by others (e.g., parents, teachers, social workers). Further, often what is written on the referral or stated in the opening moments of a session as the "identified problem" is quite a bit removed from the

heart of what is really happening. Counseling psychologists who use measurement as an aspect of their helping go about their initial sessions with clients with the same active listening and case formulation skills as they normally would; they are not necessarily thinking or listening to client concerns in terms of the tests they have on hand or a one-size-fits-all test battery. Accordingly, the same principles of good clinical interviewing are at play, such as listening, validating, balancing perspectives, exploring, and summarizing. Questioning styles and strategies are tailored to the client's developmental age. In fact, a good clinical interview is an essential foundation to employing psychological measures, as any score interpretations must occur in the context of the child or youth's personal history, and current psychosocial and cultural location.

What the psychologist will need to bring to the early phase of their clinical work is a solid understanding of some of the functions of empirical assessment and the needs it can meet to determine if justification exists for recommending measurement as part of the general assessment. Allocating time in the early sessions to explore the young person's ideas about what is happening and why, as well as any questions or curiosity they may have about themselves, is a collaborative way to gauge the usefulness of a measure or set of measures to the client. As Tharinger et al. (2013) note, the co-constructing of questions, using the client's words, if possible, is helpful for client engagement and piquing the client's curiosity about themselves. Some young people may find talking about their concern in the form of a question will itself bring some relief, and these questions can in turn guide the selection of measures. The psychologist might also hear unspoken questions in their client's stories in listening to the young person or family, and then recommend a measure that might help address the question. For example, a parent may believe the underlying cause of their child's oppositionality at school is unidentified anxiety and feel frustrated the school is offering only behavioral response strategies, such as time outs in the principal's office. The psychologist may reframe this to the parent as a question: "It sounds like you're wondering if the school sees the problem differently than you do, and that may be why they are responding with removal from the classroom rather than exploring other options?" In this case, a multi-informant assessment including measures of both anxiety and disruptive behavior could be recommended, with the goals of clarifying the parents' hunches and providing psychoeducation for the child, the parents, and the school. The multi-informant assessment may also support the school and the family to arrive at a common understanding of what may be happening for the child and inspire ideas for how to work together toward joint goals.

Informed Consent

Children, youth, and families have the right to information upon which they can make an educated decision about the risks or benefits of participating in any intervention (Canadian Psychological Association, 2017). Empirical assessment is an

intervention distinct from counseling and requires its own informed consent. In addition to sharing the purpose and nature of the proposed activities, the mutual responsibilities, risks and protections, and the option to refuse or withdraw at any time, it is essential that clients are told and understand that no single measure on its own is diagnostic or prescriptive and, given the developing and changing nature of children, information from the measure is meant for current use. Both aims are facilitated when the psychologist explains, in jargon-free language, how psychological measures work. For example, if what is being suggested is a norm-based test of childhood depression that includes a child self-report and parent-report, the psychologist can explain the measure will provide information about how important adults in the child's life experience them (i.e., parent self-report), and provide a sense of how common their own experiences and behavior are compared to other children their age (i.e., child self-report). Below is an example of how some of the benefits and risks of empirical assessment can be shared with clients:

Benefits

- (For children or youth). It is smart to be curious and find out stuff about yourself. Measures like this one can help kids know themselves better, and this is a powerful tool for a young person to have. Other benefits may include feeling less alone, keeping troubles from starting or getting worse, and having more help and hope in solving problems at home, school, or with friends.
- (For caregivers). Assessments may lead to insights about what might be getting in the way of a child or youth doing well, and what might help them to thrive at school or with family and peers. It may help us to see troubling patterns in the making and give ideas for prevention.
- Sometimes, measurement findings point to a mental health diagnosis that may help (a) you and others to better understand your specific strengths and challenges, and (b) counselors to develop better treatment plans.

Risks

- Not all measures will lead to the benefits described above. Sometimes measures may lead to a mental health diagnosis or point to psychological or emotional patterns that will require follow-up treatment or other interventions. It can be upsetting to learn about these conditions and may take time to process.
- Some measurement activities might seem a lot like schoolwork, and it is possible for children and youth to feel worried or nervous about being "tested." These measures work differently than school tests. There is no grade assigned, but it's important to give your best effort. The psychologist is prepared to sense and respond helpfully in such situations, including stopping the activity if desired.

In some cases, the psychologist may need to help in negotiating appropriate autonomy and confidentiality for the data and interpretations emerging from child or youth self-reports. For example, although adolescents in British Columbia under 19 are not adults, the mature minor rule recognizes young people may have sufficient capacity to consent to counseling, including empirical assessment, without the need for parental consent (Bryce, 2013). While open communication and parental

involvement are always aspirational in child and youth counseling, the psychologist should not break a young person's confidentiality, inclusive of test scores and interpretations, unless the young person has consented to such disclosures to others. Finally, prior to beginning administration of any measure, it is important for the psychologist to explain how findings will be shared with the client (e.g., typically shared verbally in a session, and often with a written summary).

It is strongly recommended that psychologists not solicit a young person's consent to share findings with others at the beginning of the assessment process. Instead, it is more ethical to advise the client that they will be consulted after the feedback session regarding if and what findings they would like to have shared, and to whom. There is no way for a client to consent to share findings without first knowing what the findings say. Approaching consent to share assessment findings in this way is consistent with the view of ongoing informed consent endorsed by the Canadian Psychological Association (2017).

Planning & Structuring Empirical Assessment

Selection of psychological measures. The selection of measures and inventories is ideally customized for each child, youth, or family, and will logically flow from the referral question(s) and the client goals. The choice of measure can be guided by two broad facets of validity: the measure's evidential basis (i.e., its construct validity evidence, inclusive of relevance and utility for the counselor's purpose in using it), and its consequential basis (i.e., the social consequences of test use and the value implications of test interpretation). The name of the test alone does not provide enough information or justification for its use (AERA, APA, NCME, 2014).

The evidential basis for selecting a measure will consider things such as the fit between our objectives for the measure and the purpose for which the measure was developed, the applicability of available normative data to our clients, and the fit between the measure's age range and reading level and that of the client. Ensuring a match between the client's age and a measure is a straightforward consideration, but one easily overlooked when working with young people. The unique way constructs are understood and operationalized developmentally means intended age ranges can vary widely from measure to measure. Threats to the validity of score inferences are considerable when a child has been administered a measure not intended for their current age. In terms of the applicability of the measure's normative sample, it is advisable to consider the client holistically and in terms of their interconnecting identities rather than in terms of categorical identities as test manuals tend to do. As the field progresses, it is hoped that normative samples will improve to include greater diversity regarding things such as culture, gender, and ability. However, given the nomothetical aims of measurement, the composition of a normative sample will never fall in line with the idiographic perspectives preferred by most counseling psychologists. For example, the absence of gender-diverse children or youth in a measure's normative sample represents a real limitation and may

detract from the validity of score meaning for the young person. However, that alone need not prohibit a psychologist from offering the measure to a client who may share another similar identifies with the normative sample and who may derive benefits, personally, relationally, educationally, or socially from completing the measure. In such cases, the psychologist may elect to factor elements of a client's unique identity into their integrated summary of validity evidence by qualifying score interpretations, which may be presented as hypotheses instead of conclusions.

As noted above, it is not possible to anticipate all possible positive or negative consequences of measurement. However, likely consequences can and should be considered in selecting a measure so that unintended negative consequences can be avoided (AERA, APA, NCME, 2014). Consequential considerations in measure selection might include the value implications and possible consequences of measure names, construct labels, or the theory and ideologies of the measure vis-à-vis the client's self-perception or cultural worldview. It may also encompass potential score-based actions linked to score meaning, such as admission to specialized services, therapy groups, or access to school accommodations.

Administration of psychological measures. Improper administration of psychological measures represents a source of invalidity and bears on the validity of interpretations and actions based on the scores. Accordingly, measures are ideally administered to clients in the manner indicated by the test manual (AERA, APA, NCME, 2014). However, with all clients, but especially child and youth clients, the psychologist is responsible for establishing conditions for completing the measure, which takes the client's needs and abilities into consideration, and some developmental considerations may warrant departures from standard administration procedures. Considerations might include a young person's concentration and attention when measures have many items or negotiating privacy for the young person by securing the caregiver's permission for the young person to complete their self-reports on their own rather than with parental oversight and input. In other cases, a young person may ask for help in understanding word meaning on a measure. Provided reading comprehension is not related to the construct being measured, assistance can be provided with care taken to avoid changing the meaning of the item. Further, a description of the assistance provided should be noted in the assessment findings. Likewise, nonstandard administration is sometimes warranted for standardized tests with young people, such as when perfectionism, frequent negative emotions in the face of perceived failure, inattention, hyperactivity, or fatigue make completing a test in one sitting unrealistic. Again, deviations from standard administration are ideally unlinked to the construct being measured as such departures do bear on validity and should be described in the findings.

After administration is complete, it can be very helpful to explore the young person's experience of completing the measurement activity, both as a line of validity evidence to help support score interpretation and as a possible therapeutic opportunity. For example, we can query any noteworthy responses or experiences the young person had while completing the activity ("What was that like for you?" "What did you think about that"?). As Tharinger et al. (2013) note, exploration of

the client's response to the measure or specific test items can often be a therapeutic bridge to experiences they have in their lives outside of counseling, which can be a door opener for self-exploration, psychoeducation, adopting a new point of view or weaving new understandings of and relationships to the presenting problem.

Evaluation and Synthesis: Score Meaning Making

At this stage of the process, our task is to consider the evidence and rationales supporting possible score meanings, and the trustworthiness of those meanings. The evidential and consequential basis of score interpretation guides our inferences about score meaning in a similar fashion to how they guided measure selection. As noted in the first half of this chapter, developmental, transactional, and ecological systems perspectives will feature prominently in meaning-making alongside the child and family's psychosocial and cultural history and present context. However, because test responses are a function of many things, it is worthwhile to adopt some analytic habits to avoid elevating the importance of test scores at the expense of other considerations that also bear on validity. The value implications of interpretation and the potential social consequences derive largely from the measure's construct meaning, but not entirely so. As such, it is helpful at this point to reengage the test manual to freshen our understanding of theoretical meanings of the measure's constructs, and perhaps create a concept map of the theoretical structure of the measure to keep next to us on the desk. It can also be useful to consider score indexes that are significantly elevated, or inordinately flat, and then consult the manual to determine which test items load onto those indexes. Later, we can invite the client to share their thought process/reasoning behind their ratings for these items. Indeed, Fisher (1970) described regularly inviting clients into a co-advisement role regarding score meaning where we have them at our elbow, contributing and wrestling together with us about the meanings to be made. With careful considerations of confidentiality, this can also be an approach to making meaning of discordant responses between multiple test-takers. Co-advisement strategies not only reduce power imbalances between psychologists and clients (and the measure and the client) but constitute validity evidence relating to the client's cognitive processes of the test. Indeed, using this talk aloud process aligns with Cronbach and Meehl's (1955) "studies of process" (think-aloud protocols) to accumulate validity evidence for score interpretations. The psychologist and client can discuss together how the client arrived at their rating, and changes may be considered in cases where items were misunderstood. As with therapeutic assessment (Finn & Tonsager, 1997; Tharinger et al., 2013), we can ask clients to comment on the accuracy of possible interpretations and be willing to retain what helps from the measure, and "toss out the rest" if the client's experience of themselves is very discordant with the suggested interpretation. Note that when such deliberate creative leaps are made, the evidential basis of construct-related evidence for those scores quickly erodes (Messick, 1989). Any decisions made on interpretations resulting from our creative leaps cannot rely on the measure's validity evidence but will require their own.

Communication of Findings

Communicating the findings of an assessment, in written form especially, is one of the most difficult aspects of assessment. The particulars of administration and scoring can be easily learned but communicating what we have understood about the client from their scores on a measure is another matter. Part of the difficulty is the demand placed on the psychologist to create focus and synthesize large quantities of data; we will be tapping an array of theories (e.g., our counseling theory, developmental, systems, transactional) as well as the theory underlying the measure in order to make meaning of the client's scores. Many excellent resources are available to guide psychologists in this final stage of the process (Tharinger et al., 2008; Brem & Peebles, 2014), so due to space, this section will highlight just a few general considerations.

If findings of the empirical assessment may be useful to others in the child or youth's system, such as parents, teachers, school counselors, physicians, psychiatrists, youth workers, or social workers, the client may wish for some or all of the information to be shared. The feedback session is the time to revisit the conversation about consent to share, and if so, what can be shared with others. Before releasing reports to others, we can provide our clients with drafts of the written findings and invite them to review it and provide us with feedback. In the event of disagreement on some parts of the assessment findings or score meaning, the different perspectives can be documented in the report or in an addendum at the end of the report.

Whether delivering feedback verbally or in writing, aim to use everyday language accessible to clients as far as possible. Given the tendency of numbers to imply precision and authority, it also pays to thoughtfully consider how standardized scores are summarized and reported. For example, if the write-up and feedback are only for the client's use, consider whether using a qualitative label rather than a numerical score will sufficiently convey what is needed. If the write-up is going to be shared with others and reporting of the standardized scores is deemed important for the situation, a few considerations can be taken. First, ensure contextual information about the client, details about the test, the testing situation, and the interpretations made about score meaning accompany any scores. Somewhere on the report, provide basic instructions for interpreting the scores (e.g., what a percentile means), and always report scores with their confidence intervals and an explanation of how these work. Consider the use of color-coded tables, where a legend assigns a color to a particular qualitative range, and then test scores are presented in colored cells that correspond with the qualitative range. Finally, unless required by your organization or the client's situation, consider if alternatives to the conventional professional report format are tenable. Tharinger et al. (2008) have outlined ways to share findings with children in the form of personalized fables, and it can be quite meaningful for youth to receive their feedback in the form of a personalized letter from you.

Case Study

The following fictitious case illustrates how a psychologist might think through the selection, administration, and interpretation of the *Beck Youth Inventories for Children and Adolescents, Second Edition* (BYI-II; Beck et al., 2005) as guided by the tenets of modern validity theory.

Owen, a 14-year-old cisgender Caucasian male, was referred by his mother for help with his “quick temper, angry outbursts, and trouble with authority.” Owen’s mother and father separated when he was a toddler but have an amiable relationship; His dad lives in another province and visits occasionally. Owen recently transitioned from middle school to high school, around which time he began skipping classes and arguing more with his mom and teachers. Owen normally earns A-level grades, but these have dropped to the C-range over the last few months. With no close friends, Owen usually spends his free time watching videos on the library computers or skateboarding. Cautious but open to counseling, Owen wished to attend sessions alone for now. When asked if he had any questions or curiosities he would like to explore in counseling, Owen paused before saying he would like to know why he can never fall asleep at night.

The psychologist, Josée, is a cisgender Caucasian female with a decade of experience conducting psychological assessments in French and English. She uses the clinical interview and session rating scales to form a strong working alliance. As trust is established, she contemplates offering Owen the BYI-II to augment her assessment. She has been thinking about Owen’s sleep question, and his situation in general, and believes the BYI-II could support Owen’s counseling in several ways. First, helping Owen with his sleep troubles is a matter of importance to him, and resolving it may bear favorably on the more obvious concerns, like irritability and argumentativeness. Many things can disrupt sleep, including environmental factors or electronics use, but low mood or high anxiety are also worth considering. With many evidence-based interventions available for such concerns, the BYI-II will give a sense of Owen’s mood and worries compared with other boys his age. Second, as a youth self-report measure, the BYI-II can provide a sense of Owen’s self-perceptions and his view of the world. For example, the BYI-II has a disruptive behavior factor, and Josée is curious how Owen’s self-perception in this domain look compared to his mother’s. Finally, Josée is curious and concerned about Owen’s social disconnection. A sense of connectedness to peers and one’s school community are important protective factors for youth at all ages, especially those at risk for disengaging from school or engaging in problem behaviors. After reviewing the BYI-II response booklet, she saw many items that could be helpful conversation starters for how Owen feels about himself and how he thinks others view him.

Josée weighted her rationale for using the BYI-II against a few significant concerns. First, systems and transactional frameworks mean Owen and his “problem behaviors” are understood to have emerged through relational processes and socio-cultural forces much bigger than him. The theoretical framework of the BYI-II is largely individualistic, ahistorical, and decontextualized. Accordingly, there is a real

risk that Owen may inadvertently conclude high scores mean something is wrong with him. Finally, in many ways, Owen's life is a lot like the young people in the normative sample, such as having grown up in Western culture, being cisgendered, and being educated in the public school system. Were Owen to be quite unlike the normative sample, perhaps in terms of neurodiversity, gender identity, or having been homeschooled, Josée may have decided not to offer the measure, or to offer the measure with the client's informed consent about how their unique identities may lower confidence in scores meaning and require greater caution in interpretation.

Working from the modern validity framework, Josée understands validity does not reside in the BYI-II itself, but in the meaning made of the scores based on many aspects of validity evidence. She and Owen, not the measure, will decide what meaning to make of the scores. Knowing this gives her confidence to offer the measure to Owen despite her reservations. The following is an example of how she might introduce the measure to Owen:

I've been thinking about your sleep question, and some of the other things going on for you, and I wonder if it this measure called the Beck Youth Inventory might give us some insight. Its like a questionnaire because it asks how you feel about yourself, as well as other common experiences kids have, such as your moods, things that concern you, and how you feel and act towards others.

If you want to fill it out, I'll sum up it up and next week we'll make sense of what it says together. The answers you give and any conclusions we make are confidential—I won't share them with anyone unless we talk about it first. After you and I have a chance to discuss the scores, we can talk about who else might find the information helpful to know.

I also want you to know sometimes the BYI-II can help identify problems like depression or anxiety. It can't diagnose anything by itself, but it might help you and I decide how to spend our time together in counselling.

As noted above, Messick's theory defines validity as an overall evaluation of different aspects of validity evidence (see Fig. 15.1), and the degree to which the evidence is adequate and appropriate to support inferences and actions about score meaning. The first three aspects of validity evidence were evaluated prior to offering the BYI-II to Owen. The first aspect considered was the **theory and values of the measure (1)**. Josée reviewed the measure for both the tacit and explicit values and assumptions of the theory that informs the measure and its items. The theoretical framework of the BYI-II is based on established theory and research coming out of mainstream North American psychology. Its constructs are conceptualized according to the DSM-5 (APA, 2013) and Western assumptions about the signs and indicators of mental health and illness. The authorship of the research and literature informing DSM-5 models, and the BYI-II, are predominantly white, heterosexual, male, middle-class representations. Josée is aware test score meaning-making with the BYI-II will emerge, in part, from these worldviews. Were Owen to be a racial or religious minority, **concerns about construct equivalence (5)** or alignment of measure constructs and Owen's worldview (e.g., socialization, culture, identity, etc.)

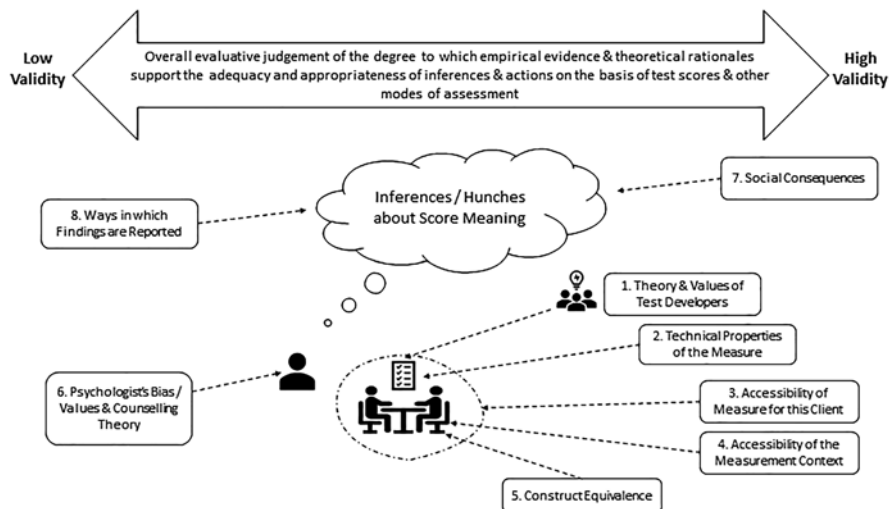


Fig. 15.1 Aspects of Validity in Psychological Measurement

would be an element of validity evidence that could diminish estimates of validity regarding score meaning.

The suitability of the **BYI-II's psychometrics (2)** was the second aspect of validity evidence considered. The manual indicates the BYI-II is a five-factor evaluation of anxiety, depression, self-concept, anger, and disruptive behavior, each with reliability (test–retest and internal consistency) estimates within an acceptable range for clinical work. The manual also confirms the normative sample in measure development was sufficiently large and included both normative and clinical populations; scoring is norm-based using the binary model of sex (male/female) and three developmental stages. The following is an example of how the psychologist might help prepare Owen to make sense of the scores he would be seeing later in the assessment:

The people who made this measure tested the questions with hundreds of adolescents. The scores you get will be compared to those of hundreds of 11 to 14-year old's and will let us see how similar or different your experiences are from the average teenage boy in that group.

The third aspect of validity evidence Josée considered was the **accessibility of the measure (3)**. The BYI-II manual indicates it was developed for English-speaking adolescents with a Grade 2 reading level who are normally sighted (can read 12-point font) with fine motor skills sufficient to mark a rating scale. It also assumes respondents will complete the measure in one sitting without the distraction, influence, or input of others. The fourth aspect of validity evidence is the **accessibility of the measurement context (4)**. Josée was present during the administration of the measure and was available to observe and clarify any questions Owen had. For example, halfway through the measure, he flipped through the

booklet to see how many pages were left but made no comment and returned to the task. He requested clarification of item meaning once (i.e., “I get shaky”), and was told the question was asking if he ever experiences involuntary shaking or trembling in his body, such as his legs or hands, that is hard to stop. Based on this, the concern is low that inaccessibility of the measure or some element of the measurement context would be sources of score invalidity. Remote administration of the BYI-II online is an example of how measurement context might introduce concerns about lowered validity. In many cases, it will not always be possible for the psychologist to observe the administration. For example, was the client alone or did someone assist or offer input? Were they focused or distracted? Did they struggle with word meaning?

Josée’s own assumptions and biases, such as her **personal values and counseling theory (6)**, are the fifth aspect of validity evidence. Biases are not about ignorance or ineptitude, but rather the kinds of blind spots to which all well-trained and well-intentioned psychologists are prone. Josée’s aim here is not the elimination of biases, but rather to understand her judgments and meaning-making about Owen’s scores will be based on information that is incomplete and highly contextual by nature. For example, in working out the meaning of Owen’s scores, Josée might reflect on some common errors in clinical reasoning that are part and parcel of normal cognitive processes. She might estimate how likely it is that a mood-related sleep disruption became her leading hypothesis based on the ease with which she can call to mind other cases of disruptive youth who also had those experiences (availability heuristic). Or she might evaluate her clinical reasoning process in terms of where and whether she actively paid attention to evidence inconsistent with her hunches about what might be happening for Owen (confirmation bias).

After administration, Josée scored the measure, discovering only the BYI-II-Depression index was elevated, with the remaining factors all within the normal range. An item analysis of each factor revealed many of the items loading onto physiological symptoms of anxiety were endorsed by Owen, but these were insufficient to raise the BYI-II-Anxiety index into the clinical range. The following week, Owen and Josée reviewed the findings together and she brought her curiosities to discuss with Owen. The following is an example of how Josée invites Owen to join her in making sense of the depression scores. She would approach her curiosities about the elevations on physiological indicators of anxiety in a similar manner.

Owen, today we planned to review some of the scores from the measure that you completed last time you were here. We’re going to have a look at all the scores, but to get us started, there’s a few parts that stand out from the others, so I thought we might start with them. I’d really like to hear your thoughts on what it is suggesting. On this section called Depression, you provided answers that led to a pretty high score. This measure isn’t saying you have depression, but it is saying that your answers suggest you are experiencing more symptoms of depression than 98% of other teenage boys your age. I thought you and I could look together at some of the questions and answers in this section, and together we can figure out how well this score and its meaning fit for you.

The **consequential aspects (7)** of validity evidence are considered next. The issue here is not about whether the test scores might be negative or difficult for Owen to hear, such as pointing to a diagnosis, but whether the scores obtained in the assessment have resulted from some invalidity in the measure, the measurement situation, or the measurement context that might lead to actions or social consequences that are negative. For example, were Owen to be an Indigenous youth, the disconnect between the Westernized conceptualization of his behaviors and the meanings and values held by Owen and his family about such behaviors, could bring about negative social consequences through the oppression and subjugation of the Indigenous worldview. In this case, negative social consequences could be a line of validity evidence that would be weighted heavily and result in very low estimates of score validity.

Finally, the ways in which Owen's BYI-II scores are **shared or reported (8)** is the last aspect of validity evidence, but in many ways integrates all the aspects above. Were validity to reside in the measure itself, a simple summary of Owen's scores next to descriptions of the corresponding factor would suffice. Working from modern validity theory, Josée is responsible to represent the findings of the assessment in a way that captures the inferences or meanings made given the totality of validity evidence to her. The following is an example of a written summary report the psychologist prepared for Owen. It interweaves the findings of the BYI-II with a tentative treatment plan.

Owen,

You recently completed the Beck Youth Inventory for Children and Youth, 2nd Ed. We reviewed your responses and scores together, and this letter is a summary of how we made sense of them. It also has some of our ideas and plans for your counselling. Some of this information is personal, so remember to put this in a safe place. If you wish me to hold onto this for you, let me know.

Your answers led to much higher scores on Depression than adolescent boys your age typically get. In our discussion, you felt your answers were a true reflection of your mood right now. You first noticed the low mood shortly after starting high school. The transition to high school meant big changes to your friend group, with your two best friends attending a different high school than you. Despite your efforts to stay in touch with your old friends, and make new ones, you always feel left out and like you don't belong anywhere. Talking, laughing and spending time with friends is really important for kids your age. It seems wise that you sensed this and tried to stay connected with your old friends and make new ones. Social disconnectedness is a major risk factors for depression, and so we agreed to make rebuilding your social connections a key goal for your counselling. One of your first goals is to re-start the Sunday night phone calls you and your dad used to have.

Things have been strained in your relationship with your mom this last year, too. We talked about your mom's sense that you seem angrier and more argumentative lately and how this is different from how you see yourself. Indeed, your scores on the Disruptive Behaviour and Anger scale were normal compared to other boys your age. You reported hardly ever feeling mad at other people, but rather a sense of being empty, alone, that life feels unfair, and people are against you. We discussed

how your mom might respond differently if she understood what you're really feeling. We agreed to invite your mom to your next session. You would like me to share the paraphrase I outlined above, but not share other information from the BYI-II with her.

Some of your answers on the BYI-II showed you experience physical symptoms commonly felt by youth with anxiety. We discussed how this might be due to a very sensitive stress-response system. But in our discussion, you didn't think you worry too much or are very sensitive to stress. We discussed how daily practices of meditation and mindful breathing can be helpful generally, and specifically when people have physical symptoms like a racing heart or shaky hands. We'll re-evaluate how you're doing with this in a few weeks time. Skateboarding is excellent exercise, and an opportunity for social connection. We talked about heading out for a skate when you notice your mood is low or your body is starting to give you the signs that its stressed.

I shared with you my belief that it might be helpful for the school to know some of what's going on for you, but you'd like to hold off on that for now. You have a meeting with your school counsellor in 2 weeks time, and we talked about how you can share some of this information with them if it feels comfortable, or perhaps later I can share some of this information with them on your behalf.

Finally, we talked about how low mood coupled with physiological arousal can interfere with sleep. It is possible that counselling to address the problems contributing to your low mood, along with good sleep hygiene, you will see an improvement in your sleep. As your sleep improves, it is possible some of your other challenges, such as irritability and argumentativeness, will improve, too.

Conclusion

The counseling psychology approach to empirical assessment is one that tends to move cautiously to avoid the “hardening of the categories” (Kelly, 1963) that can occur when a child or youth is assigned a summary score or given a rigid diagnostic label. This chapter offered a practice-based rationale for the use of empirical assessment with children and youth, as well as a conceptual framework to guide areas of inquiry and contextualize assessment findings. It also offered Messick's (1989, 1995) modern validity theory as a framework for the harmonious integration of empirical assessment with a relational, socially conscious, and humanistic approach to practice. Consistent with the values of counseling psychology, modern validity theory de-centers the measure from the position of authority that it is so commonly given. Modern validity theory brings legitimacy to the role of values and social consequences as foundational considerations in the validity alongside more common pillars of validity such as reliability or validity co-coefficients. The shift in focus to the validation of interpretations of score meaning in measurement, including the values and social consequences of score meaning, helps to bring a psychologist's practice more in line with both modern validity theory and the values of

counseling psychology. The modern validity framework may not fully resolve the hesitancy or skepticism held by some toward the quantification of human experience, but it may offer counseling psychologists a framework for more harmonious integration of empirical assessment with their professional identity and values.

References

- Abidin, R. (2012). *Parenting stress index* (4th ed.). Psychological Assessment Resources.
- Achenbach, T. M. (2011). Definitely more than measurement error: But how should we understand and deal with informant discrepancies? *Journal of Clinical Child & Adolescent Psychology*, *40*(1), 80–86. <https://doi.org/10.1080/15374416.2011.533416>
- Achenbach, T. M., Rescorla, L., McConaughy, S. H., Pecora, P. J., Wetherbee, K. M., Ruffle, T. M., & Newhouse, P. A. (2004). *Achenbach system of empirically based assessment*. ASEBA Research Centre for Children, Youth and Families.
- American Educational Research Association, American Psychological Association, & National Council on Measurement in Education. (2014). Standards for educational and psychological testing. American Psychological Association.
- American Psychiatric Association. (2013). *Diagnostic & statistical manual of mental disorders* (5th ed.). American Psychiatric Publishing.
- Beck, J. S., Beck, A. T., & J. B., Jolly, & Steer, R. A. (2005). *Beck youth inventories for children and adolescents* (2nd ed.). Harcourt Assessment.
- Bedi, R., Haverkamp, B., Beatch, R., Cave, D., Domene, J. F., Harris, G. E., & Mikhail, A. (2011). Counselling psychology in a Canadian context: Definition and description. *Canadian Psychology*, *52*(2), 128–138. <https://doi.org/10.1037/a0023186>
- Bersoff, D. N., & Hofer, P. E. (1995). The legal regulation of school psychology. In D. N. Bersoff (Ed.), *Ethical conflicts in psychology* (pp. 256–257). American Psychological Association.
- Brem, A. D., & Peebles, M. J. (2014). Principles of inference-making. In A. D. Bram & M. J. Peebles (Eds.), *Psychological testing that matters: Creating a road map for effective therapists*. American Psychological Association.
- Bronfenbrenner, U. (1977). Toward an experimental ecology of human development. *American Psychologist*, *32*(7), 513–530. <https://doi.org/10.1037/0003-066X.32.7.513>
- Bryce, G. K. (2013, July 26). Consent to counselling therapy services. *What counsellors need to know about the law of consent before they provide therapy services to their clients*. Retrieved from <http://bc-counsellors.org/app/uploads/2015/10/130726-Commentary-re-Consent-to-Counselling.pdf>
- Canadian Psychological Association. (2017). *Canadian code of ethics for psychologists* (4th ed.). Retrieved from https://www.cpa.ca/docs/File/Ethics/CPA_Code_2017_4thEd.pdf
- Cronbach, L. J., & Meehl, P. E. (1955). Construct validity in psychological tests. *Psychological Bulletin*, *52*(4), 281–302. <https://doi.org/10.1037/h0040957>
- Cronbach, L. J. (1988). Five perspectives on validity argument. In H. Wainer & H. I. Braun (Eds.), *Test validity* (pp. 3–17). Lawrence Earlbaum Associates.
- Cummings, C. M., & Fristad, M. A. (2007). Mediations prescribed for children with mood disorders: Effects of a family-based psychoeducation program. *Experimental and Clinical Psychopharmacology*, *15*(6), 555–562. <https://doi.org/10.1037/1064-1297.15.6.555>
- Dahl, V., Ramakrishnan, A., Spears, A. P., Jorge, A., Lu, J., Bigio, N. A., & Chacko, A. (2020). Psychoeducation interventions for parents and teachers of children and adolescents with ADHD: A systematic review of the literature. *Journal of Developmental and Physical Disabilities*, *32*, 257–292. <https://doi.org/10.1007/s10882-019-09691-3>
- Davis, K. M., Chang, C. Y., & McGlothlin, J. M. (2005). Teaching assessment and appraisal: Humanistic strategies and activities for counselor educators. *Journal of Humanistic Counseling, Education and Development*, *44*, 94–101. <https://doi.org/10.1002/j.2164-490X.2005.tb00059.x>

- Domene, J. F., & Socholotiuk, K. D. (2018). Incorporating research into counselling and psychotherapy practice: Why and how? *Education Review*, 5(3), 27–31. Retrieved from <https://education.uottawa.ca/en/research/educational-review>
- Duckworth, J. (1990). The counseling approach to the use of testing. *The Counseling Psychologist*, 18(2), 198–204. <https://doi.org/10.1177/0011000090182002>
- Feldman, R. (2019). *Child development* (8th ed.). Pearson Education.
- Finn, S. E., & Tonsager, M. E. (1997). Information-gathering and therapeutic models of assessment: Contemporary paradigms. *Psychological Assessment*, 9(4), 374–385. <https://doi.org/10.1037/1040-3590.9.4.374>
- Fisher, C. T. (1970). The testee as co-evaluator. *Journal of Counseling Psychology*, 17(1), 70–76. <https://doi.org/10.1037/h0028630>
- Gersten, A. (2013). *Integrative assessment: A guide for counsellors*. Pearson.
- Goldman, L. (1971). *Using tests in counseling* (2nd ed.). Appleton-Century-Crofts.
- Haverkamp, B. (2013). Education and training in assessment for professional psychology: Engaging the “reluctant student”. In K. F. Geisinger (Ed.), (Editor in Chief) *APA handbook of testing and assessment in psychology: Vol. 2. Testing and assessment in clinical and counseling Psychology*. American Psychological Association. <https://doi.org/10.1037/14048-005>
- Hubley, A., & Zumbo, B. (1996). A dialectic on validity: Where we have been and where we are going. *The Journal of General Psychology*, 123(3), 207–215. <https://doi.org/10.1080/00221309.1996.9921273>
- Kelly, G. (1963). *A theory of personality*. W.W. Norton & Co.
- Langland, L. (1960). Projective techniques and counseling psychology. *Journal of Counseling Psychology*, 7(2), 102–107. <https://doi.org/10.1037/h0046670>
- Mahoney, M. (2003). *Constructive psychotherapy: Theory and practice*. The Guilford Press.
- March, J. S. (2012). *Multidimensional anxiety scale for children* (2nd ed.). Multi-Health Systems.
- Mellin, E. A., Hunt, B., & Nichols, L. M. (2011). Counselor professional identity: Findings and implications for counseling and interprofessional collaboration. *Journal of Counseling & Development*, 89, 140–147. <https://doi.org/10.1002/j.1556-6678.2011.tb00071.x>
- Messick, S. (1989). Validity. In R. Linn (Ed.), *Educational measurement* (pp. 13–104). Macmillan Publishing; American Council on Education.
- Messick, S. (1995). Validity of psychological assessment: Validation inferences from persons’ responses and performances as scientific inquiry into score meaning. *American Psychologist*, 50(9), 741–749. <https://doi.org/10.1037/0003-066X.50.9.741>
- Olson, D. H., Gorall, D. M., & Tiesel, J. W. (2006). *FACES-IV package: Administration*. Life Innovations.
- Ponterotto, J. G. (2005). Qualitative research in counseling psychology: A primer for research paradigms and philosophy of science. *Journal of Counseling Psychology*, 52(2), 126–136. <https://doi.org/10.1037/0022-0167.52.2.126>
- Reynolds, C. R., & Kamphaus, R. W. (2015). *Behavior assessment system for children* (3rd ed.). Pearson.
- Sameroff, A. (1993). Models of development and developmental risk. In C. H. Zeanah (Ed.), *Handbook of infant mental health* (pp. 3–13). Guilford Press.
- Smith, L. T. (2012). *Decolonizing methodologies: Research and indigenous peoples* (2nd ed.). Zed Books.
- Socholotiuk, K. D., Domene, J. F., & Trenholm, A. (2016). Understanding counselling and psychotherapy research: A primer for practitioners. In N. Gazzola, M. J. Buchanan, O. Sutherland, & S. Nuttgens (Eds.), *Canadian handbook of counselling and psychotherapy* (pp. 247–263). Canadian Counselling and Psychotherapy Association.
- Taylor, O. L., & Payne, K. T. (1983). Culturally valid testing. *Topics in Language Disorders*, 3(3), 8–20. <https://doi.org/10.1097/00011363-198306000-00005>
- Tharinger, D. J., Finn, S., Hersh, B., Wilkinson, A., Christopher, G. B., & Tran, A. (2008). Assessment feedback with parents and preadolescent children: A collaborative approach. *Professional Psychology: Research and Practice*, 39(6), 600–609. <https://doi.org/10.1037/0735-7028.39.6.600>

- Tharinger, D. J., Gentry, L. B., & Finn, S. E. (2013). Therapeutic assessment with adolescents and their parents: A comprehensive model. In D. H. Saklofske, C. R. Reynolds, & V. Schwann (Eds.), *The Oxford handbook of child psychological assessment*. American Psychological Association. <https://doi.org/10.1093/oxfordhb/9780199796304.001.0001>
- Watkins, C. E., & Campbell, V. L. (1989). Personality assessment and counseling psychology. *Journal of Personality Assessment*, 53(2), 296–307. https://doi.org/10.1207/s15327752jpa5302_7
- Watkins, C. W., Campbell, V. L., & Manus, M. (1990). Personality assessment training in counseling psychology programs. *Journal of Personality Assessment*, 55(1&2), 380–383.
- Wood, C., & D'Agostino, J. V. (2010). Assessment in counseling: A tool for social justice work. In M. J. Ratts, R. L. Toporek, & J. A. Lewis (Eds.), *ACA advocacy competencies: A social justice framework for counselors* (pp. 151–159). American Counseling Association.

Chapter 16

Promoting Mental Health and Well-Being in Children and Adolescents: The Intersection of Positive Psychology and Counseling Psychology



Rhea L. Owens

Abstract This chapter describes the Strengths-Based Inclusive Theory of Psychotherapy (S-BIT of Psychotherapy), a novel counseling theory/orientation that emphasizes evidenced-based positive psychological approaches and cultural considerations. The S-BIT of Psychotherapy is appropriate for individuals across the lifespan but was designed with children and adolescents specifically in mind. In this chapter, the S-BIT of Psychotherapy will be discussed, including its core assumptions and theoretical propositions. In addition, the therapeutic process, assessment approach, and prevention and intervention strategies that align with the S-BIT of Psychotherapy will be described. Lastly, a case example will be provided to highlight the S-BIT of Psychotherapy in practice.

Guiding Framework

I was initially drawn to counseling psychology due to its core values—an emphasis on strengths, multiculturalism and social justice, lifespan considerations, short-term therapy, and vocational psychology (Gelso et al., 2014). In particular, the field's emphasis on strengths directly overlaps with core tenants of positive psychology. However, as a student, I struggled to identify a theoretical orientation that fits with how I conceptualize clients and the change process. Over time and with a great deal of reflection, it became apparent that the reason identifying a theoretical orientation was difficult for me was that many of the values that were important to me were completely lacking, deemphasized, or not integrated in a way that could maximize their potential contribution.

No existing theory involved a combination of a strengths-based/balanced approach that addressed well-being in addition to challenges experienced, an

R. L. Owens (✉)
University of Minnesota Duluth, Duluth, MN, USA
e-mail: owensr@d.umn.edu

emphasis on contextual considerations (i.e., cultural, environmental, societal, and developmental considerations), or was created specifically with children and adolescents in mind. As a result, I have developed a counseling theory/theoretical orientation, in part drawing from elements of existing theories, that address these considerations and gaps that guide my clinical work. The theory is called the Strengths-Based Inclusive Theory (S-BIT) of Psychotherapy. Of note, many of the S-BIT of Psychotherapy's core ideas overlap with the Strengths-Based Inclusive Theory of Work, a vocational/educational theory for individuals across the lifespan, designed for both research and practical applications (see Owens et al., 2019a, 2019b).

In the remainder of this chapter, I describe the S-BIT of Psychotherapy's approach to clinical reasoning, along with my approach to mental health assessment and prevention/intervention, which is an integration of counseling psychology and positive psychology approaches. I also provide a case example that will demonstrate these ideas in an applied fashion.

Clinical Reasoning Approach: The Strengths-Based Inclusive Theory of Psychotherapy

The S-BIT of Psychotherapy's guiding framework involves three core assumptions and four theoretical propositions. The core assumptions provide the foundation that guides the theoretical propositions and are informed by existing research; they are assumptions that are necessary to put the theory into action. The theoretical propositions are also informed by existing research and describe the main ideas of the counseling theory that guide how clients are conceptualized and the intervention strategies used. Thus, to implement the theory itself, the clinician must recognize and acknowledge the core assumptions. Similar to the S-BIT of Work, the constructs described within the theoretical propositions serve as exemplars and are not intended to be exhaustive. A variety of constructs could align with each theoretical proposition; the constructs and examples provided are relatively generalizable or adaptable and empirically supported. Overall, the theory was designed to be flexible with the ability to expand and evolve over time (Owens et al., 2019a).

Core Assumptions

Core Assumption 1: A focus on contextual considerations is vital to developing an inclusive, holistic conceptualization of people. Context is key when it comes to working with clients. A client exists within a much broader scope than the individual aspects of their lives. Similar to the S-BIT of Work, contextual considerations include "broad factors that are largely out of the individuals' control and influence their daily experiences (e.g., external influences, various characteristics of communities and individuals)," and are defined as "the cultural, environmental, societal, and developmental factors that influence individuals' daily lives" (Owens et al., 2019a,

p. 227). More specifically, cultural considerations describe an individual's social and individual identities (e.g., race, ethnicity, gender, sexual orientation, age, social class, ability status, nationality, religion, and immigration status) and the intersectionality of their identities (APA, 2003, 2017). Environmental considerations involve "external factors in people's immediate surroundings," such as social support and geographic location (Owens et al., 2019a, p. 229). Societal considerations are "the broadest external influences in individuals' lives beyond their immediate environment and culture" (Owens et al., 2019a, p. 230). Examples might include systemic oppression, discrimination, policies and laws, and societal norms. From the perspective of the S-BIT of Psychotherapy, each of these elements should be considered throughout the therapeutic process and are equally important to individual factors.

Core Assumption 2: A balanced perspective is beneficial to a variety of populations. A theme that is central to the S-BIT of Psychotherapy is the importance and necessity of a balanced perspective. This theory asserts it is essential to focus both on strengths, assets, and well-being as well as deficits, disorders, and challenges. However, due to historical practices, training models, and fundamental biases (e.g., Magyar-Moe et al., 2015; Owens & Motl, 2020; Wright & Lopez, 2002), assets, strengths, and well-being are often overlooked, dismissed, or underemphasized. This theory strives to address these challenges and gaps by intentionally addressing client assets and strengths, building on results from meta-analyses showing positive psychological interventions both increase well-being and reduce psychological symptoms, including depression, anxiety, and severe mental illness (e.g., Bolier et al., 2013; Chakhssi et al., 2018; Geerling et al., 2020; Sin & Lyubomirsky, 2009).

Core Assumption 3: Fulfillment (a comprehensive model of well-being) is a worthwhile goal for a wide range of people. The construct of fulfillment is a comprehensive conceptualization of well-being *across all aspects of life* that stems from the concept of "fulfilling work," defined as "a holistic and complete sense of well-being and flourishing in the work context" (Allan et al., 2015, p. 269). Fulfilling work is unique in that it does not describe a single experience, rather it involves intersecting and fluid psychological and emotional states that are adaptable to diverse contexts and cultures. Moreover, fulfilling work is comprehensive in nature in that it involves aspects of both hedonic and eudaimonic well-being, as well as both cognitive and affective aspects of well-being. Hedonic well-being involves positive emotional states and pleasurable experiences, whereas eudaimonic well-being focuses on human growth, purpose, and flourishing (Ryan & Deci, 2001). Specifically, fulfilling work is conceptualized as workplace positive emotions (hedonic and affective), work engagement (eudaimonic and affective), job satisfaction (hedonic and cognitive), and meaningful work (eudaimonic and cognitive; see Allan et al., 2015 for an extensive review).

With the S-BIT of Psychotherapy, fulfillment, an ultimate goal for clients, directly aligns with the conceptualization of fulfilling work. The only distinction is rather than viewing the experience of well-being through the lens of the work context, it is *broadened to encompass all aspects of a person's life*. Thus, fulfillment can be described as the comprehensive experience of well-being, which includes positive emotions, engagement, satisfaction, and meaning in one's life.

Theoretical Propositions

Building from the core assumptions, a number of theoretical propositions unique to the S-BIT of Psychotherapy were derived. Each will be described below; however, it is important to note the theoretical propositions were designed to be flexible. Research in positive psychology will continue to evolve, which may further inform these propositions. Furthermore, while specific ideas and constructs, which are argued to be generalizable and applicable to a number of diverse groups are identified, each possible construct that could fall within a proposition is not described and may not be applicable for a specific population. Thus, the theory was intended to give the flexibility to be inclusive of diverse groups and allow for an evolving literature base.

Theoretical Proposition 1: Individuals with promotive contexts are more likely to experience fulfillment and address challenges. *Promotive contexts* are defined as environments where: (a) people feel supported and valued, (b) where their values align with their environment's values, and (c) that promote dignity (i.e., conditions where people are treated respectfully and fairly; adapted from Owens et al., 2019a). Whether a person is experiencing challenges or striving for greater well-being, being part of a promotive environment will be advantageous. For instance, if a child is diagnosed with an intellectual disability and they have parents and a school setting that are supportive of their personal and academic growth, values them as a person, and ensures they are treated fairly in all aspects of their life, the child will likely be able to address challenges more successfully and will likely experience greater fulfillment.

Theoretical Proposition 2: Individuals with greater contextual supports and fewer contextual barriers are more likely to experience promotive contexts. While there are a number of contextual supports and barriers that exist in children's lives that could fit within the scope of this theory, at a minimum, *access to resources*, *access to opportunity structures*, and *systemic inequities* are highly relevant and generalizable across populations. First, access to resources is described as "availability of advantageous material things and people" (Owens et al., 2019a, p. 236). Access to resources is often tied to a person's socioeconomic status and social class (i.e., economic, social, human, and cultural capital that often affords or provides the ability to seek out promotive contexts; Owens et al., 2019a). For example, children whose families have greater economic resources may have access to better-funded schools, safer neighborhoods, and material resources (e.g., books). Second, opportunity structures involve "the availability of beneficial experiences" such as good educational experiences, mentoring, and extracurricular activities (Owens et al., 2019a, p. 236). Current access to resources and opportunity structures could help children later access additional or more advantageous environments (e.g., Burchinal et al., 2003; Magnuson et al., 2004). Lastly, systemic inequities include "injustice, unfairness, and oppression experiences that relate to contextual considerations and individual characteristics" (Owens et al., 2019a, p. 236). Examples include the experience of discrimination and historic and systemic marginalization. Individuals

from marginalized populations tend to have less access to contextual supports and experience contextual barriers to a greater extent (e.g., Burchinal et al., 2003; Flores & Tomany-Korman, 2008; Owens et al., 2019a), thus limiting their exposure to promotive contexts.

Theoretical Proposition 3: Contextual supports promote the experience of fulfillment and foster advantageous positive individual characteristics.

Contextual supports are valuable in two important ways. First, they can facilitate the experience of fulfillment (Owens et al., 2019a). Contextual supports are a broader way to conceptualize environmental strengths, including people, places, cultural, and societal factors. There is a large body of research that suggests positive environmental and contextual factors help children flourish (Van Ryzin et al., 2009; Waters, 2015). For example, a child with a number of supportive friends and a skilled special educational assistant (contextual supports) would likely experience enhanced fulfillment.

The second way contextual supports are beneficial is they can help develop and enhance positive individual characteristics (e.g., Owens et al., 2018; Proctor et al., 2010; Waters, 2017). There are a vast number of positive, individual characteristics that may be helpful to individuals, many of which are unique and specific to the individual's life. For instance, a person who has experienced trauma would likely benefit from resilience or forgiveness. However, three positive individual characteristics, in particular, are argued to be especially relevant to most people, across diverse populations, and for therapeutic purposes. These include *strengths*, *hope*, and *empowerment*.

Strengths are defined as “positive traits or skills that promote optimal human functioning” (Owens et al., 2018, p. 266) that can present differently based upon one's cultural context (i.e., cultural assets; Pedrotti et al., 2009). Everyone possesses strengths, yet the unique constellation of the person's strengths will vary. Hope can be defined as a conscious effort to attain a goal and includes two facets: pathways, or the ability to generate multiple ways to achieve a goal, and agency, or the motivation needed to achieve one's goals (Snyder et al., 1991). Hope arguably helps people maximize their resources by generating ways to achieve goals and address challenges (Owens et al., 2019b). While hope can be classified as an individual strength, it may not be a strength for a given client. However, it is a positive individual characteristic that is especially helpful for clients and can be enhanced through targeted interventions (Lopez & Magyar-Moe, 2015; Owens & Waters, 2020). Thus, whether or not it is identified as an individual strength, hope would be beneficial to foster in most people given its benefits (see Theoretical Proposition 4). Finally, empowerment involves “beliefs about one's competence, efforts to exert control, and an understanding of one's socio-political environment” (Zimmerman, 2000; p. 46) and can be conceptualized as one method of leading to deliberate action (Diener & Biswas-Diener, 2005). Within the S-BIT of Psychotherapy, it is argued feeling mastery, confidence, and strength through empowerment can help people make positive change, especially in the face of barriers and challenges.

As noted previously, this proposition suggests contextual supports can not only enhance fulfillment, but also boost, elevate, or otherwise facilitate these positive

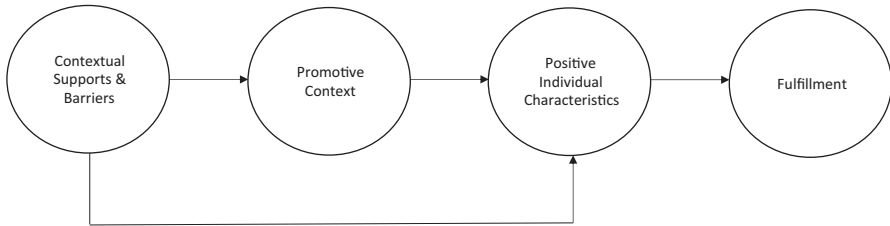


Fig. 16.1 The Strengths-Based Inclusive Theory (S-BIT) of Psychotherapy model

individual characteristics in beneficial ways for the client. For instance, a child who generally receives guidance from a helpful teacher (contextual support) in and of itself will likely promote the child’s fulfillment; however, that same helpful teacher could also provide guidance to the child on how to use their strengths (a contextual support that fosters positive individual characteristics). Similarly, parents who engage in strength-based parenting help their children flourish in meaningful ways (Waters, 2017).

Theoretical Proposition 4: Positive individual characteristics promote fulfillment and help address challenges. Finally, positive individual characteristics—including strengths, hope, and empowerment—can help foster the experience of fulfillment and address challenges (e.g., Ciarrochi et al., 2007; Govindji & Linley, 2007; Louis & Lopez, 2014; Marques et al., 2011; Molix & Bettencourt, 2010; Quinlan et al., 2012; Suldo et al., 2015; Tsai et al., 2014; Vacek et al., 2011; Zimmerman, 2000). For example, if a child’s strength is kindness, by engaging in acts of kindness, they can increase their fulfillment. If they are experiencing anxiety related to meeting new people (a challenge), they could show kindness toward the strangers as a way to reduce their fears by using a strength they are both competent and confident in, as well as one that will help foster positive relationships. Similarly, if a child is able to generate multiple ways to reach their goals (the pathways component of hope) of improving their science grade, they will likely experience both enhanced fulfillment related to their success and help address the challenge they are currently facing (see figure 16.1).

The Therapeutic Process

Therapeutic Goals

The primary aim of the S-BIT of Psychotherapy is to not only help clients address their presenting concerns and challenges but also enhance their well-being. Both challenges experienced and striving toward enhanced well-being are addressed through intentional positive behavior change, which is supported (or hindered) by

contextual/environmental factors and individual characteristics. Importantly, striving for and maintaining gains in well-being are a lifelong pursuit that requires ongoing attention and effort. Individuals inevitably will experience hedonic adaptation—where people naturally adjust to their current situation, either positive or negative, and their emotional experience attenuates over time (Fredrick & Loewenstein, 1999). Life circumstances will also continue to evolve. Thus, fulfillment is not a one-time goal that is achieved nor is it a static experience.

Therapist and Client Roles and Relationship

The desired interaction between the client and therapist is largely influenced by research in the therapeutic relationship/alliance, including a bond, agreement of therapy goals, and agreement of the tasks within therapy (Bordin, 1979; Wampold, 2015). Additionally, the therapist's role is to help facilitate and support the client's goals and change process, while simultaneously promoting client autonomy and providing their clinical expertise, perspective, and recommendations grounded in the S-BIT of Psychotherapy. The therapeutic relationship within this theory is intended to be highly collaborative, with the goal of also being both supportive and empowering. While the therapist will provide input, the client is viewed as the expert of their lives. Therefore, clients are encouraged to identify their own goals, strategies they believe will work within the context of their lives to make positive changes, and be accountable for their progress. In tandem, the therapist can help identify "blind spots," provide encouragement in the face of challenges or setbacks, praise success and gains, and provide suggestions for specific therapeutic techniques in line with the S-BIT of Psychotherapy to promote progress. With young children, this process may be more directive or concrete to accommodate developmental abilities; however, similar collaboration described earlier may occur with the caregivers involved. However, even young children will be encouraged to provide their perspectives and articulate their goals throughout.

The field of psychology as a whole has been critiqued for focusing most extensively on individual factors (Neufeld et al., 2006), which is arguably overemphasized in clinical practice as well. While individual factors (e.g., symptoms, traits) are important, as outlined previously, context (cultural, environmental, societal, and developmental considerations) is equally important and essential to develop a comprehensive, holistic client conceptualization (Owens et al., 2015, 2019a; Owens & Woolgar, 2018). To help clinicians attend to individual and contextual factors in a comprehensive and balanced fashion across clinical services, my colleagues and I developed a model titled the Balanced Diagnostic Impressions (DICE-PM) Model (Owens et al., 2015) (see figure 16.2). The Balanced Diagnostic Impressions (DICE-PM) Model is part of a larger assessment and conceptualization approach, the Comprehensive Model of Positive Psychological Assessment (CMPPA), which is discussed in greater detail in the Approach to Mental Health Assessment section.

Balanced Diagnostic Impressions (DICE-PM) Model:	
Diagnosis:	_____
Individual Strengths:	_____
Individual Weaknesses:	_____
Cultural Assets:	_____
Cultural Struggles:	_____
Environmental Resources:	_____
Environmental Deficits:	_____
Physical Wellness:	_____
Physical Health Concerns:	_____
Mental Health Category:	_____

Fig. 16.2 Balanced Diagnostic Impressions (DICE-PM) Model

The Balanced Diagnostic Impressions (DICE-PM) Model can simultaneously serve as a tool to guide data gathering and treatment practices, as well as concisely summarize key considerations related to the client. Furthermore, the Balanced Diagnostic Impressions (DICE-PM) Model was designed to address the challenges of the five-axis assessment model from the DSM-IV as well as the singular listing of diagnoses (i.e., non-axial documentation) of the DSM 5. With the previous five-axis model, only diagnoses and deficits were labeled and documented and had little emphasis on cultural or contextual factors. The current singular listing of diagnoses has boiled clinicians' labeling practices to solely diagnoses. Both systems are problematic in that attention to deficits and individual/internal considerations are primarily emphasized and documented, perpetuating a focus on weaknesses. Owens et al. (2015) argued that assessment, conceptualization, and documentation with a balanced perspective is optimal and provides a more comprehensive, holistic, and culturally sensitive approach.

The Balanced Diagnostic Impressions (DICE-PM) Model also built upon and addressed gaps in a number of existing positive psychological and cultural assessment tools, including the Four-Front approach (Wright & Lopez, 2002), the Complete State Model of Mental Health (Keyes & Lopez, 2002), the ADDRESSING model (Hays, 2008), and RESPECTFUL counseling framework (D'Andrea & Daniels, 2001). The Four-Front approach organizes assessment information gathered about a client into four quadrants—individual strengths and individual weaknesses (i.e., internal traits, states, and experiences), as well as environmental

strengths and environmental weaknesses (i.e., external factors; Wright & Lopez, 2002). The Complete State Model of Mental Health assesses the level of mental illness clients experience and their level of well-being on two discrete continuums, resulting in four possible categories that can be used to describe clients' overall functioning: (a) flourishing (low symptoms of mental illness and high symptoms of well-being), (b) floundering (high symptoms of mental illness and low symptoms of well-being), (c) languishing (low symptoms of mental illness and low symptoms of well-being), or (d) struggling (high symptoms of mental illness and high symptoms of well-being; Keyes & Lopez, 2002). The ADDRESSING model and RESPECTFUL counseling framework provide approaches to explore various cultural identities, using an acronym to recall each element (e.g., the "E" in the RESPECTFUL model stands for economic/class background; see D'Andrea & Daniels, 2001).

Throughout the assessment and treatment process, clinicians continuously gather data through various means (e.g., clinical interviews, behavioral observations, tests and measures, and counseling sessions; Owens et al., 2015). The information gathered from these sources can then be organized into the various categories of the Balanced Diagnostic Impressions (DICE-PM) Model, which can be recalled by its acronym: **D**agnosis, **I**ndividual Strengths and Weaknesses, **C**ultural Assets and Struggles, **E**nvironmental Resources and Deficits, **P**hysical Wellness and Health Concerns, and **M**ental Health Category (a category from the Complete State Model of Mental Health [Keyes & Lopez, 2002] that summarizes the client's overall functioning). An example of a completed Balanced Diagnostic Impressions (DICE-PM) Model can be seen later in the Case Study section of this chapter.

Approach to Mental Health Assessment

Assessment is part of all clinical services, whether or not a psychological evaluation is being conducted. In other words, even if a client is solely scheduled for therapy, assessment is still part of the therapeutic process. As clinicians, we are constantly engaging in assessment to varying degrees and it is an important and essential aspect of the clinical process.

As I went through my graduate education and clinical training, it became clear there were very limited resources and tools available for strengths-based clinicians in the realm of positive psychological assessment and even fewer resources were available for those who worked with children/adolescents. I was able to locate a handful of articles on the topic (e.g., Snyder et al., 2005) and one handbook was in print (currently in its second edition; Gallagher & Lopez, 2019). Furthermore, how to go about assessment in a balanced fashion (focusing on strengths—broadly defined—and challenges, deficits, and disorders) in a culturally sensitive and informed way for individuals across the lifespan (inclusive of children) was completely lacking. Thus, my colleagues and I developed a comprehensive, balanced assessment and conceptualization model with clinicians in mind—the Comprehensive Model of Positive Psychological Assessment (CMPPA; Owens et al., 2015), which

guides my approach to assessment. The main elements of the CMPPA will be summarized here; however, readers are referred to a detailed description in Owens et al. (2015).

The CMPPA was designed to address each aspect and step of clinical assessment while addressing previous gaps in assessment practice (Owens et al., 2015). The CMPPA built upon the Practice Model of Positive Psychological Assessment (Lopez et al., 2003) and the Culturally Appropriate Assessment Model (Flores & Obasi, 2003). The Practice Model of Positive Psychological Assessment was designed to emphasize both individual and environmental strengths and weaknesses (Lopez et al., 2003), which prior to its creation was lacking in the literature. The CMPPA updated and elaborated on the strengths aspects of this model, uniquely addressed children and adolescents, and incorporated an emphasis on cultural considerations.

The CMPPA is comprised of seven steps: “(a) acknowledge practitioner background, values, and biases; (b) assume that all people and environments are both strong and weak, and that you have the tools to conduct a comprehensive assessment; (c) construct an implicit theory of client functioning; (d) gather complementary data; (e) test complementary hypotheses in the context of care provided to the client; (f) develop a flexible, comprehensive conceptualization; and (g) share a balanced report of the client’s strengths/resources and weaknesses/deficits” (Owens et al., 2015, p. 637).

Step 1 involves self-examination and self-awareness of the clinician’s background, values, and biases. The goal of this step is to identify and acknowledge how cultural and societal factors may influence the clinician’s perspective, which in turn may influence their perceptions of clients and the assessment process. In *Step 2*, clinicians are prompted to reflect on a core assumption of the CMPPA, which is that all individuals and environments/contexts possess strengths (also referred to as assets, virtues, or resources) and weaknesses (also referred to as challenges, deficits, problems). Clinicians are also prompted to recognize that a number of assessment tools exist to support this assumption (see Owens et al., 2015).

In *Step 3*, clinicians are challenged to be aware of their implicit theory of client functioning—or theories about clients and their level of functioning. Clinicians’ theories of client functioning will naturally form based upon the data and information they have available about a client and are typically first formed prior to any interaction with a client. Common examples of sources of data that influence implicit theories of client functioning include intake and referral paperwork and existing records. Thus, careful attention to what is included and emphasized in the materials clinicians have access to is important, as an overemphasis on negative data could skew the clinicians’ views even before meeting the client and subsequently influence the next steps in the assessment process, perpetuating a negative focus. Clinicians are encouraged to intentionally craft the materials they have control over to include a balance of information initially sought and to be aware that other sources may be negatively skewed. Such an approach may help provide greater balance to their implicit theory to include both positive elements and deficits/pathology.

If clinicians adopt practices to provide a more balanced view of clients before any live interactions, it is argued they will more likely have balanced views of the

client's overall functioning. To help facilitate this process, my colleagues and I developed the CMPPA Intake—Adult and Child/Adolescent Forms. (See Appendix A for the Child/Adolescent version.) This intake form first informs clients that the clinician will be working from a positive psychological perspective, meaning both strengths and areas of weakness will be assessed and addressed. Second, inclusive demographics are included (Owens et al., 2015), building from the ADDRESSING model (Hays, 2008). As discussed previously, the ADDRESSING model was designed to help provide a more culturally sensitive assessment of client identities. Each letter of the ADDRESSING model represents a different cultural identity: **A**ge and generational influences, **D**isability status (developmental), **D**isability status (acquired), **R**eligion and spiritual orientation, **E**thnicity, **S**exual orientation, **S**ocioeconomic status, **I**ndigenous heritage, **N**ational origin, and **G**ender. The intake form also includes open-ended questions to provide clients with the opportunity to provide their perspectives related to their cultural identities. Third, in addition to typical questions one might see on intake paperwork (e.g., presenting concern[s]), broad questions related to generalizable positive psychological constructs (e.g., well-being, hope) are included to begin the conversation related to positive psychological functioning. In later stages and through other assessment means, these topics can be explored more fully and expanded upon.

Step 4 involves gathering additional data, typically using more formal methods, which confirms or modifies the clinician's theory of client functioning from Step 3. The data gathered can come from various sources, such as clinical interviews, behavioral observations, psychosocial measures and symptom checklists, or psychological tests. Importantly, a balance of strengths and areas of concern should be assessed in this stage; using a variety of tools can help provide balance during this stage. Additionally, with child assessment, in particular, obtaining data from multiple informants and including the child's perspective is essential.

The clinical interview is often the first in-person interaction between the client and the therapist. Thus, building rapport and focusing on the therapeutic alliance is crucial (Wampold, 2001) at this stage. The CMPPA emphasizes incorporating positive psychological constructs into the process of conducting the clinical interview and the specific questions asked. For instance, related to process considerations, "positive empathy," a form of therapeutic empathy, can be used to enhance the process of conducting a clinical interview. Positive empathy is a type of empathy that focuses on identifying a client's hidden desires for improvement based upon what is communicated by the client (Conoley et al., 2015). The use of positive empathy has been shown to increase approach goals, positive emotions, and assist with identifying strengths (Conoley et al., 2015). In addition, several approaches involving hope can be used to enhance the therapeutic alliance, referred to as hope-bonding, including establishing therapeutic goals in a flexible and respectful fashion, identifying a wide variety of pathways, and optimizing the bond between the client and therapist to propel progress toward goals (Lopez & Magyar-Moe, 2015).

Related to the types of questions asked, the CMPPA Semi-structured Clinical Interview was created and specifically infuses positive psychological constructs that are generalizable to a wide array of clients within a clinical interview (Owens et al.,

2015; see Appendix B). The CMPPA Semi-structured Clinical Interview was also designed to provide time and space to elaborate on questions from the CMPPA Intake Form. For instance, it would be particularly important to explore client identities in greater depth than what can be gleaned from intake paperwork. Hays (2008) provides specific recommendations for phrasing questions related to each dimension of the ADDRESSING model that can supplement the CMPPA Intake.

In addition to the clinical interview, other assessment approaches can be used, such as psychological tests and validated measures. From the perspective of the CMPPA, clinicians are encouraged to utilize positive psychological measures or existing balanced tools as part of their psychological test batteries to ensure strengths are represented (Owens et al., 2015). These tools can be administered as part of an assessment evaluation or prior to beginning therapy to inform treatment plans. Clinicians may also find it helpful to administer particular measures (e.g., well-being, hope) at various points throughout treatment to assess progress (Owens et al., 2015).

Behavioral observations are another source of data that is informative. These can take place during all stages of assessment or therapy. Within the CMPPA, it is recommended that clinicians strive for balance in this aspect of their work as well. Clinicians can attend to traditional behavioral observations, such as abnormal or atypical behaviors, difficulties in abilities or skills, and negative emotions. At the same time, positive, promotive, and advantageous behaviors, skills, abilities, and emotions should be attended to and commented on as well. Commonly, phrases such as “intact,” “unremarkable,” or “within normal limits” are used to describe a lack of challenges; however, comments related to assets and skills are often left out. The inclusion of details related to the positive observations is necessary and recommended as well.

Step 5 of the CMPPA involves aiming to test unbiased hypotheses related to clients’ functioning in an ongoing and balanced fashion. Testing and examining multiple hypotheses are necessary to ensure a variety of possibilities are explored with careful attention to strengths and challenges. For instance, if a client presents with concerns of depression, the therapist will likely consider and engage in assessment related to factors that impact depressive symptoms, such as adjustment or depressive disorders. However, other hypotheses related to contextual factors and a lack of support and environmental assets should also be explored, as they may temporarily influence the client’s mood. Similarly, hypotheses related to positive aspects of the client’s life should also be explored, such as how positive relationships may or may not be present in the client’s life and their impact on well-being and mood concerns (Owens et al., 2015).

In *Step 6*, a flexible and comprehensive client conceptualization is formed, following the generation of multiple hypotheses and gathering data that confirms or disconfirms the hypotheses from Step 5. Furthermore, as new data is gathered throughout working with clients, clinicians’ conceptualizations may change. Clinicians are encouraged to use the Balanced Diagnostic Impressions (DICE-PM) Model to help guide a balanced conceptualization of clients. (See the previous section on the Clinical Reasoning Approach: The Strengths-Based Inclusive Theory of Psychotherapy for more details about the Balanced Diagnostic Impressions [DICE-PM] Model and the Case Study section for an example).

Step	Description	CMPPA Tools
Step 1: Acknowledge Practitioner Background, Values, and Biases	Identify and acknowledge how cultural and societal factors may influence the therapist's perspective.	
Step 2: Assume All People and Environments have both Strengths and Weaknesses and that Tools Exist to Conduct a Comprehensive Assessment	Reflect on the assumption that all individuals and environments/contexts possess strengths and weaknesses, and tools exist to help measure these.	
Step 3: Construct an Implicit Theory of Client Functioning	Seek awareness of implicit theories about clients and their level of functioning.	CMPPA Intake – Adult and Child/Adolescent Forms
Step 4: Gather Complementary Data	Gather additional data, typically using more formal methods, to confirm or modify the therapist's theory of client functioning from Step 3.	CMPPA Semistructured Clinical Interview
Step 5: Test Complementary Hypotheses in the Context of Care Provided to the Client	Test multiple unbiased hypotheses related to clients' functioning in an ongoing and balanced fashion.	
Step 6: Develop a Flexible, Comprehensive Conceptualization	Form a flexible and comprehensive client conceptualization based on all information gathered about the client.	Balanced Diagnostic Impressions (DICE-PM) Model
Step 7: Share a Balanced Report of the Client's Strengths/Resources and Weaknesses/Deficits	Provide a balanced report of the results gathered from all of the assessment sources.	CMPPA Report Template

Fig. 16.3 Summary of the Comprehensive Model of Positive Psychological Assessment (CMPPA) and corresponding assessment tools

Finally, in *Step 7*, the clinician provides a balanced report of the results gathered from all of the assessment sources used. This report can take many forms, including both oral and written formats. Examples might include client feedback sessions, assessment reports, case presentations, and therapy notes. In any format chosen, “equal space, equal time, equal emphasis,” (Lopez et al., 2003, p. 17) or a balanced of information presented, is key (Owens et al., 2015). For instance, the information covered in the background portion of assessment reports or intake sessions could be guided by each of the categories represented in the Balanced Diagnostic Impressions (DICE-PM) Model. Both strengths and weaknesses identified from psychological tests and measures can be highlighted in the test results portion of reports. The diagnostic impressions/summary and conceptualization portion of assessment reports or therapy notes could include a balanced focus on strengths and challenges and list the Balanced Diagnostic Impressions (DICE-PM) Model as a concise summary of key data gathered. The recommendations provided in therapy notes or assessment reports should also attend to both strengths and difficulties. To help facilitate balanced reporting, the CMPPA Report Template was created (Owens et al., 2015; see Appendix C). Figure 16.3 provides a summary of the CMPPA and corresponding assessment tools.

Mental Health Prevention and Intervention

The techniques and approaches used within the S-BIT of Psychotherapy draw from the key, evidence-based techniques from literature in positive psychology, Motivational Interviewing (MI), Solution Focused Therapy (SFT), and behavior therapy. Namely, interventions involving hope, strengths, and empowerment that are generalizable across clients will be described; however, other positive psychological interventions could be consistent with the S-BIT of Psychotherapy if they align with its core assumptions and theoretical propositions.

Drawing from the positive psychology literature, hope is central to the S-BIT of Psychotherapy. Hope not only serves as a roadmap in therapy, it highly influences therapy outcomes and general life outcomes (e.g., Cheavens et al., 2006; Irving et al., 2004). Hope interventions can be used throughout various stages of counseling (Irving et al., 2004) and can be categorized into one of four types: hope finding, bonding, enhancing, and reminding (Lopez & Magyar-Moe, 2015). Hope finding consists of identifying clients' hope across life domains, including general and specific goals. Hope bonding relates to developing a hopeful therapeutic relationship, often facilitated by identifying goals collaboratively. Hope enhancing techniques include generating multiple pathways, finding means to enhance agency, and recognizing challenges that can be overcome related to goal attainment. Finally, hope reminding involves methods to engage in daily hopeful thinking (Lopez & Magyar-Moe, 2015).

Related to MI, the techniques of supporting client *autonomy* and *collaboration* are emphasized (Miller & Rollnick, 2013). Client autonomy involves eliciting and encouraging client choice when working toward change, and similar to hope bonding, collaboration involves working together toward the client's goals as a client-therapist team (Miller & Rollnick, 2013). Each of these provides the client with the ability to provide their direct input and feel ownership in the direction of therapy and their change process, while still providing the therapist with the ability to provide their expert input and recommendations. Microskills emphasized within MI (and counseling more broadly) are also used, such as open-ended questions, reflections, and affirmations, to convey empathy and gently help the client move toward the direction of change. The S-BIT of Psychotherapy utilizes each of these approaches to help build rapport and a collaborative therapeutic relationship, as well as work toward change.

Strengths interventions are central to implementing the S-BIT of Psychotherapy. The most common and effective strengths interventions tend to involve identifying strengths—often through strengths measures—and using strengths (Louis & Lopez, 2014). An extensive review of strengths interventions by Louis and Lopez (2014) resulted in the following recommendations for approaching strengths interventions: describe strengths as entities that can be developed; present strengths as interrelated and present in varying degrees; identify the desired outcome(s) first, then integrate evidence-based strategies to help achieve the desired goals; and reinforce what is learned related to strengths over time.

Overlapping with SFT, in addition to an emphasis on the client's strengths (De Jong & Kim Berg, 2013), focusing on how to improve the situation, rather than dwelling on what has been or is going wrong, is central to the S-BIT of Psychotherapy. In addition, comparable with MI's emphasis on client autonomy, SFT's technique of encouraging clients to generate their own, individually tailored ideas for how to address their concerns and improve their situation is applicable, as the client knows their life best (De Jong & Kim Berg, 2013). When working with children, caregivers' input on these perspectives is beneficial in addition to the child's.

Behavioral therapy also offers a wealth of beneficial techniques relevant to positive behavior change, especially as it relates to working with younger children and their families. Most applicable to the S-BIT of Psychotherapy is positive reinforcement. As clients work toward positive behavior change, reinforcing the desirable behaviors is highly effective and aligns with a focus on strengths and what children are doing well (versus what they are doing wrong; Kazdin, 2005). Strategies used to reinforce behavior can vary from client to client, such as praise and incentives, and should be designed to be developmentally appropriate and align with what is motivating or effective for the client (Kazdin, 2005). Inevitably, negative behaviors will occur. In those cases, techniques such as extinction/ignoring are encouraged to be attempted at first, followed by removal of a positive event/consequence following a behavior (punishment). However, the main emphasis and goal should be to focus primarily on positive reinforcement to the greatest extent possible.

Finally, empowerment interventions are designed to help support clients in identifying and capitalizing on their abilities to effect positive change in their environments (Owens et al., 2019a). The inclusion of family and peers in this process can be especially helpful (Flores, 2009; Flores & Bike, 2014). Likewise, evoking client strengths can be especially powerful in eliciting empowerment (Wong, 2006).

Together, these interventions aim to address presenting concerns and challenges, while also enhancing fulfillment through means most relevant and motivating to the client. The specific techniques and combination of interventions used will be unique to the client and involve their input throughout the counseling process to address their goals. The goal of these interventions is to impart skills that clients can use not only with current challenges but also in the future. Additionally, given that well-being is not a static experience; engagement in interventions or activities designed to enhance well-being will require continued effort over time (Lyubormirsky, 2008).

Developmental Considerations

It is critical to attend to developmental factors in selecting, implementing, and modifying interventions for children and adolescents. Owens and Waters (2020) identified three distinct ways in which positive psychological interventions for children differ from adult interventions: "developmental, dosage, and delivery" (p. 589).

First, interventions for children should attend to the unique developmental needs and abilities of the child (e.g., language ability, social skills, cognitive reasoning).

Unfortunately, there is significantly less literature, resources, and positive psychological interventions available specifically for children. Therefore, existing interventions for adults may need to be modified. The use of evidence-based interventions designed for children is ideal when working with child clients; however, careful and research-informed modifications of interventions, as well as research examining the modifications made could help advance the practice and science of positive psychological interventions for children.

Second, the most effective dosage of the intervention may look different for a child compared to an adult. For instance, given greater neuroplasticity in young children, perhaps the extent and length of the intervention could be less than for an adult engaging in an intervention with the same foci. Alternatively, given children's less advanced cognitive abilities at younger ages, they may need to spend more time or focus on a particular intervention to a greater extent compared to adults who may be able to grasp and apply the material on their own more quickly.

Third, the way in which interventions are delivered will necessarily look different for children than adults. Often, adult positive psychological interventions are self-guided or facilitated in small groups. Existing positive psychology interventions that have been tested with children are usually led by adults and almost always involve a group context (Owens & Waters, 2020). Furthermore, in the school setting, school-based positive psychological interventions tend to be time-limited (e.g., a 6-week program) and are rarely embedded into the daily functioning of the school. Practically, interventions led by adults for children are valuable and have been shown to be effective (Owens & Waters, 2020). However, expanding the available interventions to include a greater number of individually tailored (e.g., one clinician and one child) and universal school programs would be a beneficial addition to the literature.

Classification of Positive Psychological Interventions

In clinical and counseling psychology literature, the term “intervention” is commonly used to describe “remedial” interventions, or interventions designed to treat disorders or concerns that currently exist. The term “prevention,” on the other hand, is often used to describe interventions designed to circumvent the onset of a disorder or concern before it occurs. In the positive psychology literature, “positive psychological interventions” have traditionally been defined as “treatment methods or intentional activities aimed at cultivating positive feelings, positive behaviors, or positive cognitions” (Sin & Lyubomirsky, 2009, pg. 467).

Interventions in general, including positive psychological interventions, can involve a combination of foci, such as those that prevent concerns, address challenges, and/or promote well-being (Owens & Waters, 2020). Therefore, my colleagues and I have encouraged clinicians to think of positive psychological interventions more broadly to be inclusive of aspects of remedial and preventative approaches (e.g., Magyar-Moe et al., 2015; Owens et al., 2019b; Owens & Waters,

<i>Interventions that...</i>	Include Positive Processes/Content	Include Remedial Processes/Content	Include Positive <u>and</u> Remedial Processes/Content
Focus on Improving or Eliciting Positive Outcomes	Promotion Intervention	Positive Remediation Intervention	Balanced Content-Positive Outcomes Intervention
Focus on Evading or Addressing Challenges, Deficits, or Disorders	Prevention Intervention	Traditional Remediation Intervention	Balanced Content-Deficit Outcomes Intervention
Focus on Improving or Eliciting Positive Outcomes <u>and</u> Evading or Addressing Challenges, Deficits, or Disorders	Positive Content-Balanced Outcomes Intervention	Remedial Content-Balanced Outcomes Intervention	Balanced Intervention

Fig. 16.4 PPI classification matrix from Owens, R. L., & Waters, L. (2020). Taylor & Francis Ltd.; <https://www.tandfonline.com/>

2020; Owens & Woolgar, 2018). Furthermore, we contend balanced intervention approaches—those that include elements that address or prevent concerns and promote positive functioning—do not skew treatment too heavily in any direction. Rather, balanced interventions can help clients address challenges, while also simultaneously helping them flourish (e.g., Magyar-Moe et al., 2015).

To help researchers and clinicians more clearly differentiate the type of intervention used, we developed a matrix that categorizes each intervention based upon the outcomes targeted and the processes and content of the interventions (Owens & Waters, 2020). Within both of those broad categories, three possible options were identified. Possible intervention outcomes could be categorized by: (a) “interventions that aim to reduce negative outcomes,” (b) “interventions that aim to enhance positive outcomes,” and (c) interventions that “aim to both reduce negative outcomes and simultaneously enhance positive outcomes” (Owens & Waters, 2020, p. 589). The interventions’ processes and content could be categorized by: (a) “interventions that have processes and content which aim to remediate disorders/concerns,” (b) “interventions that have processes and content which aim to enhance positive functioning,” and (c) “interventions that have dual processes and content which both remediate disorders/concerns and promote positive functioning” (Owens & Waters, 2020, p. 5892). Figure 16.4 portrays this classification matrix.

Common Positive Psychology Intervention Approaches

Using the 3 × 3 matrix previously described, Owens and Waters (2020) reviewed the recent literature on school- and clinically-based positive psychological interventions. For the purposes of this chapter, the school-based interventions will not be discussed. Surprisingly, before the Owens and Waters (2020) review, no previous review on child and adolescent clinically-focused positive psychological interventions had been

published. The Owens and Waters review included published clinical studies from 1998 (the inception of positive psychology; Seligman, 1999) to 2018. Sixty-eight clinically-based studies were identified that met the following criteria: “(a) the studies included either a positive outcome and/or positive processes or content; (b) the studies included participants under the age of 18 years or still a student in high school; (c) the studies were inclusive of samples around the world, but published in English; and (d) the PPI was evaluated using valid and reliable research designs and measures” (Owens & Waters, 2020, p. 590).

The clinically-based studies reviewed were largely from the United States (32%), Canada (19%), and Australia (13%; Owens & Waters, 2020). The age of participants in the studies ranged from 5 to 19 years old (the 19-year-olds were still in high school). The vast majority of the interventions involved groups (76%); 22% were individually-focused, and 1% were unspecified. Of the nine types of interventions included in the matrix in Fig. 16.4, four were represented: positive content-balanced outcomes interventions (63%), prevention interventions (25%), balanced interventions (6%), and promotion interventions (6%). However, the synthesis of findings was only discussed for the positive content-balanced outcomes interventions and prevention interventions, as the other two categories had fewer than 10 papers to draw conclusions from (Owens & Waters, 2020).

Within the positive content-balanced outcomes interventions category, the primary type of approach used involved mindfulness (47%; Owens & Waters, 2020). Other areas of foci included resilience (6%), body image/eating disorder protective factors (3%), Make a Wish interventions (3%), multicomponent (i.e., involving multiple positive psychological constructs; 3%), and cognitive-behavioral compassion training (1%). Within the prevention intervention category, all but one of the interventions involved mindfulness (94%); the remaining intervention involved a strengths-based assessment approach to improve treatment outcomes (Owens & Waters, 2020).

Collectively, following this review, it became clear that more research and development of positive psychological interventions for the clinical context are necessary for children and adolescents. Beyond simply more research and interventions, a greater variety in the interventions’ foci, approaches, and types of interventions are also necessary. Mindfulness-based approaches have firmly established their effectiveness, popularity, and value in the field; however, what perhaps was most notable from the review was that well-established and empirically supported constructs in the field of positive psychology are significantly lacking or missing in interventions and applied work. For instance, hope, strengths, and gratitude interventions designed for children in the clinical context are highly underrepresented. Additionally, Owens and Waters (2020) argued a focus on balanced interventions would likely be most applicable for the clinical context given most clients present with concerns or disorders that necessarily need attention; attending to the well-being aspect of mental health is also important to address as well (Keyes & Lopez, 2002; Magyar-Moe et al., 2015; Owens et al., 2015). Lastly, expanding the positive psychological interventions available for younger children (children under the age of 8) and that are designed for individual counseling for all ages across childhood and adolescence is also needed (Owens & Waters, 2020).

Case Study

As an applied summary of the content presented, a case study will be provided. All identifying information has been modified to protect the client's confidentiality.

Abbreviated Background

Aliyah was an 8-year-old girl who identified as Black from a large urban city in the Midwest of the United States. She was referred by her primary care physician (*Environmental Resource*) for counseling to help address behavior concerns. Aliyah was diagnosed with Down syndrome and had related difficulties with cognitive functioning, communication (*Individual Weaknesses*), muscle tone, hearing loss, and a heart defect (*Physical Health Concerns*). Aliyah was reported to generally have a healthy appetite and sleep habits (*Physical Wellness*). In addition, Aliyah particularly excelled at developing friendships, kindness, and helping her peers and teachers at school (*Individual Strengths*).

Aliyah was primarily raised by her maternal grandmother, who has been a strong source of support and role model for Aliyah (*Cultural Asset; Environmental Resource*). Many adults in the community have also been supportive of Aliyah and her grandmother. In particular, the family is involved in a local nonprofit organization for Black and African American families in their community (*Cultural Assets; Environmental Resources*). However, some children in Aliyah's neighborhood bully her by making fun of her developmental delays. She has experienced discrimination related to her race and disabilities throughout her life (*Cultural Struggle; Environmental Deficit*), which has been upsetting to her family. Since birth, Aliyah has had very little contact with her biological parents (*Environmental Deficit*), largely due to their long-term substance use and a lack of interest in child-rearing, as described by her grandmother. Aliyah's grandmother has been the sole provider for the family and has limited financial resources (*Cultural Struggle; Environmental Deficit*). Beginning at age four, Aliyah began receiving early intervention and special education services through her school district (*Environmental Resource*).

Aliyah's grandmother described as Aliyah got older and grew in size, her behaviors became more challenging. When Aliyah was younger, her grandmother stated she was better able to "manage" Aliyah, largely through physical guidance (e.g., moving her away from the source of conflict) or redirection to a new task. However, as Aliyah aged, she became more physically aggressive when she became frustrated and typically refused to follow her grandmother's instructions or requests (*Individual Weaknesses*). Aliyah's grandmother was at a loss in how to address Aliyah's behaviors, particularly since these were not occurring at school.

Assessments Used

Aliyah's grandmother completed the CMPPA Intake–Child/Adolescent Form prior to our first session, and the CMPPA Semi-structured Clinical Interview was used to guide the initial session. Medical and school records were also reviewed. A psychosocial/behavioral standardized instrument was also used to gather additional information in another format to supplement the intake and clinical interview. Given Aliyah's low cognitive abilities, child self-report standardized questionnaires were not used. Aliyah was asked for her perspective on her goals (e.g., "What would you like to see go better at home?"), strengths (e.g., "What are you really good at?"), and well-being (e.g., "What makes you happy?") through developmentally appropriate interview questions. Aliyah's grandmother's perspective on these topics was also explored.

Based on the information gathered from these assessment approaches, the Balanced Diagnostic Impressions (DICE-PM) Model was summarized as follows:

Diagnosis: Down syndrome

Individual strengths: Developing friendships, kind, helpful

Individual weaknesses: Behavior challenges at home, cognitive deficits, communication difficulties

Cultural assets: Supportive grandmother and community members, involvement and support of a local nonprofit organization for Black and African American families

Cultural struggles: Discrimination, limited financial resources

Environmental resources: Supportive grandmother and community members, medical care, local nonprofit organization for Black and African American families, early intervention and special education services

Environmental deficits: Little contact or involvement of biological parents, limited financial resources, bullying, discrimination

Physical wellness: Healthy eating and sleep habits

Physical health concerns: Deficits in muscle tone, hearing loss, heart defect

Mental health category: Incomplete mental illness/struggling

Interventions Used

At the beginning of counseling, building rapport with Aliyah and her grandmother was the primary focus. In particular, hope bonding was key; collaborative discussions related to the family's goals—including input from Aliyah—were

helpful during treatment. Aliyah's grandmother indicated her goals were to have less conflict with Aliyah and learn techniques to better manage Aliyah's behavior. Aliyah hoped to have more fun and get in trouble less often.

Following establishing goals, time was spent exploring what the family had already tried to reach their goals and what previously worked and did not work. Aliyah's grandmother expressed she frequently tried to get Aliyah's attention and adjust her behavior by yelling at Aliyah, but that strategy was not effective. Aliyah typically yelled back and became aggressive, by swinging at her grandmother and knocking objects over. Following these descriptions, time was spent in session exploring what an ideal day would look like, and if conflict were to arise or Aliyah would act out, what an ideal resolution would look like. Following these discussions, new strategies that everyone thought might be beneficial to address the challenges were generated. For example, if Aliyah or her grandmother became upset, rather than raising their voices, they would take a five-minute break in another room to calm down. They would remind each other to take a break if either became too upset. Aliyah and her grandmother also agreed to come up with a list of house rules to help minimize conflict and align with what they both hoped for. Aliyah suggested 1 hour of TV time each day. Aliyah's grandmother suggested Aliyah help with one identified chore each day. Additional strategies were generated and revisited in future sessions to assess their effectiveness and modifications were made as needed.

In several sessions that followed, extensive attention was given to Aliyah's strengths and how they might be emphasized—both to address the challenges present and to help Aliyah flourish. In particular, it was suggested that Aliyah's grandmother first start by praising and rewarding Aliyah's strengths (kindness, helpfulness, and positive interactions with others) each day, aiming for a minimum of five times each day. The intention behind this recommendation was to provide Aliyah's grandmother with an opportunity to practice positive reinforcement with positive skills and characteristics Aliyah already excelled at, which would likely be more readily present in her daily life, and to promote Aliyah's well-being. As Aliyah's grandmother's confidence grew in using positive reinforcement with Aliyah's strengths, and Aliyah recognized the benefits of engaging in positive behaviors (e.g., praise, rewards, less conflict), Aliyah's grandmother began to reinforce positive behaviors more closely related to the ideal scenario she initially described and opposite behaviors of the negative behaviors the family was hoping to reduce. More specifically, when Aliyah listened to her grandmother's request the first time and when she took a five-minute break when she was upset (rather than yelling or hitting), she also received praise and rewards. In addition, by reinforcing Aliyah's strengths, her negative behaviors naturally began to reduce in their frequency. Over time, Aliyah recognized positive outcomes and reinforcement that coincided with positive behaviors, and she began to engage in more challenging, yet positive behaviors more readily. Aliyah also began engaging in the positive behaviors more often without prompting and with less and less use of rewards by her grandmother.

In this particular case, strengths were of central importance. Focusing on what Aliyah was already doing well provided the family with the confidence to address more challenging behaviors. They were also more effective in addressing challenging situations, while simultaneously enhancing Aliyah's well-being and the family's overall interactions. Working together in identifying goals, envisioning what a better future might look like, and seeking the client's input on what strategies they had already tried, what they thought would work, and what they would be willing to try was also key in maintaining client motivation, effort, and trust when unexpected set-backs or particularly challenging days would arise. Clearly articulating Aliyah's strengths also helped reduce an overemphasis or hyper-focus on Aliyah's weaknesses. This helped provide her grandmother with a new perspective, appreciation for what was going well, and elicited a number of positive emotions in Aliyah and her grandmother (e.g., joy, pride, gratitude).

Conclusion

In conclusion, the S-BIT of Psychotherapy provides an assessment and prevention/intervention approach that emphasizes positive psychological evidence-based techniques and cultural considerations and was developed with children and adolescents specifically in mind. In particular, the assessment approach discussed—the Comprehensive Model of Positive Psychological Assessment—built upon existing positive psychological and cultural assessment models, while addressing their limitations and gaps, namely integration of positive psychological and cultural considerations in a comprehensive fashion. Additionally, the prevention/treatment approach described within the S-BIT of Psychotherapy was flexibly designed with the goal to be inclusive of diverse populations, while also taking into account research on evidence-based positive psychological techniques. Future research on positive psychological intervention and assessment approaches for children and adolescents, including empirically testing the S-BIT of Psychotherapy, would be helpful next steps.

Appendix A: Comprehensive Model of Positive Psychological Assessment Intake—Child/Adolescent Form

Thank you for choosing to participate in psychological services at (agency name). To provide you with the best services possible, we are requesting your completion of the following paperwork. The information requested includes questions about your current and past functioning, family and social relationships, educational and work history, and more. Please note that we are interested in understanding areas of weakness or struggle as well as areas of strength and well-being, as treatment of any problem areas identified will be informed by the strengths that you possess and the resources available in your environment.

Name: _____

Date Form Completed: _____ Date of Birth: _____

Parent/Stepparent/Guardian's Name: _____

Address (City, State, and Zip): _____

Marital Status: _____

Phone: (Home) _____ (Work) _____ (Cell) _____

(Duplicate parent contact information as needed. Not included here due to space.)

Emergency Contact Name: _____

Relationship: _____ Phone: _____

Who referred you? _____

Referral's relation? _____

(Parent's/Guardian's) Employment Status: _____ Occupation: _____

Employer's Name and Address: _____

Highest level of education: _____ Grade: _____

School: _____

Disability Status (developmental; for example, Down syndrome, intellectual disability): _____

Disability Status (acquired; for example, spinal cord injury, traumatic brain injury): _____

Religion and Spiritual Orientation: _____

Race and Ethnicity: _____

Sexual Orientation: _____

Socioeconomic Status/Income: _____

Indigenous Heritage: Native _____ Nonnative _____ (check which applies)

National Origin: Please indicate where you were born: _____

Gender: _____

Other identities: _____

What is your primary concern? _____

What are your weaknesses? _____

What are your strengths? _____

(Consider having a list or providing a list of strengths and corresponding definitions for clients who may struggle to identify or to find language that represents their strengths.)

What people or things in your environment are helpful/supportive? _____

What people or things bring happiness and well-being to your life?

Have you been in counseling in the past? If so, please indicate with whom, where, and when. _____

Have you had an evaluation/testing in the past? If so, please indicate with whom, where, and when. _____

Physician: _____

Medical diagnoses: _____

Medications: _____

What do you do to maintain a healthy lifestyle? _____

What do you hope to achieve from this evaluation/therapy? _____

*Appendix A slightly modified from Owens, R. L., Magyar-Moe, J. L., & Lopez, S. J. (2015). Finding balance via positive psychological assessment and conceptualization: Recommendations for practice. *The Counseling Psychologist*, 43(5), 634–670. <https://doi.org/10.1177/0011000015584956>*

Appendix B: Comprehensive Model of Positive Psychological Assessment Semi-Structured Clinical Interview

Background Information

- What brings you in? (Assess duration, frequency, intensity, triggers, etc.)
- What are particular areas of struggle for you/your child?
- What have/has you/your child tried to do to cope with the difficulties you've described? What worked? What was less successful? (The therapist can ask about each area specifically.)
- What barriers have/has you/your child faced or currently face in your environment?
- How would you describe your/your child's identity? For example, some clients reference their cultural background or gender. However, there are a number of

variables that can describe people. How would you describe yourself/your child? How do others describe you/your child? (Reference the ADDRESSING and RESPECTFUL models for additional examples, if needed, or for follow-up. Also be prepared to provide specific questions to the client if they are unable to generate this information with further prompts, such as “How would you describe your financial situation?” “What is your sexual orientation?”)

- You mentioned (insert client’s strengths from the intake paperwork) are your/your child’s strengths. Please describe these and how you/your child use(s) them.

Medical History

- Did your child meet their developmental milestones? (Provide examples as needed.) Please describe any delays.
- Do/does you/your child have any previous or current medical conditions or illnesses? If so, what? When were/was you/your child diagnosed?
- Have/has you/your child ever been hospitalized? If so, for what and how long?
- Have/has you/your child ever experienced a concussion, brain injury, or seizure(s)? If so, please describe.
- Are/is you/your child currently taking any medication? Have/has you/your child taken any medications in the past? If so, what medication(s) and what dose?
- What medical conditions or psychological disorders are present on both sides of your/your child’s family?
- Please describe your/your child’s sleep habits. (Onset, maintenance, the average length of sleep, etc.)
- Please describe your/your child’s eating habits/behaviors.
- You mentioned (insert items indicated in the paperwork) are ways you/your child maintain(s) a healthy lifestyle. Please describe those and the frequency you/your child engage(s) in those behaviors. (Assess other areas that may have been left out—diet, exercise, meditation, etc.)

Emotional Functioning

- How would you typically describe your/your child’s mood? (Any concerns of depression or anxiety? Assess in more depth, if necessary.)
- Have/has you/your child ever experienced suicidal ideation? (If so, ask the client to describe when that took place and what prevented further action. Also, assess current ideation, plan, intent, and protective factors.)
- You mentioned (insert person or thing from the intake paperwork) brings you/your child happiness and well-being. Please describe that person/thing. (Assess duration, frequency, intensity, triggers, etc.)

Social Functioning and Environmental Variables

- What concerns, if any, do you have about your/your child's social relationships and social skills?
- Are you currently in a romantic relationship? If so, with whom? Tell me about your partner. (These questions will largely pertain to the adult and adolescent populations.)
- Are you sexually active? If so, what sexual behaviors are you engaging in, how often, and do you use protection? (These questions will largely pertain to the adolescent population unless there are concerns of sexual activity with the child client.)
- Who are the important people in your/your child's life? What is your/your child's relation to them?
- You also mentioned (insert name of people or things in the client's environment from the intake form) are helpful or supportive. Please tell me about these people/things.
- Whom do/does you/your child currently live with? (If parents are separated/divorced, assess custody arrangement.)
- How many siblings does your child have? What are their ages?
- Where do/does you/your child work? What does your/your child's job entail? (These questions will pertain to the adult and adolescent populations).
- Where does your child go to school? What grade are they in? Do they receive any special services/accommodations? If so, what do they receive and how often? When did they begin using these services?
- What areas in school does your child excel and struggle in?
- What do/does you/your child like to do for fun? What are your/your child's hobbies? Are/is you/your child involved in any organizations, clubs, sports, or extra-curricular activities?

Substance Use

- Do you currently use any substances (e.g., alcohol, tobacco, caffeine)? If so, what substance(s)? How often do you use each substance? (These questions will largely pertain to the adult and adolescent populations unless there are concerns of substance use with the child client.)
- Have you used or experimented with any other substances in the past? If so, what substance have you used? (These questions will largely pertain to the adult and adolescent populations unless there are concerns of substance use with the child client.)
- (If a previous substance use problem existed) What prevents you from continuing using (insert name of the substance)?

Trauma and Stressors

- Have/has you/your child ever experienced a traumatic event, including accidents? If so, please describe to your level of comfort.
- Have/has you/your child ever experienced sexual, emotional, or physical abuse? If so, please describe to your level of comfort. (If so, assess the details of the presence of the perpetrator and the form and frequency of the abuse.)
- Are you currently experiencing any significant stressors (e.g., death in the family, moved)? Have/has you/your child experienced any significant stressors in the past year or so? If so, please describe.
- What has helped you/your child cope with/overcome the trauma(s)/stressor(s) you/your child have/has experienced?
- Have/has you/your child ever been arrested/in trouble with the law? If so, for what? When did this occur?

Psychological Services

- You noted in the intake paperwork that you/your child have/has been in therapy before. What did you find helpful about that experience? What did you/your child not find helpful or what would you/your child change?
- You noted in the intake paperwork that you/your child have/has had an evaluation/testing before. What did you/your child find helpful about that experience? What did you/your child not find helpful or what would you/your child change?
- Have/has you/your child been diagnosed with anything? If so, do you recall what?

Goals/Hope

- You mentioned you/your child hope(s) to gain (insert client's answer from intake) from therapy/this evaluation. What are ways you/your child can foresee yourself/themself achieving that/those goal(s)? (Assess the pathways for each goal.)
- On a scale from 1 to 10, with 1 being *not at all* and 10 being *extremely*, how motivated are/is you/your child to achieve your/their goal(s)? (Assess agency for each goal.)

Note. This is designed to be a semi-structured interview. Therefore, questions can be asked in any order, and additional questions may be necessary. Some questions may not apply to all individuals interviewed.

Appendix B slightly modified from Owens, R. L., Magyar-Moe, J. L., & Lopez, S. J. (2015). Finding balance via positive psychological assessment and conceptualization: Recommendations for practice. The Counseling Psychologist, 43(5), 634–670. doi: <https://doi.org/10.1177/0011000015584956>

Appendix C: Comprehensive Model of Positive Psychological Assessment Report Template

Name:

Date of Birth:

Date of Evaluation:

Referral:

Relevant History:

Presenting Concerns and Individual Strengths:

Cultural Identities: (including cultural assets and struggles)

Medical History and Physical Wellness:

Emotional Functioning and Well-being: (including positive emotions)

Social Functioning and Environmental Variables: (including environmental resources and deficits)

Substance Use:

Trauma, Stressors, and Coping Strategies:

Psychological Services:

Goals/Hope:

Tests Administered:

- List the names of the tests/measures administered, including positive psychological measures.

Behavioral Observations:

- Aim for equal space and focus on positive and negative behaviors observed.

Test Results:

- Report all test/measure results; include significant and personal strengths and weaknesses throughout.

Cognitive Abilities:

Adaptive Functioning:

Academic Achievement:

Language:

Attention:

Executive Functions:

Learning and Memory:

Visual-Motor/Motor:

Emotional and Social Functioning:

Personality:

Strengths:

Additional Positive Psychological Measures:

Summary and Balanced Diagnostic Impressions:

- Note the reason for referral.
- Identify client cultural identities.
- Summarize significant findings from background information, behavior observations, and test results, with equal space and focus on strengths and weaknesses.
- List each variable from the Balanced Diagnostic Impressions (DICE-PM) Model.

Diagnosis:

Individual strengths:

Individual weaknesses:

Cultural assets:

Cultural struggles:

Environmental resources:

Environmental deficits:

Physical wellness:

Physical health concerns:

Mental health category:

Recommendations:

- Include recommendations focusing on strengths and weaknesses.

Note. Not all components/headings in the Relevant History and Test Results sections will apply. Include only those relevant to the client.

Appendix C from Owens, R. L., Magyar-Moe, J. L., & Lopez, S. J. (2015). Finding balance via positive psychological assessment and conceptualization: Recommendations for practice. *The Counseling Psychologist, 43*(5), 634–670. <https://doi.org/10.1177/0011000015584956>

References

- Allan, B. A., Owens, R. L., Sterling, H. M., England, J., & Duffy, R. D. (2015). Conceptualizing well-being in vocational psychology: A model of fulfilling work. *The Counseling Psychologist, 47*(2), 266–290. <https://doi.org/10.1177/0011000019861527>
- American Psychological Association. (2003). Guidelines on multicultural education, training, research, practice, and organizational change for psychologists. *American Psychologist, 58*, 377–402.
- American Psychological Association. (2017). *Multicultural guidelines: An ecological approach to context, identity, and intersectionality*. Retrieved from <http://www.apa.org/about/policy/multicultural-guidelines.pdf>
- Bolier, L., Haverman, M., Westerhof, G. J., Riper, H., Smit, F., & Bohlmeijer, E. (2013). Positive psychology interventions: A meta-analysis of randomized controlled studies. *BMC Public Health, 13*(119). Retrieved from <http://www.biomedcentral.com/1471-2458/13/119>

- Bordin, E. S. (1979). The generalizability of the psychoanalytic concept of the working alliance. *Psychotherapy: Theory, Research and Practice*, 16(3), 252–260.
- Burchinal, M. R., Roberts, J. E., Riggins, R., Jr., Zeisel, S. A., Neebe, E., & Bryant, D. (2003). Relating quality of center-based child care to early cognitive and language development longitudinally. *Child Development*, 71(2), 339–357. <https://doi.org/10.1111/1467-8624.00149>
- Chakhssi, F., Kraiss, J. T., Sommers-Spijkerman, M., & Bohlmeijer, E. T. (2018). The effect of positive psychology interventions on well-being and distress in clinical samples with psychiatric or somatic disorders: A systematic review and meta-analysis. *BMC Psychiatry*, 18(211). <https://doi.org/10.1186/s12888-018-1739-2>
- Cheavens, J. S., Feldman, D. B., Gum, A., Michael, S. T., & Snyder, C. R. (2006). Hope therapy in a community sample: A pilot investigation. *Social Indicators Research*, 77, 61–78. <https://doi.org/10.1007/s11205-005-5553-0>
- Ciarrochi, J., Heaven, P. C. L., & Davies, F. (2007). The impact of hope, self-esteem, and attributional style on adolescents' school grades and emotional well-being: A longitudinal study. *Journal of Research in Personality*, 41(6), 1161–1178. <https://doi.org/10.1016/j.jrp.2007.02.001>
- Conoley, C. W., Pontrelli, M. E., Oromendia, M. F., Bello, B., & Nagata, C. M. (2015). Positive empathy: A therapeutic skill inspired by positive psychology. *Journal of Clinical Psychology*, 71(6), 575–583. <https://doi.org/10.1002/jclp.22175>
- D'Andrea, M., & Daniels, J. (2001). Respectful counseling: An integrative model for counselors. In D. Pope-Davis & H. Coleman (Eds.), *The interface of class, culture and gender in counseling* (pp. 417–466). Sage.
- De Jong, P., & Kim Berg, I. (Eds.). (2013). *Interviewing for solutions* (4th ed.). Brooks/Cole.
- Diener, E., & Biswas-Diener, R. (2005). Psychological empowerment and subjective well-being. In D. Narayan (Ed.), *Measuring empowerment: Cross-disciplinary perspectives* (pp. 125–140). The World Bank.
- Flores, G., & Tomany-Korman, S. C. (2008). Racial and ethnic disparities in medical and dental health, access to care, and use of services in US children. *Pediatrics*, 121(2), e286–e298. <https://doi.org/10.1542/peds.2007-1243>
- Empowering life choices (2009). Career counseling in the contexts of race and class. In N. Gysbers, M. Heppner, & J. Johnston (Eds.), *Career counseling: Contexts, processes and techniques* (pp. 49–74). Alexandria, VA: American Counseling Association.
- Flores, L. Y., & Obasi, E. M. (2003). Positive psychological assessment in an increasingly diverse world. In S. J. Lopez & C. R. Snyder (Eds.), *Positive psychological assessment: A handbook of models and measures* (pp. 443–458). American Psychological Association.
- Flores, L. Y., & Bike, D. H. (2014). Multicultural career counseling. In F. T. L. Leong, L. Comas-Díaz, G. C. N. Hall, V. C. McLoyd, & J. E. Trimble (Eds.), *APA handbook of multicultural psychology* (pp. 403–417). Washington, DC: American Psychological Association.
- Fredrick, S., & Loewenstein, G. (1999). Hedonic adaptation. In D. Kahneman, E. Diener, & N. Schwarz (Eds.), *Well-being: The foundations of hedonic psychology* (pp. 302–329). Russell Sage Foundation.
- Gallagher, M. W., & Lopez, S. J. (Eds.). (2019). *Positive psychological assessment: A handbook of models and measures* (2nd ed.). American Psychological Association.
- Geerling, B., Kraiss, J. T., Kelders, S. M., Stevens, A. W. M. M., Kupka, R. W., & Bohlmeijer, E. T. (2020). The effect of positive psychology interventions on well-being and psychopathology in patients with severe mental illness: A systematic review and meta-analysis. *The Journal of Positive Psychology*, 15(5), 572–587. <https://doi.org/10.1080/17439760.2020.1789695>
- Gelso, C. J., Nutt Williams, E., & Fretz, B. (2014). *Counseling psychology* (3rd ed.). American Psychological Association.
- Govindji, R., & Linley, P. A. (2007). Strengths use, self-concordance and well-being: Implications for strengths coaching and coaching psychologists. *International Coaching Psychology Review*, 2(2), 143–153.
- Hays, P. A. (2008). *Addressing cultural complexities in practice: Assessment, diagnosis, and therapy* (2nd ed.). American Psychological Association.

- Irving, L. M., Snyder, C. R., Cheavens, J., Gravel, L., Hanke, J., Hilberg, P., & Nelson, N. (2004). The relationship between hope and outcomes at the pretreatment, beginning, and later phases of psychotherapy. *Journal of Psychotherapy Integration, 14*, 419–443. <https://doi.org/10.1037/1053-0479.14.4.419>
- Kazdin, A. E. (2005). *Parent management training: Treatment for oppositional, aggressive, and antisocial behavior in children and adolescents*. Oxford University Press.
- Keyes, C. L. M., & Lopez, S. J. (2002). Toward a science of mental health: Positive directions in diagnosis and intervention. In C. R. Snyder & S. J. Lopez (Eds.), *Handbook of positive psychology* (pp. 45–62). Oxford University Press.
- Lopez, S. J., & Magyar-Moe, J. L. (2015). Strategies for accentuating hope. In S. Joseph (Ed.), *Positive psychology in practice* (2nd ed., pp. 483–502). Wiley.
- Lopez, S. J., Snyder, C. R., & Rasmussen, H. N. (2003). Striking a vital balance: Developing a complementary focus on human weakness and strength through positive psychological assessment. In S. J. Lopez & C. R. Snyder (Eds.), *Positive psychological assessment: A handbook of models and measures* (pp. 3–20). American Psychological Association.
- Louis, M. C., & Lopez, S. J. (2014). Strengths interventions: Current progress and future directions. In A. C. Parks & S. M. Schueller (Eds.), *The Wiley Blackwell handbook of positive psychological interventions*. John Wiley & Sons, Ltd.
- Lyubormirsky, S. (2008). *The how of happiness: A new approach to getting the life you want*. Penguin Press.
- Magnuson, K. A., Meyers, M. K., Ruhm, C. J., & Waldfogel, J. (2004). Inequality in preschool education and school readiness. *American Educational Research Journal, 41*(1), 115–157. <https://doi.org/10.3102/00028312041001115>
- Magyar-Moe, J. L., Owens, R. L., & Conoley, C. W. (2015). Positive psychological interventions in counseling: What every counseling psychologist should know. *The Counseling Psychologist, 43*(4), 508–557. <https://doi.org/10.1177/0011000015573776>
- Marques, S. C., Lopez, S. J., & Pais-Ribeiro, J. L. (2011). “Building hope for the future”: A program to foster strengths in middle-school students. *Journal of Happiness Studies, 12*, 139–152. <https://doi.org/10.1007/s10902-009-9180-3>
- Miller, W. R., & Rollnick, S. (2013). *Motivational interviewing: Helping people change*. Guilford Press.
- Molix, L., & Bettencourt, B. A. (2010). Predicting well-being among ethnic minorities: Psychological empowerment and group identity. *Journal of Applied Social Psychology, 40*(3), 513–533.
- Neufeld, J. E., Rasmussen, H. N., Lopez, S. J., Ryder, J. A., Magyar-Moe, J. L., Ford, A. I., Edwards, L. M., & Bouwkamp, J. C. (2006). The engagement model of person-environment interaction. *The Counseling Psychologist, 34*(2), 245–259. <https://doi.org/10.1177/0011000005281319>
- Owens, R. L., Allan, B. A., & Flores, L. Y. (2019a). The strengths-based inclusive theory of work. *The Counseling Psychologist, 47*(2), 222–265. <https://doi.org/10.1177/0011000019859538>
- Owens, R. L., Baugh, L., Barrett-Wallis, R., Hui, N., & McDaniel, M. (2018). Strengths across the lifespan: A qualitative analysis of developmental trajectories and influential factors. *Translational Issues in Psychological Science, 4*(3), 265–276. <https://doi.org/10.1037/tps0000164>
- Owens, R. L., Flores, L. Y., Kopperson, C., & Allan, B. A. (2019b). Infusing positive psychological interventions into career counseling for diverse populations. *The Counseling Psychologist, 47*(2), 291–314. <https://doi.org/10.1177/0011000019861608>
- Owens, R. L., Magyar-Moe, J. L., & Lopez, S. J. (2015). Finding balance via positive psychological assessment and conceptualization: Recommendations for practice. *The Counseling Psychologist, 43*(5), 634–670. <https://doi.org/10.1177/0011000015584956>
- Owens, R. L., & Waters, L. (2020). What does positive psychology tell us about early intervention and prevention with children and adolescents? A review of positive psychological interventions with young people. *The Journal of Positive Psychology, 15*(5), 588–597. <https://doi.org/10.1080/017439760.2020.1789706>

- Owens, R. L., & Woolgar, S. R. (2018). Moving past pathology: Clinical applications of the balanced diagnostic impressions (DICE-PM) model. *Translational Issues in Psychological Science*, 4(3), 304–313. <https://doi.org/10.1037/tps0000163>
- Pedrotti, J. T., Edwards, L. M., & Lopez, S. J. (2009). Putting positive psychology within a cultural context. In S. J. Lopez & C. R. Snyder (Eds.), *The Oxford handbook of positive psychology* (pp. 49–57). Oxford.
- Proctor, C., Tsukayama, E., Wood, A. M., Maltby, J., Eades, J. F., & Linley, P. A. (2010). Strengths gym: The impact of a character strengths-based intervention on the life satisfaction and well-being of adolescents. *The Journal of Positive Psychology*, 6(5), 377–388. <https://doi.org/10.1080/17439760.2011.594079>
- Quinlan, D., Swain, N., & Vella-Brodrick, D. A. (2012). Character strengths interventions: Building on what we know for improved outcomes. *Journal of Happiness Studies*, 13, 1145–1163. <https://doi.org/10.1007/s10902-011-9311-5>
- Ryan, R. M., & Deci, E. L. (2001). On happiness and human potentials: A review of research on hedonic and eudaimonic well-being. *Annual Review of Psychology*, 52, 141–166.
- Seligman, M. E. P. (1999). The president's address. *American Psychologist*, 54, 559–562.
- Sin, N. L., & Lyubomirsky, S. (2009). Enhancing well-being and alleviating depressive symptoms with positive psychology interventions: A practice-friendly meta-analysis. *Journal of Clinical Psychology*, 65(5), 467–487. <https://doi.org/10.1002/jclp.20593>
- Snyder, C. R., Harris, C., Anderson, J. R., Holleran, S. A., Irving, L. M., Sigmon, S. T., Yoshinobu, L., Gibb, J., Langelle, C., & Harney, P. (1991). The will and the ways: Development and validation of an individual differences measure of hope. *Journal of Personality and Social Psychology*, 60, 570–585. <https://doi.org/10.1037/0022-3514.60.4.570>
- Snyder, C. R., Ritschel, L. A., Rand, K. L., & Berg, C. J. (2005). Balancing psychological assessments: Including strengths and hope in client reports. *Journal of Clinical Psychology*, 62(1), 33–46. <https://doi.org/10.1002/jclp.20198>
- Suldo, S. M., Hearon, B. V., Bander, B., McCullough, M., Garofano, J., Roth, R. A., & Tan, S. Y. (2015). Increasing elementary school students' subjective well-being through a classwide positive psychology intervention: Results of a pilot study. *Contemporary School Psychology*, 19, 300–311. <https://doi.org/10.1007/s40688-015-0061-y>
- Tsai, C. L., Chaichanasakul, A., Zhao, R., Flores, L. Y., & Lopez, S. J. (2014). Development and validation of the strengths self-efficacy scale (SSES). *Journal of Career Assessment*, 22(2), 221–232. <https://doi.org/10.1177/1069072713493761>
- Vacek, K. R., Coyle, L. D., & Vera, E. M. (2011). Stress, self-esteem, hope, optimism, and well-being in urban, ethnic minority adolescents. *Journal of Multicultural Counseling and Development*, 38(2), 99–111. <https://doi.org/10.1002/j.2161-1912.2010.tb00118.x>
- Van Ryzin, M. J., Gravely, A. A., & Roseth, C. J. (2009). Autonomy, belongingness, and engagement in school as contributors to adolescent psychological well-being. *Journal of Youth and Adolescence*, 38, 1–12. <https://doi.org/10.1007/s10964-007-9257-4>
- Wampold, B. E. (2001). *The great psychotherapy debate: Models, methods, and findings*. Lawrence Erlbaum.
- Wampold, B. E. (2015). How important are the common factors in psychotherapy? An update. *World Psychiatry*, 14(3), 270–277.
- Waters, L. (2017). *The strengths switch: How the new science of strength-based parenting can help your child and teen to flourish*. Penguin.
- Waters, L. E. (2015). Strength-based parenting and life satisfaction in teenagers. *Advances in Social Sciences Research Journal*, 2(11). <https://doi.org/10.14738/assrj.211.1651>
- Wright, B. A., & Lopez, S. J. (2002). Widening the diagnostic focus: A case for including human strengths and environmental resources. In C. R. Snyder & S. J. Lopez (Eds.), *The handbook of positive psychology* (pp. 26–44). Oxford University Press.
- Wong, J. (2006). Strengths-Centered Therapy: A social constructionist, virtue based psychotherapy. *Psychotherapy: Theory, Research, Practice, and Training*, 43, 133–146. <https://doi.org/10.1037/0033-3204.43.2.133>
- Zimmerman, M. A. (2000). Empowerment theory. In J. Rappaport & E. Seidman (Eds.), *Handbook of community psychology* (pp. 43–63). Springer.

Chapter 17

A Humanistic Approach to Mental Health Assessment, Evaluation, and Measurement-Based Care



William E. Hanson, Hansen Zhou, Diana L. Armstrong, and Noëlle T. Liwski

Abstract Mental health assessment and evaluation models have waxed and waned over the years. However, a contemporary humanistic approach, Collaborative/Therapeutic Assessment (C/TA), holds considerable promise and staying power. When combined with Measurement-Based Care (MBC), therapeutic processes and outcomes are enhanced. This chapter focuses on the integration of C/TA and MBC into clinical practice. It includes relevant theory and research, real-life applications and examples, and answers fundamental questions, like “Can mental health assessment and testing actually be collaborative and humanistic in nature?” and “As clinicians, why should we care about measuring clients’ treatment progress?” At the end of the chapter, illustrative graphs and verbatim scripts are provided for clinical use.

Historically, mental health assessment has been conceptualized as an objective means of gathering client information related to psychological functioning and possible diagnoses. Data are gathered via observation, clinical interviews, psychological tests, corroborative reports, and other data sources. Test scores are interpreted to minimize bias and integrated with relevant data, and detailed psychological reports are written (Finn & Tonsager, 1997). That has been standard practice. Standard practice has, however, been criticized by many clinicians. These clinicians eschew traditional information-gathering approaches, where the goal is to facilitate clinical decision-making, in favor of contemporary therapeutic ones, where the goal is to

W. E. Hanson (✉)
Concordia University of Edmonton, Edmonton, AB, Canada
e-mail: bill.hanson@concordia.ab.ca

H. Zhou
University of Alberta, Edmonton, AB, Canada

D. L. Armstrong
Alberta Health Services and University of Alberta, Edmonton, AB, Canada

N. T. Liwski
Blue Sky Psychology Group, and University of Alberta, Edmonton, AB, Canada

facilitate client insight and change (Dana, 1985; Finn, 2007; Finn & Tonsager, 1997; Fischer, 2000). These are not, mind you, small or insignificant matters, especially considering assessments' centrality to psychology.

Mental health assessment is indeed central to psychology and is a professionally distinguishing activity of clinical, counseling, and school psychologists. Insofar as assessment has treatment validity and clinical utility, it will survive. If it does not positively affect treatment and quality of care, it will not (Hanson et al., *in press*; Haynes et al., 2011; Meyer et al., 2001; Poston & Hanson, 2010). In their meta-analysis, Poston and Hanson (2010) concluded, "...assessment and testing practices should, as a professionally distinguishing clinical activity, rise from the ashes of past critiques and criticisms, Phoenix-like, and continue playing an important role in the profession generally and psychological treatment specifically" (p. 211).

This chapter focuses on a humanistic approach to mental health assessment and evaluation, Collaborative/Therapeutic Assessment (C/TA), and the integration of C/TA principles and procedures into Measurement-Based Care (MBC). It includes relevant theory and research, as well as real-life applications and examples. Additionally, it answers frequently asked questions like, "*Can psychological assessment and testing actually be collaborative and humanistic in nature?*" and "*How can test results be therapeutically (and ethically) integrated into clinical practice?*" The chapter also answers questions related to MBC like, "*As clinicians, why should we care about measuring clients' treatment progress?*" "*Doesn't MBC negatively affect treatment?*" and "*What is the best, most effective way to practice MBC?*"

In the first section, we describe our guiding frameworks: C/TA and MBC. In subsequent sections, we discuss clinical reasoning and our conceptual rationale for combining C/TA and MBC. Additionally, we discuss accountability issues, including various treatment contexts, therapist and client factors, and important cultural considerations. Then, we discuss basic C/TA and MBC processes and step-by-step guidelines. To make concepts concrete and explicit, we present a real-life case study with illustrative graphs and verbatim scripts. Scripts are provided because clinicians often feel ill-prepared about what to say and when to say it. Lastly, we offer concluding remarks, take-home points for stimulating research and practice, and succinct answers to the questions raised above.

Guiding Frameworks

Collaborative/Therapeutic Assessment (C/TA) and Measurement-Based Care (MBC)

Collaborative/Therapeutic Assessment (C/TA) is a well-established approach to mental health assessment and evaluation (Finn, 2007; Finn et al., 2012; Finn & Tonsager, 1997). It has a long history and is used throughout the world, albeit to varying degrees (Curry & Hanson, 2010; Hanson et al., *in press*; Jacobson et al., 2015; Zhou et al., 2020). It has been used successfully with a variety of psychological problems,

disorders, and complaints, including personality, mood, and psychotic disorders (e.g., Durosini et al., 2017; Finn, 2003; Hinrichs, 2016; Morey et al., 2010; Tiegreen et al., 2012), as well as **Attention-Deficit Disorder, eating disorders, neuropsychological problems, and other mental health issues.**

C/TA is a brief, semi-structured approach to mental health assessment. It is highly collaborative, client-centered, and represents a paradigm shift from traditional information-gathering (IG) approaches (Finn & Tonsager, 1997). IG approaches are geared toward therapists and contemporary therapeutic approaches, like C/TA, are geared toward clients. When it comes to collaborating with clients, counseling psychologists are frontrunners (Haverkamp, 2012). Haverkamp (2012, 2013) classifies clinical, counseling, school, and industrial/organizational (I/O) psychologists along two axes: the extent of client–clinician involvement/collaboration in testing (x axis) and the extent to which contextual data are considered in interpreting test results (y axis). As Fig. 17.1 illustrates, counseling psychologists involve clients extensively in the assessment process and, at the same time, carefully consider assessment and testing contexts and extraneous variables. The “counseling” quadrant on the lower right is not only consistent with C/TA but also our approach to Measurement-Based Care (MBC).

MBC is an evidence-based approach to clinical work (Lambert et al., 2001a, 2018). It represents a powerful combination of Evidence-Based Practice (EBP; APA Presidential Task Force on Evidence-Based Practice, 2006; Canadian Psychological Association, 2012) and its lesser-known counterpart, Practice-Based Evidence (PBE; Green & Latchford, 2012). The American Psychological Association (APA) and Canadian Psychological Association (CPA) recommend using MBC in day-to-day clinical practice (Lambert et al., 2018; Tasca et al., 2019). Notably, CPA recently

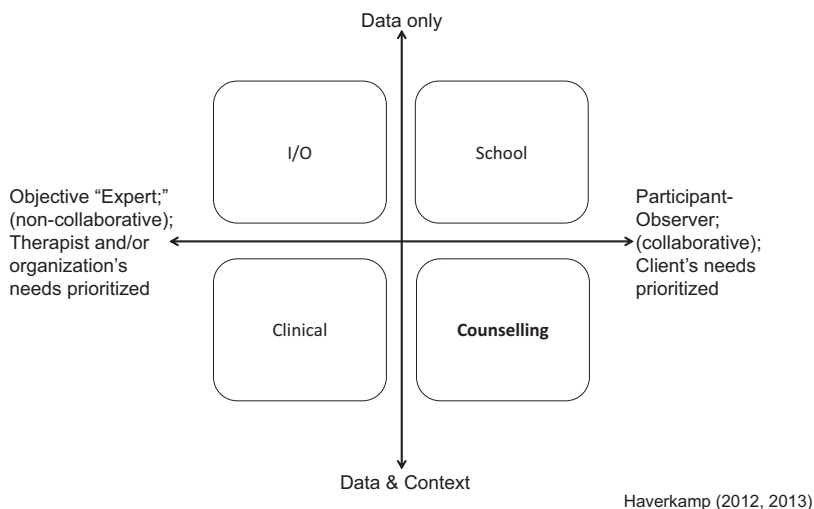


Fig. 17.1 Clinical, counseling, school, and industrial/organizational (I/O) psychologists’ approaches to collaborative, highly contextualized mental health assessment

formed a task force on MBC—or what they called “Outcome and Progress Monitoring” (OPM)—to provide policy guidance for psychologists in Canada. The task force reviewed research on the efficacy of OPM, as well as its implementation. Based on their review, the task force recommended that all Canadian psychologists be trained in OPM/MBC and use it regularly, that training programs and internships educate students about OPM/MBC, and that implementation of OPM/MBC should be ubiquitous. Finally, they recommended that ethical standards be revised to clearly emphasize use of OPM/MBC (Tasca et al., 2019). Taken one step farther, Pinner and Kivlighan (2018) believe psychologists need to evaluate the quality of services provided and empirically demonstrate clinical competence.

Essentially, MBC involves assessing and tracking session-by-session process-outcome data across clients. Although it is transtheoretical and transdiagnostic, we approach it humanistically, from a client-centered C/TA perspective. This approach is innovative and cutting edge. Although we have done it for decades and conducted extensive program evaluation on its effectiveness, we are not aware of any published studies on the topic, save for a few tangentially related studies on suicide risk assessment (Ellis et al., 2012; Ellis et al., 2017; Jobes, 2012; Jobes et al., 2005).

Still, C/TA may guide one’s clinical reasoning and judgment regarding MBC, especially considering their overlapping processes and commonalities. For example, they both involve psychological tests and measures, feedback and discussion of results, and treatment planning and intervention. However, instead of using heavy-duty personality, intellectual, or neuropsychological tests, MBC uses various screening tests and treatment monitoring systems, like the Outcome Questionnaire-45 (OQ-45), Clinical Outcomes in Routine Evaluation-Outcome Measure (CORE-OM), and the Behavior Symptom Identification Scale (BASIS-24).¹ They also sometimes use repurposed research measures, like the Session Evaluation Questionnaire (SEQ) and popular relational measures, like the Working Alliance Inventory (WAI; cf. Pascual-Leone & Andreescu, 2013; Pascual-Leone et al., 2014). Full stop: we believe there is significant alchemy between C/TA and MBC and, when combined, they coalesce into a complementary, highly transformative clinical experience.

Next, we elaborate further on this transformative process and discuss our rationale for combining C/TA and MBC.

Clinical Reasoning

Why Collaborative/Therapeutic Assessment (C/TA)?

C/TA humanizes mental health assessment and testing processes. Influenced by the humanistic movement of the 1950s, many clinicians were deeply troubled by the dominant medical model and traditional forms of assessment (Fischer, 2000; Gelso

¹Psychometrically sound measures also exist regarding clinicians’ attitudes toward MBC, including the Evidence-Based Practice Attitude Scale-Routine Outcome Monitoring (Rye et al., 2019) and the Monitoring Feedback Attitude Scale (Jensen-Doss et al., 2018).

et al., 2014). In response, one particularly dissatisfied psychologist, Dr. Connie Fischer, advocated for a paradigm shift (Fischer, 1970, 1972, 1978, 1985/1994, 2000). Ultimately, she aimed to make psychological assessment client-centered, urging it to become centrally helpful and growth-producing. Stated differently, she aimed to make assessment an intervention in and of itself. In Fischer's writings, she emphasized client-clinician collaboration, contextualized understanding of test results, and holistic descriptions of clients as individuals (Fischer, 1985/1994, 2000), which, coincidentally, ties back to Fig. 17.1 and counseling psychologists' approach.

Counseling psychologists have long-studied collaborative assessment approaches, even predating Fischer's seminal works (Duckworth, 1990; Gelso et al., 2014; Goldman, 1961, 1971; Lichtenberg & Goodyear, 1999). Bordin and Bixler (1946), for example, studied therapeutic effects of involving clients in test selection. They found positive results, including significantly increased engagement, responsibility-taking, enhanced client self-understanding, and increased compliance with lengthy testing batteries. Other supportive studies followed (Dressel & Matteson, 1950; Harrower, 1956; Luborsky, 1953; Goldman, 1961, 1971). It was counseling psychology's focus on client strengths and commitment to collaborative practice that inspired Fischer to later publish "The Testee as Co-Evaluator" (Fischer, 1970), which paved the way for future therapeutically oriented mental health assessment approaches, such as C/TA (e.g., Finn, 1996, 2007; Fischer, 1994, 2000; Gorske & Smith, 2009, 2012; Purves, 2002).

C/TA is informed by many psychological theories, including self-psychology, which emphasizes introspection and empathy (Kohut, 1977); intersubjectivity theory, which emphasizes idiographic, systemic, subjective, and phenomenological perspectives (Stolorow & Atwood, 1984; Stolorow et al., 1987); and humanistic psychology, which emphasizes mutual respect, collaboration, authenticity, and the equalization of power dynamics. It is also informed by phenomenological psychology, including a contextualized understanding of clients' unique perspectives, and Harry Stack Sullivan's interpersonal approach, which emphasizes client goals, respect for privacy/confidentiality, the clinician's participant-observer stance, and the potential for assessment to influence clients' self-system (APA, 2017; Finn, 2007; Finn & Tonsager, 2002; Fischer, 1979, 2000; Sullivan, 1953, 1954). Finn and Tonsager (1997) suggested collaborative assessment fosters client growth and change by addressing three basic human motives: self-verification, self-enhancement, and self-efficacy/self-discovery experiences. Claiborn and Hanson (1999) added that social influence processes also contribute to C/TA's positive therapeutic effects. Most recently, Kamphuis and Finn (2018) explored the efficacy of C/TA within the context of the evolutionarily informed theory of epistemic trust (ET) and epistemic hypervigilance (EH; cf. Fonagy et al., 2015).

One of C/TA's most prominent figures and developers, Dr. Stephen Finn (2007), believes C/TA assists with the development of clearer, more accurate, and more organized self-narratives that contribute to clients' abilities to understand and behave in new and different ways. The development of new, more adaptive self-narratives is the primary goal of C/TA, which is facilitated through the co-interpretation of test results within genuine, highly supportive therapeutic

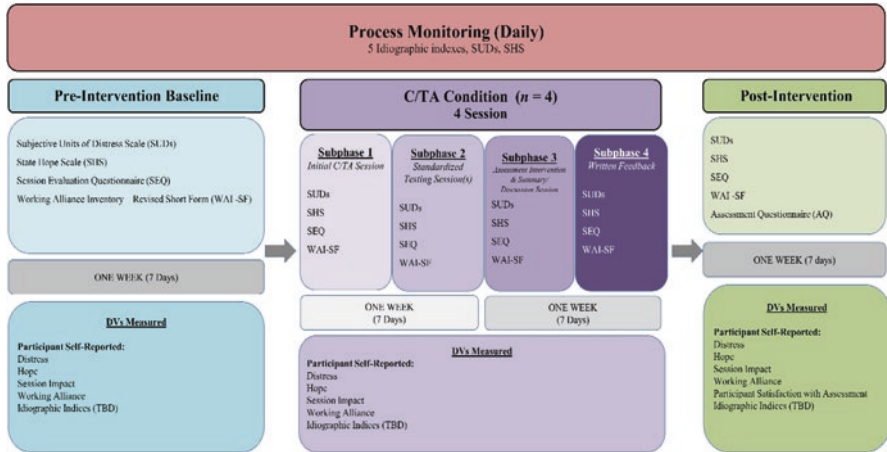


Fig. 17.2 Visual depiction of brief four-session C/TA approach. Clients complete clinically relevant and salient measures pre/post, a standardized testing battery (session 2), and collaboratively interpret results throughout. In this depiction, clients also complete process measures, like the SEQ and WAI, each session, which relate to MBC

relationships (Finn, 2003, 2007). The collaborative exploration of test results is an essential feature of the C/TA process (Finn & Tonsager, 1997). From this perspective, psychological tests—and for that matter, MBC measures—are “*empathy magnifiers*” that help clinicians maintain a “grounded nomothetic perspective on the client’s problems” (Finn & Tonsager, 1997, p. 375), while also facilitating personal growth (Finn, 2007; Finn & Tonsager, 1997). (see Fig. 17.2)

C/TA is guided by five core values, including collaboration, humility, openness and curiosity, compassion, and respect (Finn, 2009). These values mirror those of counseling psychologists (Bedi et al., 2011, 2012; Gelso et al., 2014). Specifically, Gelso et al. (2014) note that counseling psychology (a) emphasizes client strengths and optimal functioning; (b) focuses on the whole person, with particular emphasis on life-span development and vocational growth; (c) advocates for social justice, maintains ongoing awareness of the importance of environmental context and culture; (d) concentrates on brief, educational, and preventative interventions; and (e) espouses the scientist–practitioner model.

C/TA Processes and Outcomes

C/TA “techniques” are powerful because they focus on helping clients ‘rewrite’ stories they tell themselves about themselves (which psychologists usually call *identity*) when those stories have become problematic or incomplete in important ways” (Finn, 2007, p. 126). Finn and Kamphuis (2006) suggest C/TA is ideally used with

clients who voluntarily engage in the assessment process, openly seek new ways of being and thinking about themselves, and who have had experiences with other treatment modalities (e.g., medication trials, psychotherapy) that were ineffective or unhelpful. These are important client factors. Additionally, and preferably, clients would not have had prior negative testing experiences, have adequate emotional support systems, and be “cognitively and psychologically able to take part in a process that invites self-observation, curiosity, and introspection” (Finn & Kamphuis, 2006, p. 190). Regarding self-observation and curiosity, Finn (2007) encourages clients to come up with questions they would like answered from testing. He also recommends exploring past assessment-related hurts.

C/TA is supported by hundreds of peer-reviewed studies. Research examining collaborative, therapeutically oriented assessment practices has accumulated since the 1940s. At this time, there are over 200 published articles, book chapters, and dissertations/theses related to C/TA processes and outcomes, the vast majority of which support its use clinically (e.g., Aschieri et al., 2016; Hanson & Poston, 2011; Poston & Hanson, 2010). Most studies focus on process variables (e.g., working alliance) and outcomes of C/TA (e.g., symptom reduction). According to Aschieri et al. (2016), researchers concentrate mostly on clinical applications of C/TA, including its use with adults, couples, families, and of particular relevance to this book, children and adolescents (Tharinger et al., 2008; Tharinger et al., 2011; Tharinger et al., 2012). Interested readers are referred to Dr. Deborah Tharinger’s excellent program of research. Importantly, C/TA has been studied in diverse clinical settings, including outpatient mental health, university-based counseling clinics, in-patient settings, and forensic units. Specific applications of C/TA focus on a variety of diagnoses, psychological problems, and client complaints, as well as the use of C/TA with clients who are ethnically and culturally diverse and clients from around the world (Hanson et al., *in press*).

Research studies have found positive effects regarding client well-being, self-esteem, and symptomatic factors, in addition to positive contributions to clinical processes, such as working alliance (Aschieri et al., 2018; Aschieri et al., 2016). Both quantitative and qualitative designs are used in C/TA studies, with a large emphasis on descriptive case studies (e.g., Brown & Morey, 2016; Finn, 2003; Hinrichs, 2016). Recently, there has been a move toward inclusion of quasi-experimental single-case designs (e.g., Aschieri & Smith, 2012; Smith et al., 2010; Wolf, 2010). The literature base also includes experimental designs, such as RTCs (e.g., De Saeger et al., 2014) and meta-analyses (e.g., Poston & Hanson, 2010). De Saeger et al.’s RCT reports compelling evidence regarding C/TA’s positive effects ($d = 0.40\text{--}0.68$) and mirrors previous meta-analyses. For example, in Poston and Hanson’s (2010) meta-analysis, therapeutically oriented assessments demonstrated clinical effectiveness with aggregate effect sizes hovering around 0.40 (Cohen’s d). They also found effect sizes of $d = 1.11$ for process variables. Overall, results suggest that therapeutically oriented assessment models positively affect symptoms of distress (Aschieri & Smith, 2012; Finn & Tonsager, 1992; Little, 2009; Newman & Greenway, 1997; Wolf, 2010), enhance therapeutic relationships (Ackerman et al., 2000; Hilsenroth et al., 2004) and engagement in treatment (Hilsenroth et al., 2004),

and increase overall satisfaction with treatment (Little, 2009; De Saeger et al., 2014; Wolf, 2010). Clinical benefits like these are equally important in MBC, both from preventative and intervention standpoints.

Prevention and Intervention

Measurement-Based Care (MBC) in Clinical Practice

MBC is not only of interest to professionals, but also the lay public, as indicated by recent articles in the *Globe and Mail* (Andersson, 2018) and *The Atlantic* (Rousmaniere, 2017). Andersson's newspaper article called it a "revolution," emphasizing the innovative nature of this largely preventative approach to mental health care. Below, we provide a historical overview of MBC and its attendant research. We also discuss important therapeutic elements of MBC.

History and Empirical Basis

MBC is an umbrella term covering several related concepts, including Feedback-Informed Treatment (FIT; Prescott et al., 2017), Routine Outcome Monitoring (ROM; Howard et al., 1996; Lambert, 2017), Progress Monitoring (PM; Tasca et al., 2019), and Patient-Focused Research (PFR; Howard et al., 1996). Historically speaking, MBC arose out of PFR. PFR is a well-known, long-standing perspective that makes clinical research more relevant to practice (Howard et al., 1996). PFR answers questions directly related to clients and collects data on their individualized progress over the course of treatment. In this way, data are highly relevant and informative—not only for clinicians but also clients (Lambert et al., 2001a).

From its inception, MBC had another primary purpose, namely, to accurately identify and prevent client deterioration. Although there is a large, significant evidence base establishing the efficacy of psychotherapy in general (Smith et al., 1980), researchers consistently find that 5–10% of clients deteriorate (Lambert, 2013). MBC helps clinicians identify clients who are at risk of deteriorating early on. Identification of deterioration is done by comparing outcome monitoring scores with expected recovery curves. At-risk clients tend to exhibit a lower rate of expected change, and such information is fed back to the clinician (Lambert et al., 2001b). Treatment for these so-called not-on-track (NOT) clients can be modified to prevent negative outcomes. MBC is especially important for this purpose because clinicians are notoriously bad at identifying clients that are at greatest risk of deteriorating (Hannan et al., 2005; Walfish et al., 2012).

Researchers have investigated the use of MBC through numerous clinical trials. An experimental randomized controlled trial (RCT) for MBC has commonalities in

its design. Clients are randomly assigned to a control/treatment-as-usual (TAU) group and an intervention group. For the TAU condition, clients participate in outcome monitoring, but this information is not provided to the therapist. In the intervention condition, therapists receive session-by-session feedback on client progress. Often, feedback is in the form of a categorized signal. For example, in the OQ-45 system, therapists receive a green, yellow, or red signal. Green indicates the client is on-track (OT) and no modifications are needed. Yellow indicates the client shows low-level signs of a negative outcome. And red indicates the client shows signs of a high likelihood of negative outcome (Lambert et al., 2018). Lambert and colleagues wisely developed supplemental clinical support tools (CSTs) to help clinicians intervene when red NOT clients are identified. CSTs typically include assessments of therapeutic alliance, social support, motivation, and stressful life events. Some clinical trials included use of CSTs as part of the intervention, as well (Harmon et al., 2007; Whipple et al., 2003).

Across MBC studies, common dependent variables are self-reported symptoms, self-reported levels of distress, rates of change, likelihood of deterioration, and likelihood of clinically significant change (de Jong et al., 2012; Lambert et al., 2001a, 2002; Lutz et al., 2015). Early clinical trials were highly promising for identifying NOT clients, finding moderate effect sizes in support of MBC ranging from Cohen's $d = 0.40$ – 0.70 but only for NOT clients. There were no significant differences for clients deemed on track. This finding bears repeating: on-track clients did not benefit. This finding is perplexing and, we believe, relates to the way in which MBC is traditionally practiced. As of yet, clinicians and researchers have not approached MBC from a C/TA perspective.

Numerous clinical trials of MBC have been conducted, including couples therapy (Anker et al., 2009), group therapy (Schuman et al., 2015), in-patient and severe mental health (Probst et al., 2014; de Jong et al., 2018), and internationally (Amble et al., 2015; She et al., 2018). Several systematic reviews and meta-analyses of MBC have also been conducted (Kendrick et al., 2016; Lambert et al., 2018). These investigations established a strong empirically based foundation supporting MBC and its effectiveness.

The most recent meta-analysis of MBC included 15 studies using the OQ-45 for ROM and 9 studies using the PCOMS (Lambert et al., 2018). With the OQ-45 studies, 11 out of 15 (73%) found a significant positive effect of MBC with an effect size of $SMD = 0.14$. For the subsample of NOT clients, the effect size was larger ($SMD = 0.33$). There was also evidence that MBC led to significantly decreased likelihood of deterioration and increased likelihood of clinically significant improvement. With the PCOMS studies, six out of nine (67%) found a significant MBC intervention effect ($SMD = 0.40$). Although there was no evidence of significantly decreased likelihood of deterioration, MBC significantly increased the likelihood of clinically significant improvement. Lambert et al. (2018) also listed eight previous reviews and meta-analyses of MBC. They concluded that most of these reviews found positive results supporting MBC except for the 2016 Cochrane Review of MBC for common mental disorders (Kendrick et al., 2016).

Clearly, rigorous studies of MBC have been conducted, and researchers are to be commended for their efforts. That said, additional research is needed; research that attends to important clinical processes—not just outcomes—and research that is theoretically based. Contextualized Feedback Intervention Theory (CFIT; Bickman et al., 2006), which is geared toward therapists' actions, is a potentially viable theory. Another is Ryan and Deci's (2000) Self-Determination Theory (SDT), which relates to "people's inherent growth tendencies and innate psychological needs that are the basis for their self-motivation and personality integration, as well as for the conditions that foster those positive processes" (p. 68; see also Ryan & Deci, 2008). Both theories are promising, but so, too, is C/TA. Studying MBC from a C/TA perspective necessitates progressive investigation of client experiences and sharing process-outcome data with them, not just therapists. Providing feedback to clients—with therapeutic intent—has long been considered important in clinical practice (cf. Goldfried, 1980). Again, we believe the lack of more pronounced positive findings for clients that are on track relates to the predominant therapist-centric information-gathering approach to MBC, as opposed to the client-centered C/TA approach (Hanson, 1999).

Fortunately, a few studies regarding MBC processes have been conducted and published. They deserve special attention here, as they shed much-needed light on current MBC practices.

Studies of the MBC Process

MBC processes vary considerably across clinicians and clinical contexts, and clinicians are differentially effective at it. Currently, there is no consensus on the right, or best, way to do it (Wampold, 2015). In RCT investigations of MBC, after feedback is provided, clinicians' use of that information is conspicuously absent in the literature (Lambert et al., 2001b). There have been recent efforts, however, to dismantle the effect of MBC, with researchers proposing that improved therapeutic alliance mediate positive effects of MBC. These studies have been primarily secondary analyses. In actuality, findings have been mixed and inconclusive (Brattland et al., 2019; Mikeal et al., 2016). More research is needed from this perspective. Alas, we believe innovation is sorely needed and current MBC practice needs to be overhauled. Researchers need to reset and, at a minimum, clearly delineate (and document) therapists' use of MBC in clinical trials.

MBC researchers have, of note, investigated stakeholders' attitudes, perceptions, and acceptability through qualitative methodologies. Several studies have investigated clinician and client experiences using MBC through interviews and focus groups (Hovland et al., 2020; Sundet, 2012, 2014; Unsworth et al., 2012). Generally, these studies have reported widespread acceptability of MBC practices among clinicians and clients. There is also clear acknowledgment of barriers to MBC, such as time and resource burdens, and clinician anxiety about getting feedback. That said, clinicians often use MBC scores to initiate conversations about important therapy

processes (Solstad et al., 2019). Solstad and colleagues recently reviewed 16 qualitative studies of clients' MBC experiences and identified themes. Clients reported, for example, MBC helps focus sessions, further engages them in the treatment process, and stimulates therapeutic conversations with clinicians. They also expressed feeling more involved in sessions when using MBC. Interestingly, but not surprisingly, clients expressed initial suspicion of clinicians' motives for using MBC. They doubted measures could capture complexities of their experiences. These findings make good sense and resonate with our clients' experiences and the call for a C/TA approach to MBC.

As noted above, the "best" MBC approach remains a mystery. We simply do not know the best, most effective way to do it. Still, we believe past approaches fall short of MBC's full potential, especially regarding clients that are "on track." Perhaps their clinical trajectories can be steepened further and they can indeed benefit from MBC (e.g., decreased symptomology, increased hope, etc.). Greater clarity is needed regarding how clinicians turn MBC data and feedback into improved outcomes for all clients—not just clients who are deteriorating or progressing slowly. Feedback from psychological tests and measures can, we know, facilitate meaningful client change (Finn, 2007; Finn & Tonsager, 1997; Hanson et al., *in press*; Hanson & Poston, 2011; Meyer et al., 2001; Poston & Hanson, 2010). In our collective experience, decades of ongoing program evaluation of MBC practices suggest positive effects on 95% of clients, with end-of-treatment effect sizes around 1.00. We noticed that by integrating MBC and C/TA into clinical work, we achieve a 0.20 boost in overall treatment effectiveness. Little is known, however, about other clinicians' use of MBC.

To help address that knowledge gap, Zhou (2021) qualitatively investigated clinicians' ROM-related practice. He conducted multiple case studies of experienced ROM users to better understand how they integrate ROM into practice and use it to develop clinical expertise. Results showed that clinicians most used the PCOM's Outcome Rating Scale (ORS) and Session Rating Scale (SRS). They followed standardized instructions for administration and scoring but, additionally, they asked clients to elaborate on the meaning of their scores, which is consistent with a C/TA principles and practices. Participants also emphasized the importance of establishing a sense of safety to give feedback by thoroughly introducing the nature and purpose of the measure and encouraging clients to give honest feedback, both in completing measures and discussing results.

These findings illuminated how some clinicians use ROM to engage clients and enlist their collaboration in clinical practice. They see ROM as helping the therapeutic alliance and empowering clients, which, again, is consistent with C/TA. This is done by tracking changes in scores between sessions and being attentive to trends in outcomes. If there is a concerning trend in session-by-session outcomes (i.e., a pattern indicative of deterioration) ROM clinicians discuss both reevaluating their treatment plans and sharing this information with clients to facilitate conversations about progress. They have similar conversations when they notice worsening scores on the alliance. Clinicians describe, for example, generating graphs of client's outcome scores over time and presenting them to clients directly to discuss in therapy.

This also serves to jumpstart discussions about changing the therapy approach or terminating therapy, depending on the pattern exhibited. Clinicians also pay close attention to discrepancies between clients' scores and how they present in session. These discrepancies potentially lead to productive discussions about therapeutic processes. Finally, ROM clinicians in this study discussed how administering ROM measures served as an intervention, which is, perhaps, the central point of this chapter.

Given C/TA's theoretical and empirical bases, humanistic approach to mental health assessment and evaluation, and overlapping processes and procedures, we believe it is highly relevant to MBC—both in terms of augmenting MBC's efforts to prevent client deterioration and enhance its capacity as an intervention.

Approach to Mental Health Assessment and MBC

As noted earlier in the chapter, the C/TA approach has a semi-structured flow consisting of up to six steps: (a) initial session, (b) standardized testing session, (c) assessment intervention session, (d) summary/discussion session, (e) provision of written feedback, and (f) follow-up session. The initial session is a clinical interview focusing on what the client is wondering about themselves, as well as any traditional referral questions. The clinician works collaboratively with the client to develop one or more assessment questions. The standardized testing session adheres closely to administration requirements of tests used, but with extra attention given to tests that help answer clients' assessment questions. The assessment intervention session is the most distinctive aspect of the approach, where the assessor attempts to elicit/bring about the client's difficulties in the session (e.g., tendency to want to "yay-say" and/or please others). This process embodies the feedback-as-intervention concept, but it is not always enacted in C/TA. In the summary/discussion session, the clinician carefully orders the presentation of results to make it easier for clients to process and integrate into their identity/self-perception. This process follows Swann's (1997) self-verification theory, where findings that verify clients' present thinking are presented first and findings that are most discrepant from their current self-perceptions are presented last. The clinician also engages the client in a collaborative dialogue, asking them to agree, disagree, revise, and give examples related to assessment findings. Sometimes, assessment findings are also discussed in relation to client pre-estimates of test scores (Hanson, 2013). In the provision of written feedback, the client is given a short letter summarizing answers to their assessment questions rather than a traditional psychological assessment report. Finally, follow-up sessions may be needed, where the client returns after a few months to see how the findings have been integrated into their life (Finn, 2007).

These C/TA steps extend easily to MBC. Measures like the OQ-45, SEQ, and WAI can, for example, be co-interpreted in sessions with clients and used in ways that are similarly therapeutic. Openly discussing MBC data with clients every session can be empowering, thought provoking, and ultimately transformative (Hanson, 1999).

Our approach to MBC is straightforward and based on C/TA principles and procedures. Client-based process-outcome data are collected, analyzed, graphed, collaboratively interpreted, and integrated into treatment from start to finish. The goal is to create a continuous, interactive, and collaborative feedback loop between client and therapist. Between four and six measures are used every session. Although that may sound like a lot, or too many, it is manageable once therapists get the hang of it. Then, as they develop increased skill and confidence, they can pick and choose measures on the fly, score and graph them in the moment, and share them with clients. Doing so mobilizes the change process, strengthens and accelerates the development of the working alliance, and instills hope in clients. Clients often report feeling empowered and that therapy is working, which are critically important aspects of client self-determination (Ryan & Deci, 2008).

Below, readers will find practical verbatim scripts reflecting what we typically say in session. The first session sets the stage and socializes clients to MBC. There is a role-induction element to the process. Consequently, we recommend including MBC-related practices and expectations in informed consent statements, so clients know what to expect and what is expected of them.

Getting Started

First session with about 10 min left: *“Before we go today, I want to mention one more thing: every week, I use brief therapy measures with clients. I think of them as mini check-ins and gauging your psychological ‘vital signs.’ They let me know how you are doing week-to-week and, quite often, trigger deep and meaningful discussions. They are an important part of treatment and help me know we’re on track and meeting your needs and goals. They can enrich your experience and give me a heightened sense of your thoughts, feelings, and experiences. I don’t want to overwhelm you, though. I know you’ve been through a lot already. But, if you don’t mind, let’s see how it goes.”*

If they agree, add something like: *“Very good, thank you. Have you ever taken psychological tests or measures before?”* Briefly discuss and process past experiences, especially past hurts. A common past hurt is not receiving test feedback, which can be queried if it is not self-disclosed. After processing all past hurts say: *“Most of the measures I use are short and don’t take much time; maybe a few minutes or so. After taking them, we’ll work together to make sense of the results. I’ll show them to you and talk about what they might mean and how they relate to therapy.”* Although rare, clients sometimes do not agree to take the measures. In our experience, about 5% of clients say, *“No, I’d rather not.”* That is fine and appropriately assertive. We always honor and respect it, as it is within the spirit of C/TA to, among other things, never argue with clients. In these instances, we usually say, *“Okay, that’s totally fine. No problem. We won’t use them for now. But, if you don’t mind, I’d like to revisit the possibility again later. Let’s see how it goes.”* Relatedly, some research suggests MBC is not unilaterally appropriate for all

clients (e.g., clients who are actively psychotic; de Jong et al., 2018; Errazuriz & Zilcha-Mano, 2018; van Oenen et al., 2016).

Assuming clients agree, however, and assuming it is clinically appropriate, say “*I have some questions I always ask like, ‘How is our relationship going? Are we moving too fast or too slowly? Are your basic psychological needs being met in session?’ ‘Are you progressing and feeling better, as expected?’*” And finally, “*What about you, I’m sure you have questions, too.*” Use prompts as necessary and validate clients’ lack of questions, as it often catches them off guard. They are not, unfortunately, used to being asked what they want to know. If they cannot come up with questions, give them examples from other clients’ questions and/or tie them back to their presenting problems.

At this point, therapists can administer whichever tests and measures they believe to be most relevant and helpful. In the first session, we typically use the Session Evaluation Questionnaire (SEQ; Stiles, 1980; Stiles & Snow, 1984a, 1984b), Multidimensional Scale of Perceived Social Support (MSPSS; Zimet et al., 1998), Goals Scale (Snyder et al., 1996), and Warwick–Edinburgh Mental Well-Being Scale (WEMWBS; Stewart-Brown & Janmohamed, 2008). The SEQ is scored weekly, graphed visually, and shared with clients week-to-week. MSPSS, Goals Scale scores, and well-being scores provide an important baseline, and clients can see how they compare to others (normatively), and how they compare to themselves over time (ipsitively; pre-/post-). Additionally, other measures are used regularly, including the Working Alliance Inventory (WAI; Horvath & Greenberg, 1986) and the Counselor Rating Form–Short (CRF-S; Tracey et al., 1988).

Therapists should attend closely to the measures used. As Truscott (2019) points out, “We ought to take great care to measure what matters, because what is measured is what will matter” (p. 17). For us, both process and outcome measures matter; outcome measures alone are not enough. As we always say, “*attend to process and outcomes will follow.*” From a process standpoint, much can be learned from Wampold and Imel (2015). In their latest book, they advance process factors (e.g., collaboration, empathy, alliance) as key therapeutic elements (see Fig. 17.3). For many clinicians, this figure is enlightening and, to be honest, unsettling, as it calls into question widely held beliefs about therapeutic approaches being most important.

According to Wampold and Imel (2015), therapist–client collaboration (blue circle), therapist empathy, working alliance, and genuineness/positive regard matter most in treatment—much more so than specific therapeutic approaches, like Cognitive-Behavior Therapy (CBT). These are critically important therapeutic elements, which positively affect change and treatment outcomes. As can be readily seen in Fig. 17.3, specific treatments and ESTs do not account for much variance in outcome, as there is little-to-no difference between, for example, CBT and dynamic therapy (red circle). Similarly, there is virtually no difference—or meaningful effect—when it comes to specific ingredients, like therapy techniques. Additionally, much can also be learned from Tasca et al. (2018) regarding publicly funded psychotherapy in Canada, where these scholars emphasize “process” and discuss the importance of various client and therapist factors, as well as progress monitoring.

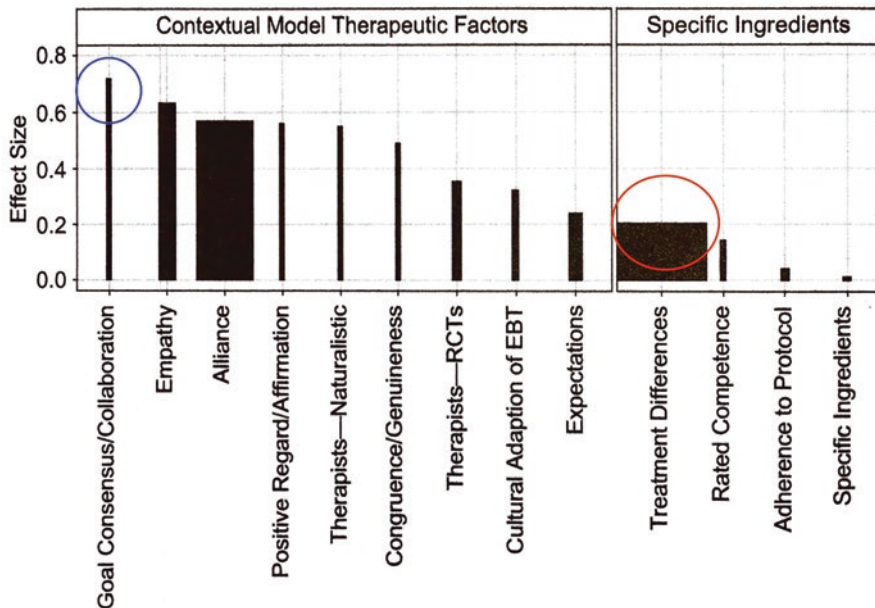


Fig. 17.3 Average aggregate effect sizes of therapeutic factors (Contextual Model of Psychotherapy) and specific ingredients (Medical Model of Psychotherapy; Wampold & Imel, 2015)

MBC and C/TA can be used clinically with a wide range of problems. It can also be used with a wide range of clients, including children, adolescents, emerging adults, adults, and older adults. For demonstration purposes, we chose a teenage client, whom we will call “Alex.” We chose this case because it is typical and representative of the positive therapeutic effects seen when MBC and C/TA are combined clinically.

Case Study

The Case of Alex²

Alex is a White/European–Canadian teenager. She was born and raised in Western Canada, which is also where she graduated high school. She intends to go to university and become a registered occupational therapist. At the time of treatment, she

²“Alex” is a pseudonym. Although she is an actual former client—and all process-outcome data are real—potentially identifying information was changed significantly to preserve anonymity and client confidentiality. Alex gave permission to be included in this case study for illustrative purposes.

was diagnosed with Ewing sarcoma, a rare bone cancer. Cancer treatment was extensive, involving multiple surgeries, dozens of chemotherapy sessions and radiation treatments, marker tattooing, and numerous prescription medications.

Understandably, she was having difficulty adjusting to her quote-unquote “new normal” and self-referred for therapy. In her words, she was “lost” and began experiencing severe “anxiety, panic, doubt, crushing depression and loneliness... the fear was unbearable.” She said she “needed tools to deal with the mess called my life.” She was seen seven times over seven months at a large Western Canadian psychosocial oncology outpatient clinic. At intake, she was profoundly sad, anxious, and angry; clearly demoralized. Additionally, she reported maintenance insomnia, little-to-no social support, and low self-esteem. There were no obvious signs or symptoms of debilitating or serious psychopathology. Of note, she attended closely to some important stress buffers, like exercising regularly and eating nutritiously, but neglected others, like sleep hygiene and social contact. In session, Alex was engaged, notably introspective, and self-reflective. She attended every session as scheduled and participated actively. Based on the Rokeach Values Survey, her identified values included mental and physical health, family security, taking care of loved ones, inner peace and harmony, and being ambitious/hard working. She said she had not taken psychological tests or measures before but expressed interest in doing so. Her personalized assessment/MBC questions related to feelings of competence, dependency, and emotional well-being. At the time of treatment, she was not taking psychotropic medications.

With Alex, her psychologist took an integrative therapeutic approach, which involved elements of client-centered/humanistic therapy, Acceptance and Commitment Therapy (ACT), and C/TA. From the outset, MBC was emphasized and enacted in treatment. Importantly, Alex saw her psychologist as credible and a culturally salient healer, per Counselor Rating Form-Short subscale scores of 6/7 (Interpersonal Attractiveness), 6/7 (Expertness), and 7/7 (Trustworthiness), which were obtained after the second session.

As can be seen in Fig. 17.4, sessions were appropriately paced. Sessions 1, 2, 5, 6, and 7 were not only rated as relaxing and comfortable, but also powerful and effective. When sessions are rated like these, they are referred to as “smooth sailing” (Stiles et al., 2002, p. 327). Although Session 3 was highly effective, Alex was notably uncomfortable, exhibiting uncharacteristic handwringing, rapid speech, and tearfulness. This session focused on her boyfriend and their strained relationship. Session depth is, by the way, an important positive predictor of therapy outcome (Stiles et al., 2002). Session 4, in contrast, was much less effective. Interestingly, that session focused mostly on relaxation and mindfulness techniques. Historically speaking, we have noticed that technique-based sessions are rarely rated as powerful or helpful. This observation fits with Wampold and Imel’s (2015) conclusions.

Throughout, Alex and her psychologist had a strong therapeutic relationship, as evidenced by WAI scores obtained after the third session (6.25/7 goals scale average; 6.25/7 task scale average; and 6/7 emotional bond scale average). They clearly saw eye-to-eye on the goals and tasks of therapy and were on the same page clinically.



Fig. 17.4 Session Evaluation Questionnaire (SEQ). SEQ scores measure the extent to which clients perceive therapy sessions to be deep and powerful (Depth score), as well as relaxed and comfortable (Smoothness score). Session number is indicated above each point on the graph

Alex's basic needs of autonomy, competence, and relatedness were met in therapy, as well, evidenced by Basic Need Satisfaction Scale in Relationships/Therapy scores (BNSSiR adapted; La Guardia et al., 2000) scores (Fig. 17.5). These needs were not met, however, in her romantic relationship, particularly her need for autonomy. She said her boyfriend was controlling and routinely dismissive and uninterested in her mental and physical well-being, despite her life-threatening cancer diagnosis.

Pre- and posttreatment, there was meaningful and measurable improvement in Alex's perceived social support (MSPSS; Fig. 17.6) and overall hopefulness (Goals Scale; Fig. 17.7). Posttreatment, Alex's general mental well-being score fell within high-average ranges for clinical populations (WEMWBS; Fig. 17.8). Essentially, after seven MBC-based therapy sessions, Alex became less demoralized and more hopeful, focused on self-care, self-confident, and generally more grateful, saying:

I have learned what it feels like to be supported, what my values are and how important it is to live those values, what my needs are and how to address those needs... my anxiety is under control... I have a new normal, focusing on what is good for me while building my social network. Fear is still present, but I feel empowered to manage it... I take smaller steps and have learned to be grateful. I know about boundaries and how to be in a safe environment.

Therapy was mutually terminated after the seventh session. She ended saying, "Everyone wins with psychological counselling."

We believe this case exemplifies the benefits of MBC and C/TA. This belief was supported by Alex's unprompted verbal report last session. She said the measures—and the way in which they were discussed—were extremely helpful. She also said

Basic Need Satisfaction Scale in Relationships/Therapy

When I am in counselling...	Not		Somewhat				Very
	True at all			true			true
1. I feel free to be who I am.	1	2	3	(4)	5	6	7
2. I feel like a competent person.	1	2	3	(4)	5	6	7
3. I feel cared about.	1	2	(3)	4	5	6	7
* 4. I often feel inadequate or incompetent.	1	2	3	(4)	5	6	7
5. I have a say in what happens and I can voice my opinion.	1	2	3	(4)	5	6	7
* 6. I often feel a lot of distance between myself and the therapist.	1	2	3	4	5	(6)	7
7. I feel very capable and effective.	1	2	3	(4)	5	6	7
8. I feel close with my therapist.	1	2	3	4	5	(6)	7
* 9. I feel controlled and pressured to be certain ways.	1	2	3	(4)	5	6	7

*Reverse scored

Basic Psychological Needs (met)	Average In Session Score (circled scores)	Average at Home Score (x's)
Autonomy/Independence	6.7	4.0
Competence	5.7	4.0
Relatedness/Connection	6.3	3.7

Fig. 17.5 Basic Need Satisfaction Scale in Relationships/Therapy (BNSSiR adapted). Higher scores represent greater feelings of autonomy, competence, and connection

she enjoyed taking them and looked forward to discussing weekly scores and graphs. Each session, Alex reflected deeply on scores and graphs. Of note, just taking the measures provided powerful therapeutic discussions. For example, Alex became tearful while taking the social support measure. When discussing it, she revealed for the first time that, while she used to experience tremendous support from her boyfriend, she does not now. It was a poignant therapeutic moment and insight for Alex, and something she and her psychologist revisited many times over the course of treatment (Fig. 17.8).

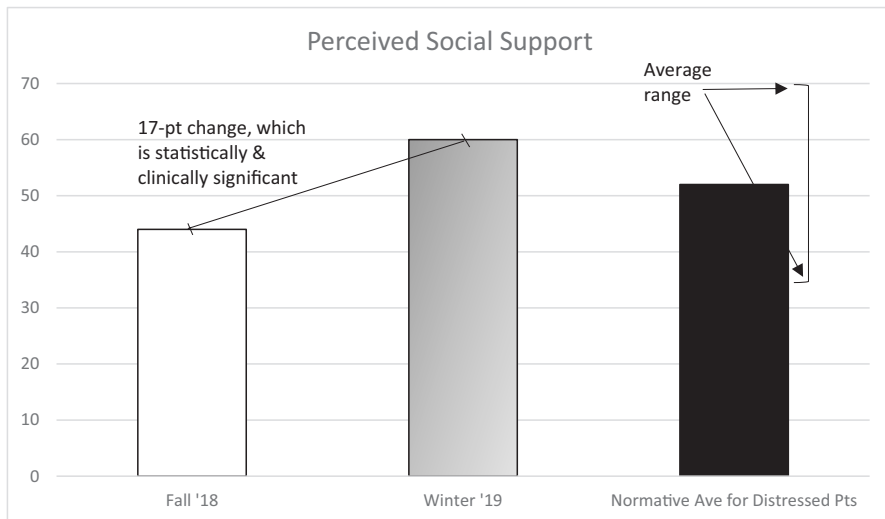


Fig. 17.6 Multidimensional Scale of Perceived Social Support. Higher scores reflect greater perceived support. Scores presented are total scores, which include three subscale scores (Friends, Family, and Significant Other)

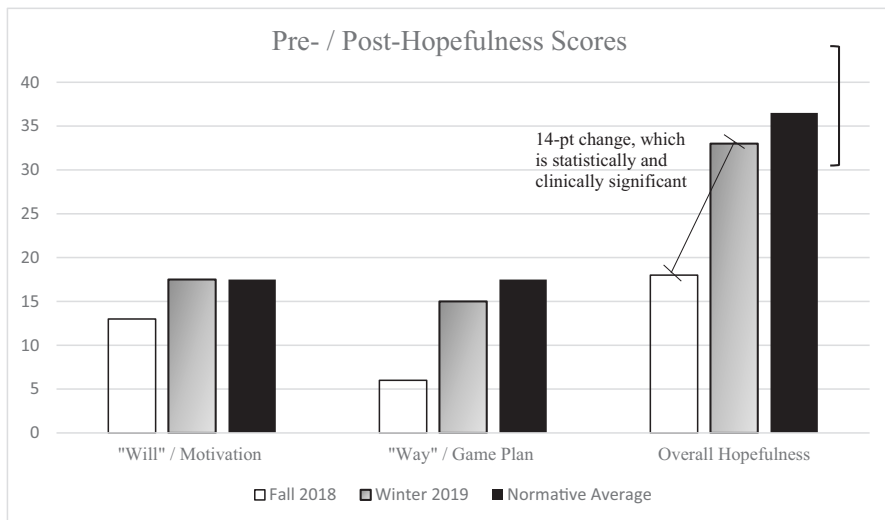


Fig. 17.7 The Goals Scale, or State Hope Scale, measures two aspects of hopefulness: the will and the way. Higher scores indicate greater hopefulness. The bracket on the top right-hand side of the figure represents the average range of hopefulness in the general population, within which Alex's posttreatment total score falls

Short Warwick-Edinburgh Mental Well-Being Scale

	None of The time	Rarely	Some of The time	Often	All of the time
1. I've been feeling optimistic about the future.	1	2	3	4	5
2. I've been feeling useful.	1	2	3	4	5
3. I've been feeling relaxed.	1	2	3	4	5
4. I've been dealing with problems well.	1	2	3	4	5
5. I've been thinking clearly.	1	2	3	4	5
6. I've been feeling close to other people.	1	2	3	4	5
7. I've been able to make up my own mind about things.	1	2	3	4	5

Clinical Average/Normative Range Alex's Post-Tx Score

Fig. 17.8 Warwick–Edinburgh Mental Well-Being Scale (WEMWBS). The WEMWBS is an empirically based, widely used measure of well-being in the general population, though norms for clinical populations have been developed. It produces a single total score, with higher scores indicating better well-being

Conclusion

Mental health assessment and evaluation are at a crossroads, particularly in counseling psychology and allied fields. Traditional information-gathering approaches have waxed and waned over the years and, in some cases, experienced backlash. However, a contemporary approach, Collaborative/Therapeutic Assessment (C/TA), has considerable promise and staying power. Likewise, Measurement-Based Care (MBC) also has considerable promise and staying power, especially if it is approached from a C/TA perspective.

In this chapter, we pushed the envelope and proposed an innovative, though largely untested, approach to MBC. In psychology, data and rigorous research are prioritized over clinical experience and anecdotal evidence—and rightly so. Evidence quality is weighted and hierarchical, ranging from RCTs at the top to case reports, program evaluation and, at the bottom, anecdotal evidence. Although we have researched and practiced MBC and C/TA for years, we are not aware of any published studies on this combined approach, and certainly not any RCTs. Empirically speaking, our approach is based on case reports, anecdotal evidence, personal experience (with client feedback, mind you), as well as over 20 years training doctoral students in C/TA and MBC. Across hundreds and hundreds of clients, we consistently see significant pre–/post-effect sizes around 1.00, which surpass general clinical outcome data regarding treatment effectiveness (cf. Wampold & Imel, 2015) and studies of MBC. We also see similar effect sizes in clinical practice and trainee development, when combining C/TA and MBC.

From our perspective, MBC is currently practiced suboptimally and a seismic shift is needed in process and implementation. Little-to-no research has been conducted on how to optimally practice MBC (Bargmann & Robinson, 2012; Zhou, 2021). As pioneers on this front, we are emboldened by Epictetus' apt quote, "If you want to improve, be content to be thought foolish and stupid." Are we foolish or stupid? Some psychologists may think so, but we are not. We are content. Our MBC practices are fully informed, intentional, and theoretically and empirically based. To improve, MBC researchers and clinicians must rethink the role of process-outcome feedback in mental health assessment and treatment. After all, feedback is an intervention in and of itself—it does not just inform treatment. It is part-and-parcel of treatments' "common factors" and an active therapeutic element (Goldfried, 1980; Wampold & Imel, 2015). And as Poston and Hanson (2010) noted, "Those who engage in assessment and testing as usual may miss out, it seems, on a golden opportunity to effect client change and enhance clinically important treatment processes" (p. 210). Those who engage in MBC as usual may miss out, too.

Being a good scientist means, among other things, being simultaneously open-minded and skeptical (Sagan, 1995). Clinicians are encouraged to be open-minded and test our ideas in clinical practice, and researchers are encouraged to be skeptical and test our ideas in the lab. A 2×2 factorial RCT of C/TA and MBC efficacy and effectiveness is needed. Researchers could compare four cells: C/TA only, C/TA + MBC, MBC only, and a treatment as usual (TAU) control condition. Interactions and main effects could then be tested statistically. In such studies, it is critically important to assess treatment fidelity and the extent to which C/TA and MBC were conducted as experimentally intended. It is also critically important to rule-out therapist effects, as therapists are differentially effective at MBC. Studies such as these need multiple, highly training therapists and, minimally, 25–30 clients per cell. In addition to RCT studies, researchers should also study clinicians who excel at MBC and carefully examine their approaches and insights. Alas, we will see where data take us moving forward.

In closing, we come full circle and succinctly answer the chapter's opening questions:

Can Psychological Assessment and Testing Actually Be Collaborative and Humanistic in Nature?

Yes. C/TA is highly collaborative and humanizes mental health assessment and testing. It also humanizes MBC. It is a transformative approach that represents a paradigm shift in applied psychology: away from traditional, more-or-less sterile therapist-centered approaches and towards contemporary relational approaches that benefit clients directly. Without question, C/TA and MBC align well with the roles, functions, and professional values of counseling psychologists (Beatch et al., 2009; Bedi et al., 2012; Duckworth, 1990; Lichtenberg & Goodyear, 1999).

How Can Test Results Be Therapeutically (and Ethically) Integrated into Clinical Practice?

The semi-structured approach to C/TA is ideally suited for guiding clinicians' integration of test results into clinical practice. Of the multistep process, the first step is arguably the most important but, essentially, clinicians collaborate with clients and answer their assessment questions, follow standardized testing procedures, co-interpret test results, write individualized summary letters, and, if needed, follow-up with clients about questions they have about the results. To be sure, it is not an easy thing to do, but it is well-worth doing.

As Clinicians, Why Should We Care About Measuring Clients' Treatment Progress?

For one thing, it certainly does not hurt, and the benefits outweigh the costs. For another, it is an ethical imperative. National organizations, like APA and CPA, strongly recommend using it in practice. Additionally, it helps psychologists develop and refine clinical skills and competencies and document their effectiveness. Most importantly, it benefits clients and the treatment process, especially if clinicians measure treatment processes. The operative word here is "care"; care for clients' health, well-being, and welfare. Measurement-Based *Care* does exactly that. Psychologists should not only care about measuring clients' treatment progress but make it an essential part of day-to-day clinical practice.

Doesn't MBC Negatively Affect Treatment?

No. Measuring client progress positively affects treatment, especially from a preventative standpoint. At a minimum, it helps identify and prevent treatment failure. Maximally, it enhances the entire treatment process, including clinic-based system integration. MBC creates a clinic-wide 360° feedback loop for clients, clinicians, supervisors, and administrators. Clinics and therapeutic systems operate more effectively and efficiently and there is increased accountability.

What Is the Best, Most Effective Way to Practice MBC?

Despite dozens and dozens of empirical studies, we do not have a clear-cut answer. Approaching it from a C/TA perspective holds considerable promise. When combined, C/TA and MBC are a potentially powerful combination and therapeutic

one–two punch; essentially turbocharging therapy by 0.20 ES. The extent to which these practices are researched further and shown to have positive effects, they will flourish. Future research is needed to empirically determine their treatment validity and clinical utility. Preliminary evidence is promising and may in time bolster C/TA and MBC's widespread use in clinical practice.

As one of the greatest measurement and psychological testing experts of all-time, Anne Anastasi, wrote, “Whether any test is an instrument of good or harm depends on how the test is used” (Anastasi, 1992, p. 610). When mental health tests and measures are used according to Collaborative/Therapeutic Assessment and MBC principles and procedures, they are more often good than not.

References³

- Ackerman, S. J., Hilsenroth, M. J., Baity, M. R., & Blagys, M. D. (2000). Interaction of therapeutic process and alliance during psychological assessment. *PsycEXTRA Dataset*. <https://doi.org/10.1037/e323122004-009>
- Amble, I., Gude, T., Stubdal, S., Andersen, B. J., & Wampold, B. E. (2015). The effect of implementing the Outcome Questionnaire-45.2 feedback system in Norway: A multisite randomized clinical trial in a naturalistic setting. *Psychotherapy Research*, 25(6), 669–677. <https://doi.org/10.1080/10503307.2014.928756>
- American Psychological Association (2017). *Therapeutic assessment with adults [DVD]*. Available from <http://www.apa.org/pubs/videos/4310960.aspx>
- Anastasi, A. (1992). What counselors should know about the use and interpretation of psychological tests. *Journal of Counseling & Development*, 70, 610–615.
- Andersson, E. (2018, April). Rethinking therapy: How 45 questions can revolutionize mental health care in Canada. Globe and mail. Retrieved from <https://www.theglobeandmail.com/canada/article-rethinking-therapy-how-45-questions-can-revolutionize-mental-health/>
- Anker, M. G., Duncan, B. L., & Sparks, J. A. (2009). Using client feedback to improve couple therapy outcomes: A randomized clinical trial in a naturalistic setting. *Journal of Consulting and Clinical Psychology*, 77(4), 693–704. <https://doi.org/10.1037/a0016062>
- APA Presidential Task Force on Evidence-Based Practice. (2006). Evidence-based practice in psychology. *American Psychologist*, 61(4), 271–285.
- Aschieri, F., Fantini, F., & Finn, S. E. (2018). Incorporation of therapeutic assessment into treatment with clients in mental health programming. *APA Handbook of Psychopathology: Psychopathology: Understanding, Assessing, and Treating Adult Mental Disorders*, 1, 631–642. <https://doi.org/10.1037/0000064-025>
- Aschieri, F., Fantini, F., & Smith, J. D. (2016). Collaborative/therapeutic assessment: Procedures to enhance client outcomes. In S. F. Maltzman (Ed.), *Oxford handbook of treatment processes and outcomes in counseling psychology* (pp. 241–269). Oxford University Press.
- Aschieri, F., & Smith, J. D. (2012). The effectiveness of therapeutic assessment with an adult client: A single-case study using a time-series design. *Journal of Personality Assessment*, 94(1), 1–11. <https://doi.org/10.1080/00223891.2011.627964>
- Bargmann, S. & Robinson, B. (2012). *Manual 2: Feedback-informed clinical work: The basics*. International Center for Clinical Excellence.

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- Beatch, R., Bedi, R. P., Cave, D., Domene, J. F., Harris, G. E., Haverkamp, B. E., & Mikhail, A. M. (2009). Counselling psychology in a Canadian context: Report from the executive committee for a Canadian understanding of counselling psychology. Report commissioned by the Counselling Psychology Section 24 of the Canadian Psychological Association. Retrieved from <https://cpa.ca/docs/File/Sections/Counselling/CPA-CNPSY-Report-Final%20nov%2009.pdf>
- Bedi, R. P., Haverkamp, B. E., Beatch, R., Cave, D., Domene, J. F., Harris, G. E., & Mikhail, A.-M. (2011). Counselling psychology in a Canadian context: Definition and description. *Canadian Psychology*, 52(2), 128–138. <https://doi.org/10.1037/a0023186>
- Bedi, R. P., Klubben, L. M., & Barker, G. T. (2012). Counselling vs. CLINICAL: A comparison of psychology doctoral programs in Canada. *Canadian Psychology*, 53(3), 238–253. <https://doi.org/10.1037/a0028558>
- Bickman, L., Riemer, M., Breda, C., & Kelley, S. D. (2006). CFIT: A system to provide a continuous quality improvement infrastructure through organizational responsiveness, measurement, training, and feedback. Report on *Emotional & Behavioral Disorders in Youth*, 6, 86–87, 93–94. Retrieved from http://www.civresearchinstitute.com/online/article_abstract.php?pid=5&iid=113&aid=721
- Bordin, E. S., & Bixler, R. H. (1946). Test selection: A process of counseling. *Readings in Modern Methods of Counseling*, 173–183. <https://doi.org/10.1037/10841-016>
- Brattland, H., Koksvis, J. M., Burkeland, O., Klöckner, C. A., Lara-Cabrera, M. L., Miller, S. D., Wampold, B., Ryum, T., & Iversen, V. C. (2019). Does the working alliance mediate the effect of routine outcome monitoring (rom) and alliance feedback on psychotherapy outcomes? A secondary analysis from a randomized clinical trial. *Journal of Counseling Psychology*, 66(2), 234–246. <https://doi.org/10.1037/cou0000320>
- Brown, J. D., & Morey, L. C. (2016). Therapeutic assessment in psychological triage using the PAI. *Journal of Personality Assessment*, 98(4), 374–381. <https://doi.org/10.1080/00223891.2015.1123160>
- Canadian Psychological Association (2012). *Evidence-based practice of psychological treatments: A Canadian perspective – Report of the CPA Task Force on Evidence-Based Practice of Psychological Treatments*. Retrieved from https://cpa.ca/docs/File/Practice/Report_of_the_EBP_Task_Force_FINAL_Board_Approved_2012.pdf
- Claiborn, C. D., & Hanson, W. E. (1999). Test interpretation: A social influence perspective. In J. W. Lichtenbeg & R. K. Goodyear (Eds.), *Scientist-practitioner perspectives on test interpretation* (pp. 1–14). Allyn & Bacon.
- Curry, K. T., & Hanson, W. E. (2010). National survey of psychologists' test feedback training, supervision, and practice: A mixed methods study. *Journal of Personality Assessment*, 92(4), 327–336. <https://doi.org/10.1080/00223891.2010.482006>
- Dana, R. H. (1985). A service-delivery paradigm for personality assessment. *Journal of Personality Assessment*, 49(6), 598–604. https://doi.org/10.1207/s15327752jpa4906_6
- de Jong, K., Segaar, J., Ingenhoven, T., van Busschbach, J., & Timman, R. (2018). Adverse effects of outcome monitoring feedback in patients with personality disorders: A randomized controlled trial in day treatment and inpatient settings. *Journal of Personality Disorders*, 32(3), 393–413. https://doi.org/10.1521/pedi_2017_31_297
- de Jong, K., van Sluis, P., Nugter, M. A., Heiser, W. J., & Spinhoven, P. (2012). Understanding the differential impact of outcome monitoring: Therapist variables that moderate feedback effects in a randomized clinical trial. *Psychotherapy Research*, 22(4), 464–474. <https://doi.org/10.1080/10503307.2012.673023>
- De Saeger, H., Kamphuis, J. H., Finn, S. E., Smith, J. D., Verheul, R., van Busschbach, J. J., Feenstra, D. J., & Horn, E. K. (2014). Therapeutic assessment promotes treatment readiness but does not affect symptom change in patients with personality disorders: Findings from a randomized clinical trial. *Psychological Assessment*, 26(2), 474–483. <https://doi.org/10.1037/a0035667>
- Dressel, P. L., & Matteson, R. W. (1950). The effect of CLIENT participation in test interpretation. *Educational and Psychological Measurement*, 10(4), 693–706. <https://doi.org/10.1177/001316445001000407>

- Duckworth, J. (1990). The counseling approach to the use of testing. *The Counseling Psychologist*, 18(2), 198–204. <https://doi.org/10.1177/0011000090182002>
- Durosini, I., Tarocchi, A., & Aschieri, F. (2017). Therapeutic assessment with a client with persistent complex bereavement disorder: A single-case time-series design. *Clinical Case Studies*, 16(4), 295–312. <https://doi.org/10.1177/1534650117693942>
- Ellis, T. E., Green, K. L., Allen, J. G., Jobes, D. A., & Nadorff, M. R. (2012). Collaborative assessment and management of suicidality in an inpatient setting: Results of a pilot study. *Psychotherapy*, 49(1), 72–80. <https://doi.org/10.1037/a0026746>
- Ellis, T. E., Rufino, K. A., & Allen, J. G. (2017). A controlled comparison trial of the collaborative assessment and management of suicidality (CAMS) in an inpatient setting: Outcomes at discharge and six-month follow-up. *Psychiatry Research*, 249, 252–260. <https://doi.org/10.1016/j.psychres.2017.01.032>
- Errazuriz, P., & Zilcha-Mano, S. (2018). In psychotherapy with severe patients discouraging news may be worse than no news: The impact of providing feedback to therapists on psychotherapy outcome, session attendance, and the alliance. *Journal of Consulting and Clinical Psychology*, 86(2), 125–139. <https://doi.org/10.1037/ccp0000277>
- Finn, S. E. (1996). *Manual for using the MMPI-2 as a therapeutic intervention*. University of Minnesota Press.
- Finn, S. E. (2003). Therapeutic assessment of a man with “ADD”. *Journal of Personality Assessment*, 80(2), 115–129. https://doi.org/10.1207/s15327752jpa8002_01
- Finn, S. E. (2009). *Therapeutic assessment*. Retrieved from <http://www.therapeuticassessment.com>
- Finn, S. E. (2007). *In our clients' shoes: Theory and techniques of therapeutic assessment*. Psychology Press.
- Finn, S. E., Fischer, C. T., & Handler, L. (2012). *Collaborative/therapeutic assessment: A case-book and guide*. Wiley & Sons.
- Finn, S. E., & Kamphuis, J. H. (2006). Therapeutic Assessment With the MMPI-2. In J. N. Butcher (Ed.), *MMPI-2: A practitioner's guide* (pp. 165–191). American Psychological Association. <https://doi.org/10.1037/11287-008>
- Finn, S. E., & Tonsager, M. E. (1992). Therapeutic effects of providing MMPI-2 test feedback to college students awaiting therapy. *Psychological Assessment*, 4(3), 278–287. <https://doi.org/10.1037/1040-3590.4.3.278>
- Finn, S. E., & Tonsager, M. E. (1997). Information-gathering and therapeutic models of assessment: Complementary paradigms. *Psychological Assessment*, 9(4), 374–385. <https://doi.org/10.1037/1040-3590.9.4.374>
- Finn, S. E., & Tonsager, M. E. (2002). How therapeutic assessment became humanistic. *The Humanistic Psychologist*, 30(1-2), 10–22. <https://doi.org/10.1080/08873267.2002.9977019>
- Fischer, C. (2000). Collaborative, individualized assessment. *Journal of Personality Assessment*, 74(1), 2–14. <https://doi.org/10.1207/s15327752jpa740102>
- Fischer, C. T. (1970). The testee as co-evaluator. *Journal of Counseling Psychology*, 17(1), 70–76. <https://doi.org/10.1037/h0028630>
- Fischer, C. T. (1972). Paradigm changes which allow sharing of results. *Professional Psychology*, 3(4), 364–369. <https://doi.org/10.1037/h0033991>
- Fischer, C. T. (1978). Collaborative psychological assessment. In C. T. Fischer & S. L. Brodsky (Eds.), *Client participation in human services* (pp. 41–61). Transaction Books.
- Fischer, C. T. (1985/1994). *Individualizing psychological assessment*. Erlbaum.
- Fischer, C. T. (1994). Rorschach scoring questions as access to dynamics. *Journal of Personality Assessment*, 62, 515–525.
- Fischer, R. A. (1979). The inductive-deductive controversy revisited. *The Modern Language Journal*, 63(3), 98–105. <https://doi.org/10.1111/j.1540-4781.1979.tb02433.x>
- Fonagy, P., Luyten, P., & Allison, E. (2015). Epistemic petrification and the restoration of epistemic trust: A new conceptualization of borderline personality disorder and ITS psychosocial treatment. *Journal of Personality Disorders*, 29(5), 575–609. <https://doi.org/10.1521/pedi.2015.29.5.575>

- Gelso, C. J., Nutt Williams, E., & Fretz, B. R. (2014). *Counseling psychology* (3rd ed.). American Psychological Association.
- Goldfried, M. R. (1980). Toward the delineation of therapeutic change principles. *American Psychologist*, *35*, 991–999. <https://doi.org/10.1037/0003-066x.35.11.991>
- Goldman, L. (1961). *Using tests in counseling*. Appleton-Century-Crofts.
- Goldman, L. (1971). *Using tests in counseling* (2nd ed.). Appleton-Century-Crofts.
- Gorske, T. T., & Smith, S. R. (2009). *Collaborative therapeutic neuropsychological assessment*. Springer.
- Gorske, T. T., & Smith, S. R. (2012). Case studies in collaborative neuropsychology: A man with brain injury and a child with learning problems. In S. E. Finn, C. T. Fischer, & L. Handler (Eds.), *Collaborative therapeutic assessment: A casebook and guide* (pp. 401–417). John Wiley & Sons.
- Green, D., & Latchford, G. (2012). *Maximising the benefits of psychotherapy*. John Wiley & Sons. <https://doi.org/10.1002/9781119967590>
- Hannan, C., Lambert, M. J., Harmon, C., Nielsen, S. L., Smart, D. W., Shimokawa, K., & Sutton, S. W. (2005). A lab test and algorithms for identifying clients at risk for treatment failure. *Journal of Clinical Psychology*, *61*(2), 155–163. <https://doi.org/10.1002/jclp.20108>
- Hanson, W. E. (1999, August). Using psychological assessment instruments (effectively) with clients. In W. E. Hanson & C. E. Watkins, Jr. (Co-Chairs), *Psychological assessment training and practice: Considerations for the 21st century*. Symposium conducted at the annual meeting of the American Psychological Association, Boston, MA.
- Hanson, W. E. (2013). Teaching therapeutic assessment practicum. *Therapeutic Assessment*, *1*(2), 7–12.
- Hanson, W. E., Leighton, J. P., Donaldson, S. I., Oakland, T., Terjesen, M., & Shealy, C. N. (in press). Assessment: The power and potential of psychological testing, educational measurement, and program evaluation around the world. In C. N. Shealy, M. Bullock, S. Kapadia (Eds.), *Going global: How psychology and psychologists can meet a world in need*. American Psychological Association Books.
- Hanson, W. E., & Poston, J. M. (2011). Building confidence in psychological assessment as a therapeutic intervention: An empirically based reply to Lilienfeld, garb, and wood (2011). *Psychological Assessment*, *23*(4), 1056–1062. <https://doi.org/10.1037/a0025656>
- Harmon, S. C., Lambert, M. J., Smart, D. M., Hawkins, E., Nielsen, S. L., Slade, K., & Lutz, W. (2007). Enhancing outcome for potential treatment failures: Therapist–client feedback and clinical support tools. *Psychotherapy Research*, *17*(4), 379–392. <https://doi.org/10.1080/10503300600702331>
- Harrower, M. (1956). Projective counseling—A psychotherapeutic technique. *American Journal of Psychotherapy*, *10*(1), 74–86. <https://doi.org/10.1176/appi.psychotherapy.1956.10.1.74>
- Haverkamp, B. E. (2012). *The counseling relationship*. Oxford Handbooks Online. <https://doi.org/10.1093/oxfordhb/9780195342314.013.0003>
- Haverkamp, B. E. (2013). Education and training in assessment for professional psychology: Engaging the reluctant student. In K. F. Geisinger (Ed.), *APA handbook on testing and assessment in psychology* (Vol. 2, pp. 63–82). Testing and assessment in clinical and counseling psychology. American Psychological Association.
- Haynes, S. N., Smith, G. T., & Hunsley, J. D. (2011). *Scientific foundations of clinical assessment*. Routledge. <https://doi.org/10.4324/9780203829172>
- Hilsenroth, M. J., Peters, E. J., & Ackerman, S. J. (2004). The development of therapeutic alliance during psychological assessment: Patient and therapist perspectives across treatment. *Journal of Personality Assessment*, *83*(3), 332–344. <https://doi.org/10.1207/s15327752jpa830314>
- Hinrichs, J. (2016). Inpatient therapeutic assessment with narcissistic personality disorder. *Journal of Personality Assessment*, *98*(2), 111–123. <https://doi.org/10.1080/00223891.2015.1075997>
- Horvath, A. O., & Greenberg, L. S. (1986). The development of the working alliance inventory. In L. S. Greenberg & W. M. Pinsoff (Eds.), *The psychotherapeutic process: A research handbook* (pp. 529–556). Guilford Press.

- Hovland, R. T., Ytrehus, S., Mellor-Clark, J., & Moltu, C. (2020). How patients and clinicians experience the utility of a personalized clinical feedback system in routine practice. *Journal of Clinical Psychology*. <https://doi.org/10.1002/jclp.22992>
- Howard, K. I., Moras, K., Brill, P. L., Martinovich, Z., & Lutz, W. (1996). Evaluation of psychotherapy: Efficacy, effectiveness, and patient progress. *American Psychologist*, *51*(10), 1059–1064. <https://doi.org/10.1037/0003-066x.51.10.1059>
- Jacobson, R. M., Hanson, W. E., & Zhou, H. (2015). Canadian psychologists' test feedback training and practice: A national survey. *Canadian Psychology*, *56*(4), 394–404. <https://doi.org/10.1037/cap0000037>
- Jensen-Doss, A., Haimes, E. M. B., Smith, A. M., Lyon, A. R., Lewis, C. C., Stanick, C. F., & Hawley, K. M. (2018). Monitoring treatment progress and providing feedback is viewed favorably but rarely used in practice. *Administration and Policy in Mental Health and Mental Health Services Research*, *45*(1), 48–61. <https://doi.org/10.1007/s10488-016-0763-0>
- Jobes, D. A. (2012). The collaborative assessment and management of suicidality (CAMS): An evolving evidenced-based clinical approach to suicidal risk. *Suicide and Life-threatening Behavior*, *42*(6), 640–653. <https://doi.org/10.1111/j.1943-278x.2012.00119.x>
- Jobes, D. A., Wong, S. A., Conrad, A. K., Drozd, J. F., & Neal-Walden, T. (2005). The collaborative assessment and management of suicidality versus treatment as usual: A retrospective study with suicidal outpatients. *Suicide and Life-threatening Behavior*, *35*(5), 483–497. <https://doi.org/10.1521/suli.2005.35.5.483>
- Kamphuis, J. H., & Finn, S. E. (2018). Therapeutic assessment in personality disorders: Toward the restoration of epistemic trust. *Journal of Personality Assessment*, *101*(6), 662–674. <https://doi.org/10.1080/00223891.2018.1476360>
- Kendrick, T., El-Gohary, M., Stuart, B., Gilbody, S., Churchill, R., Aiken, L., Bhattacharya, A., Gimson, A., Britt, A. L., de Jong, K., & Moore, M. (2016). Routine use of patient reported outcome measures (proms) for improving treatment of common mental health disorders in adults. *Cochrane Database of Systematic Reviews*. <https://doi.org/10.1002/14651858.cd011119.pub2>
- Kohut, H. (1977). *The restoration of the self*. International Universities Press.
- La Guardia, J. G., Ryan, R. M., Couchman, C. E., & Deci, E. L. (2000). Within-person variation in security of attachment: A self-determination theory perspective on attachment, need fulfillment, and well-being. *Journal of Personality and Social Psychology*, *79*, 367–384. <https://doi.org/10.1037/0022-3514.79.3.367>
- Lambert, M. J. (2013). *Bergin and Garfield's handbook of psychotherapy and behavior change* (6th ed.). Wiley & Sons.
- Lambert, M. J. (2017). Maximizing psychotherapy outcome beyond evidence-based practice. *Psychotherapy and Psychosomatics*, *86*, 80–89. <https://doi.org/10.1159/000455170>
- Lambert, M. J., Hansen, N. B., & Finch, A. E. (2001b). Patient-focused research: Using patient outcome data to enhance treatment effects. *Journal of Consulting and Clinical Psychology*, *69*(2), 159–172. <https://doi.org/10.1037/0022-006x.69.2.159>
- Lambert, M. J., Whipple, J. L., & Kleinstäuber, M. (2018). Collecting and delivering progress feedback: A meta-analysis of routine outcome monitoring. *Psychotherapy*, *55*(4), 520–537. <https://doi.org/10.1037/pst0000167>
- Lambert, M. J., Whipple, J. L., Smart, D. W., Vermeersch, D. A., Nielsen, S. L., & Hawkins, E. J. (2001a). The effects of providing therapists with feedback on patient progress during psychotherapy: Are outcomes enhanced? *Psychotherapy Research*, *11*(1), 49–68. <https://doi.org/10.1080/713663852>
- Lambert, M. J., Whipple, J. L., Vermeersch, D. A., Smart, D. W., Hawkins, E. J., Nielsen, S. L., & Goates, M. (2002). Enhancing psychotherapy outcomes via providing feedback on client progress: A replication. *Clinical Psychology & Psychotherapy*, *9*(2), 91–103. <https://doi.org/10.1002/cpp.324>
- Lichtenberg, J. W., & Goodyear, R. K. (1999). A scientist-practitioner perspective on test interpretation. In J. W. Lichtenberg & R. K. Goodyear (Eds.), *Scientist-practitioner perspectives on test interpretation* (pp. 1–14). Allyn & Bacon.

- Little, J. A. (2009). *Collaborative assessment, supportive psychotherapy, or treatment as usual: An analysis of ultra-brief individualized intervention for psychiatric inpatients* (Doctoral dissertation). Retrieved from Quest Dissertations & Theses Global. (Order No. 3375557). <http://login.ezproxy.library.ualberta.ca/login?url=https://search-proquest-com.login.ezproxy.library.ualberta.ca/docview/304853926?accountid=14474>
- Luborsky, L. (1953). Intraindividual repetitive measurements (p technique) in understanding psychotherapeutic change. *Psychotherapy: Theory and Research*, 389–413. <https://doi.org/10.1037/10572-015>
- Lutz, W., Rubel, J., Schiefele, A.-K., Zimmermann, D., Böhnke, J. R., & Wittmann, W. W. (2015). Feedback and therapist effects in the context of treatment outcome and treatment length. *Psychotherapy Research*, 25(6), 647–660. <https://doi.org/10.1080/10503307.2015.1053553>
- Meyer, G. J., Finn, S. E., Eyde, L. D., Kay, G. G., Moreland, K. L., Dies, R. R., Eisman, E. J., Kubiszyn, T. W., & Reed, G. M. (2001). Psychological testing and psychological assessment: A review of evidence and issues. *American Psychologist*, 56(2), 128–165. <https://doi.org/10.1037/0003-066x.56.2.128>
- Mikeal, C. W., Gillaspay, J. A., Scoles, M. T., & Murphy, J. J. (2016). A dismantling study of the partners for change outcome management system. *Journal of Counseling Psychology*, 63(6), 704–709. <https://doi.org/10.1037/cou0000168>
- Morey, L. C., Lowmaster, S. E., & Hopwood, C. J. (2010). A pilot study OF manual-assisted cognitive therapy with a therapeutic assessment augmentation for borderline personality disorder. *Psychiatry Research*, 178(3), 531–535. <https://doi.org/10.1016/j.psychres.2010.04.055>
- Newman, M. L., & Greenway, P. (1997). Therapeutic effects of providing MMPI-2 test feedback to clients at a university counseling service: A collaborative approach. *Psychological Assessment*, 9(2), 122–131. <https://doi.org/10.1037/1040-3590.4.3.278>
- Pascual-Leone, A., & Andreeescu, C. (2013). Repurposing process measures to train psychotherapists: Training outcomes using a new approach. *Counselling and Psychotherapy Research*, 13(3), 210–219. <https://doi.org/10.1080/14733145.2012.739633>
- Pascual-Leone, A., Singh, T., Harrington, S., & Yeryomenko, N. (2014). Psychotherapy progress and process assessment. In C. J. Hopwood & R. F. Bornstein (Eds.), *Multimethod clinical assessment of personality and psychopathology* (pp. 319–344). Guilford Press.
- Pinner, D. H., & Kivlighan, D. M., III. (2018). The ethical implications and utility of routine outcome monitoring in determining boundaries of competence in practice. *Professional Psychology: Research and Practice*, 49(4), 247–254. <https://doi.org/10.1037/pro0000203>
- Poston, J. M., & Hanson, W. E. (2010). Meta-analysis of psychological assessment as a therapeutic intervention. *Psychological Assessment*, 22(2), 203–212. <https://doi.org/10.1037/a0018679>
- Prescott, D. S., Maeschalck, C. L., & Miller, S. D. (Eds.). (2017). *Feedback informed treatment in clinical practice—Reaching for excellence*. American Psychological Association.
- Probst, T., Lambert, M. J., Dahlbender, R. W., Loew, T. H., & Tritt, K. (2014). Providing patient progress feedback and clinical support tools to therapists: Is the therapeutic process of patients on-track to recovery enhanced in psychosomatic in-patient therapy under the conditions of routine practice? *Journal of Psychosomatic Research*, 76(6), 477–484. <https://doi.org/10.1016/j.jpsychores.2014.03.010>
- Purves, C. (2002). Collaborative assessment with involuntary populations: Foster children and their mothers. *The Humanistic Psychologist*, 30, 164–174. <https://doi.org/10.1080/08873267.2002.9977031>
- Rousmaniere, T. (2017, April). What your therapist doesn't know. *The Atlantic*. Retrieved from <https://www.theatlantic.com/magazine/archive/2017/04/what-your-therapist-doesnt-know/517797/>
- Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55, 68–78. <https://doi.org/10.1037/003-066X.55.1.68>
- Ryan, R. M., & Deci, E. L. (2008). A self-determination theory approach to psychotherapy: The motivational basis for effective change. *Canadian Psychology*, 49, 186–193. <https://doi.org/10.1037/a0012753>

- Rye, M., Rognmo, K., Aarons, G. A., & Skre, I. (2019). Attitudes towards the use of routine outcome monitoring of psychological therapies among mental health providers: The EBPAS-ROM. *Administration and Policy Mental Health and Health Service Delivery*, 46(6), 833–846. <https://doi.org/10.1007/s10488-019-00968-5>
- Sagan, C. (1995). Wonder and skepticism. *Skeptical Inquirer*. Retrieved from https://www.e-reading-lib.com/bookreader.php/148586/Sagan_-_Wonder_and_Skepticism.pdf
- Schuman, D. L., Slone, N. C., Reese, R. J., & Duncan, B. (2015). Efficacy of client feedback in group psychotherapy with soldiers referred for substance abuse treatment. *Psychotherapy Research*, 25(4), 396–407. <https://doi.org/10.1080/10503307.2014.900875>
- She, Z., Duncan, B. L., Reese, R. J., Sun, Q., Shi, Y., Jiang, G., Wu, C., & Clements, A. L. (2018). Client feedback in China: A randomized clinical trial in a college counseling center. *Journal of Counseling Psychology*, 65(6), 727–737. <https://doi.org/10.1037/cou0000300>
- Smith, M. L., Glass, G. V., & Miller, T. I. (1980). *The benefits of psychotherapy*. Johns Hopkins University Press.
- Smith, J. D., Handler, L., & Nash, M. R. (2010). Therapeutic assessment for preadolescent boys with oppositional defiant disorder: A replicated single-case timeseries design. *Psychological Assessment*, 22(3), 593–602. <https://doi.org/10.1037/a0019697>
- Snyder, C. R., Simpson, S. C., Ybasco, F. C., Borders, T. F., Babyak, M. A., & Higgins, R. L. (1996). Development and validation of the state Hope scale. *Journal of Personality and Social Psychology*, 70(2), 321–335. <https://doi.org/10.1037/0022-3514.70.2.321>
- Solstad, S. M., Castonguay, L. G., & Moltu, C. (2019). Patients' experiences with routine outcome monitoring and clinical feedback systems: A systematic review and synthesis of qualitative empirical literature. *Psychotherapy Research*, 29(2), 157–170. <https://doi.org/10.1080/10503307.2017.1326645>
- Stewart-Brown, S., & Janmohamed, K. (2008). *Warwick-Edinburgh mental well-being scale (WEMWBS): User guide* (Version 1). Retrieved from <http://www.mentalhealthpromotion.net/resources/user-guide.pdf>
- Stiles, W. B. (1980). Measurement of the impact of psychotherapy sessions. *Journal of Consulting and Clinical Psychology*, 48(2), 176–185. <https://doi.org/10.1037/0022-006x.48.2.176>
- Stiles, W. B., Gordan, L. E., & Lani, J. A. (2002). Session evaluation and the session evaluation questionnaire. In G. S. Tryon (Ed.), *Counseling based on process research—Applying what we know* (pp. 325–343). Allyn & Bacon.
- Stiles, W. B., & Snow, J. S. (1984a). Counseling session impact as viewed by novice counselors and their clients. *Journal of Counseling Psychology*, 31(1), 3–12. <https://doi.org/10.1037/0022-0167.31.1.3>
- Stiles, W. B., & Snow, J. S. (1984b). Dimensions of psychotherapy session impact across sessions and across clients. *British Journal of Clinical Psychology*, 23(1), 59–63. <https://doi.org/10.1111/j.2044-8260.1984.tb00627.x>
- Stolorow, R. D., & Atwood, G. E. (1984). Psychoanalytic phenomenology: Toward a science of human experience. *Psychoanalytic Inquiry*, 4(1), 87–105. <https://doi.org/10.1080/07351698409533532>
- Stolorow, R. D., Brandchaft, B., & Atwood, G. E. (1987). *Psychoanalytic treatment: An intersubjective approach*. Analytic Pr.
- Sullivan, H. S. (1953). *The interpersonal theory of psychiatry*. Norton.
- Sullivan, H. S. (1954). *The psychiatric interview*. Norton.
- Sundet, R. (2012). Therapist perspectives on the use of feedback on process and outcome: Patient-focused research in practice. *Canadian Psychology*, 53(2), 122–130. <https://doi.org/10.1037/a0027776>
- Sundet, R. (2014). Patient-focused research supported practices in an intensive family therapy unit. *Journal of Family Therapy*, 36(2), 195–216. <https://doi.org/10.1111/j.1467-6427.2012.00613.x>
- Swann, W. B. (1997). The trouble with change: Self-verification and allegiance to the self. *Psychological Science*, 8(3), 177–180. <https://doi.org/10.1111/j.1467-9280.1997.tb00407.x>

- Tasca, G. A., Angus, L., Bonli, R., Drapeau, M., Fitzpatrick, M., Hunsley, J., & Knoll, M. (2019). Outcome and progress monitoring in psychotherapy: Report of a Canadian psychological association task force. *Canadian Psychology*, *60*(3), 165–177. <https://doi.org/10.1037/cap0000181>
- Tasca, G. A., Town, J. M., Abbass, A., & Clarke, J. (2018). Will publicly funded psychotherapy in Canada be evidence based? A review of what makes psychotherapy work and a proposal. *Canadian Psychology/Psychologie Canadienne*, *59*(4), 293–300. <https://doi.org/10.1037/cap0000151>
- Tharinger, D. J., Christopher, G., & Matson, M. (2011). Play, playfulness, and creative expression in therapeutic assessment with children. In S. W. Russ & L. N. Niec (Eds.), *An evidence-based approach to play in intervention and prevention: Integrating developmental and clinical science* (pp. 109–148). Guilford Press.
- Tharinger, D. J., Finn, S. E., Arora, P., Judd-Glossy, L., Ihorn, S. M., & Wan, J. T. (2012). Therapeutic assessment with children: Intervening with parents “behind the mirror”. *Journal of Personality Assessment*, *94*(2), 111–123. <https://doi.org/10.1080/00223891.2011.645932>
- Tharinger, D. J., Finn, S. E., Austin, C. A., Gentry, L. B., Bailey, K. E., Parton, V. T., & Fisher, M. E. (2008). Family sessions as part of child psychological assessment: Goals, techniques, clinical utility, and therapeutic value. *Journal of Personality Assessment*, *90*(6), 547–558. <https://doi.org/10.1080/00223890802388400>
- Tiegreen, J. A., Braxton, L. E., Elbogen, E. B., & Bradford, D. (2012). Building a bridge of trust: Collaborative assessment with a person with serious mental illness. *Journal of Personality Assessment*, *94*(5), 513–521. <https://doi.org/10.1080/00223891.2012.666596>
- Tracey, T. J., Glidden, C. E., & Kokotovic, A. M. (1988). Factor structure of the counselor rating form-short. *Journal of Counseling Psychology*, *35*(3), 330–335. <https://doi.org/10.1037/0022-0167.35.3.330>
- Truscott, D. (2019). Every breath you take: Ethical considerations regarding health care metrics. *Health Ethics Today*, *27*(1), 14–19.
- Unsworth, G., Cowie, H., & Green, A. (2012). Therapists’ and clients’ perceptions of routine outcome measurement in the NHS: A qualitative study. *Counselling and Psychotherapy Research*, *12*(1), 71–80. <https://doi.org/10.1080/14733145.2011.565125>
- van Oenen, F. J., Schipper, S., Van, R., Shoevers, R., Visch, I., Peen, J., & Dekker, J. (2016). Feedback-informed treatment in emergency psychiatry: A randomised controlled trial. *BMC Psychiatry*, *16*, 110. <https://doi.org/10.1186/s12888-016-0811-z>
- Walfish, S., McAlister, B., O’Donnell, P., & Lambert, M. J. (2012). An investigation of self-assessment bias in mental health providers. *Psychological Reports*, *110*(2), 639–644. <https://doi.org/10.2466/02.07.17.pr0.110.2.639-644>
- Wampold, B. E. (2015). Routine outcome monitoring: Coming of age—With the usual developmental challenges. *Psychotherapy*, *52*(4), 458–462. <https://doi.org/10.1037/pst0000037>
- Wampold, B. E., & Imel, Z. E. (2015). *The great psychotherapy debate: The evidence for what makes psychotherapy work*. Routledge.
- Whipple, J. L., Lambert, M. J., Vermeersch, D. A., Smart, D. W., Nielsen, S. L., & Hawkins, E. J. (2003). Improving the effects of psychotherapy: The use of early identification of treatment and problem-solving strategies in routine practice. *Journal of Counseling Psychology*, *50*(1), 59–68. <https://doi.org/10.1037/0022-0167.50.1.59>
- Wolf, N. J. (2010). Evaluating the effectiveness of therapeutic assessment with depressed adult clients using case-based time-series design. (Unpublished doctoral dissertation). University of Tennessee. Retrieved from https://trace.tennessee.edu/utk_graddiss/925
- Zhou, H. (2021). Therapists’ use of routine outcome monitoring in clinical practice: A qualitative multiple case study. (Unpublished doctoral dissertation). University of Alberta, Edmonton, AB.
- Zhou, H., Hanson, W. E., Jacobson, R., Allan, A., Armstrong, D., Dykshoorn, K. L., & Pott, T. (2020). Psychological test feedback: Canadian clinicians’ perceptions and practices. *Canadian Journal of Counselling and Psychotherapy*, *54*(4), 691–714. <https://doi.org/10.47634/cjcp.v54i4.61217>
- Zimet, G. D., Dahlem, N. W., Zimet, S. G., & Farley, G. K. (1998). The multidimensional scale of perceived social support. *Journal of Personality Assessment*, *52*(1), 30–41. https://doi.org/10.1207/s15327752jpa5201_2

Chapter 18

Career Development and Mental Health Assessment, Prevention, and Intervention for Children and Adolescents



Bryan J. Dik, Dylan R. Marsh, and Alexandra J. Alayan

Abstract This chapter explores connections between youth career development and mental health assessment, prevention, and intervention for children and adolescents. After a brief historical review, we present a guiding framework—Lapan’s (*Career development across the K-16 years: Bridging the present to satisfying and successful futures*. American Counseling Association, 2004) Integrative Contextual Model (ICM) of Career Development—for fostering youth educational and career development in ways that promote well-being and psychological health and simultaneously establish preventative buffers against problematic mental health symptoms. We describe a clinical reasoning model based on ICM to guide assessment and intervention, touching briefly on its implications for general mental health. We illustrate our guiding framework and clinical reasoning model using a case example of a 17-year-old secondary school student striving to establish a sense of direction and, ultimately, a sense of purpose in school, work, and life.

Guiding Framework

The purpose of this chapter is to explore the connections between career development and mental health assessment, prevention, and intervention for young people. First, we describe connections between work and mental health and set the historical context for understanding how researchers and counseling psychologists have examined the links between career development and psychological health. We proceed with describing Lapan’s (2004) Integrative Contextual Model (ICM) of Career Development for fostering youth career development in ways that both promote well-being and psychological health and, by doing so, establish preventative buffers against problematic mental health symptoms. Next, we offer a clinical reasoning

B. J. Dik (✉) · D. R. Marsh · A. J. Alayan
Colorado State University, Fort Collins, CO, USA
e-mail: bryan.dik@colostate.edu

model drawn from ICM to guide assessment, prevention, and intervention, then, briefly explore the implications of the model for general mental health assessment, prevention, and intervention. We then illustrate our guiding framework and clinical reasoning model using a case example of a 17-year-old secondary school student striving to establish a sense of direction and, relatedly, a sense of purpose in his burgeoning vocational life.

Work and Mental Health

There are close connections between work experiences and the development, expression, and maintenance of mental health. In most cultures today, “work”—the life domain in which people create goods or provide services, usually (although not exclusively) in exchange for payment—occupies the period of life after formal schooling and before retirement (although work often overlaps with both schooling and retirement). A “job” is a specific position held over a discrete period of time, and a “career” usually refers to a collection of jobs a person holds over the course of one’s working life, or to one’s involvement in a particular industry or job family (e.g., a teaching career). For most people, work plays a central role in one’s experience of life and offers a means to address one’s basic needs and foster well-being, satisfaction, mastery, and meaning. Work’s impact on mental health—for ill or for good—can be profound. On one end of the spectrum, the loss of work is linked to numerous mental health concerns, ranging from reduced self-esteem to increased relational conflict to substance abuse and other more serious mental health problems (Blustein, 2008). On the other end, positive work experiences can boost one’s subjective well-being and spur on a sense of hope, gratitude, and purpose in life and forge deeper connections to others and to one’s community (Dik et al., 2015).

Work is usually understood as an activity undertaken within adulthood, yet the roots of healthy career development begin in childhood and continue throughout adolescence. Early in life, children identify with primary caregivers and begin to establish an image of what makes them unique in terms of their interests, values, abilities, personality, and strengths and limitations. This image represents the beginning of a “vocational self-concept” (Super, 1980). As children encounter opportunities and experiences at home and at school, curiosities are aroused, interests are explored, and future possible selves are imagined in work and other roles in life. During this period of growth, developmental tasks include cultivating a sense of concern about the future, control in one’s decision-making, conviction to achieve, and competence in attitudes and habits pertaining to work (Hartung, 2020; Savickas & Super, 1993). When this process goes well, children begin to anticipate the future in a planful way, envisioning themselves functioning in work and other roles in a self-directed manner that effectively accounts for cultural, community, and familial values and expectations. During adolescence and into emerging adulthood, growth gives way to exploration. For this phase, the developmental tasks include crystallizing (establishing a clear vocational self-concept reflecting one’s

interests and strengths), specifying (broadly exploring career paths and forming a vocational identity), and implementing (enacting a career choice by preparing for and pursuing a position; Hartung, 2020). Successfully navigating these developmental tasks requires substantial social support and self-confidence. In a rapidly changing world of work, the process also requires building “career adaptability,” or one’s readiness and resources for coping with anticipated developmental tasks but also unexpected transitions and traumas that may occur throughout the life span (Savickas, 2013).

History of Career Development Psychology and Importance to Mental Health

In many ways, the history of vocational psychology (i.e., research, theory, and practice related to career choice and development) is intertwined with the history of careers themselves. The rise of careers dates to the convergence of industrialization, urbanization, and immigration that propelled many major cities into modernity during the nineteenth century. At the center of the rise of careers was the factory system of production, itself a product of rapid innovation in energy production and technology. The advent of steam power meant that machines could be developed and deployed in plants located anywhere, not only along rivers that offered water power. A heavy demand saw the invention of many new machines, resulting in rapid specialization and division of labor. Because machines only performed specific (rather than general) functions, operators with specific skills as well as specialists capable of installing, maintaining, and repairing particular machines were needed. In response, employers recruited workers to perform a specific cluster of tasks, which ultimately resulted in the division of jobs into occupations (e.g., management, research, sales, accounting). For the first time, large numbers of workers were free to seek out particular jobs and even to change from one occupation to another, based on available opportunities and the worker’s strengths and interests. This represented quite a departure from the agrarian roots of most local economies at that time (Savickas & Baker, 2005).

These forces of industrialization, urbanization, and immigration quickly began to shift the population’s distribution, and cities grew rapidly. Along with this growth came parallel increases in unemployment and in many related social problems, such as problematic alcohol use, delinquency, and crime. Social services were established to respond to the need. For example, in 1844 in London, the Young Men’s Christian Association (YMCA) was established to improve the “spiritual condition and mental culture of young men engaged in drapery and other trades” (p. 18, Savickas & Baker, 2005). The YMCA opened a library and offered classes to help accomplish this. The first YMCAs in North America opened shortly thereafter, and established committees on occupations to provide job search support for underemployed immigrants. By the 1890s, the YMCAs led the way in their focus on

prevention, offering industrial education courses and character education for youth. Their services grew and expanded, eventually incorporating formal vocational guidance. When the scientific study of individual differences emerged in the late 1800s and early 1900s, these principles—along with early methods of assessing differences—became incorporated into the vocational guidance process.

Adopting an individual differences-based approach with the goal of helping immigrants make sound choices about education, training, and work, Frank Parsons—often described as the “father of vocational guidance”—authored the landmark book, *Choosing a Vocation* (Parsons, 1909). The book established what was essentially a person–environment fit model, in which wise choices were those that accounted for the individual’s unique psychological attributes, the distinct work-related requirements of different lines of work, and “true reasoning on the relation of these two groups of facts” (p. 5). This basic model, and the vision of offering strategies to improve the lives of marginalized people, remains at the core of vocational psychology and career counseling practice today. The disciplines of vocational psychology (which after the 1950s became a subfield of counseling psychology) and the related discipline of industrial–organizational psychology grew in response to salient societal needs, such as the need to select and train soldiers efficiently, and to assist returning military personnel in their quest to find meaningful civilian jobs, during and after the major world wars of the twentieth century. These demands led to advancements in interest and personality assessment, as well as intellectual and ability testing, all of which found application in both career counseling and employee selection.

As psychology grew as a discipline in the middle-to-late twentieth century, the pressure toward increasing specialization led to an unfortunate growing bifurcation of the study and treatment of work-related concerns from other areas of psychological scholarship and practice. Within health services, the demands of mental health practice and changing role of third-party reimbursements in countries like the United States further divided mental health practice from efforts to assist with work-related issues, which were typically not covered by health insurance. As several authors have argued (e.g., Blustein, 2006; Hall, 1996), in an era in which treating “the whole person” is an oft-repeated goal, an integrative approach that incorporates all aspects of human experience—work and nonwork—is essential. Some examples of integrative approaches have emerged and offer promise, such as those within rehabilitation psychology, vocational rehabilitation counseling, occupational health psychology, and positive psychology. Each of these interdisciplinary areas of research and practice more explicitly recognizes the role that work experiences play in healthy psychological functioning, and vice versa. Ultimately, while disciplinary boundaries are convenient ways for scholars to divide up the study of human behavior, the separation of work from other life domains is not consistent with the lived experiences of people. Clearly, an integrative approach is needed.

Lapan's Integrative Contextual Model of Career Development

Within vocational psychology, several distinct theoretical paradigms have emerged. The most direct descendants of Parson's model are the person–environment fit (P-E fit) theories (e.g., Dawis & Lofquist, 1984; Holland, 1997), which emphasize the congruence or correspondence between psychological attributes of the individual (e.g., interests, values) and unique characteristics of jobs. From this perspective, the greater the alignment between P and E, the better the outcomes. Developmental approaches (e.g., Gottfredson, 1981; Super, 1980) shift focus toward the broader developmental context in which career paths unfold, noting the unique tasks that are essential at different stages in the life course as individuals strive to implement their vocational self-concepts within their work and lives. Social Cognitive Career Theory (Lent et al., 1994) attends to individuals' beliefs about aspects of their career potential (i.e., self-efficacy) and expected outcomes for relevant task behavior, which combine to influence career goals and leverage personal agency. Constructivist and narrative approaches (e.g., Cochran, 1997; Savickas, 2013) propose a co-constructive process for personal development in which individuals interact with their social environments to form a narrative reputation and identity they can enact within the career domain. Finally, the Psychology of Working Theory proposes that marginalized people facing economic constraints strive to develop the volition and adaptability to build a career marked by “decent work” that affords safety and a reasonable standard of living; only then can people experience need fulfillment necessary for well-being and meaning in their careers (Duffy et al., 2016). Together, these theories offer a rich tapestry of frameworks through which career behavior can be explained. Rather than drawing from one paradigm, we take an integrative approach, noting that youth are more likely to develop an adaptive, resilient, and proactive approach to career development by accomplishing several interrelated tasks that draw from multiple theories.

Specifically, the model informing our approach to assessment, prevention, and intervention is Lapan's Integrative Contextual Model (ICM; Lapan, 2004; Turner & Lapan, 2013). The ICM Model posits that there are several career development tasks that children and adolescents must engage in preparation for the world of work. Success with these tasks is associated with positive school, career, and life outcomes, including school success and academic achievement, career awareness, adaptability, resiliency, and emotional support (see Fig. 18.1). These specific career development tasks include (1) developing career-related self-efficacy and attributional styles; (2) forming a vocational identity; (3) learning effective social, prosocial, and work readiness skills; (4) constructing a better understanding of self, world of work, and fit; (5) crystallizing personally valued vocational interests; and (6) developing the empowerment of students to achieve academically and become self-regulated learners (Turner & Lapan, 2013). Each of these tasks is described in detail subsequently.

First, self-efficacy (i.e., a task-specific belief in one's ability to successfully perform or complete that task) for relevant educational tasks has been associated with

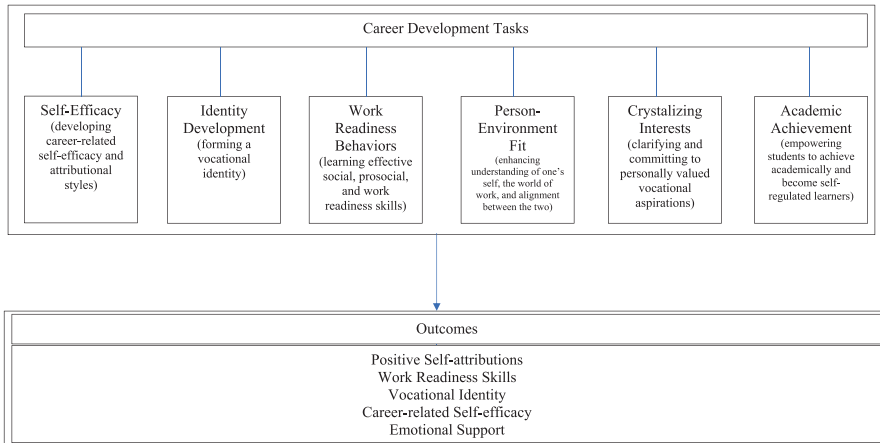


Fig. 18.1 Career development tasks and outcomes in Lapan's (2004) Integrative Contextual Model of Career Development

academic and career-related outcomes for youth, such as persistence in academic subjects (e.g., Larose et al., 2006). Self-efficacy beliefs begin developing early in one's academic career, through the influences of one's personal performance accomplishments (e.g., grades received), vicarious learning (e.g., observations of peer performance), social persuasion (e.g., feedback from others), and physiological arousal. Teachers and caregivers play a large role in the development of self-efficacy beliefs in children and adolescents through these sources of information. Specifically, Turner et al. (2003) posited that parents' providing positive self-efficacy information was associated with positive career development outcomes, including motivation to engage in career planning, knowledge of self in the world of work, and career decision-making. The development of positive self-attributional styles (i.e., one's ability to attribute personal accomplishments to one's abilities, skills, and efforts) is also linked to the development of self-efficacy. In a broader sense, adolescent positive attributional styles are positively related to a bevy of important career development outcomes, including improved vocational maturity and knowledge (Powell & Luzzo, 1998).

Second, vocational identity refers to one's view of oneself (including one's abilities, interests, and goals) related to the vocational domain (Holland, 1997). Vocational identity may be developed through several cognitive processes, including exploration, reflection, and observation. Higher levels of vocational identity clarity in adolescents are associated with positive career and psychological health-related outcomes, including career adaptability, meaning in life, and life satisfaction (Hirschi, 2012; Negru-Subtirica et al., 2015, 2016).

Third, work readiness skills comprise a wide range of abilities, including social skills, prosocial skills, and general employability skills (Lapan, 2004). More specifically, these skills include positive work habits (e.g., punctuality, responsibility, attention to detail), social and prosocial competence (e.g., building relationships,

interpersonal skills), and entrepreneurship (e.g., leadership skills, initiative, motivation, flexibility). Work readiness skills are positively associated with career exploration, goal setting, and proactivity in the work domain (Conkel-Ziebell et al., 2018). Work readiness skills are also linked to better workplace adjustment, which in turn is associated with higher self-esteem and self-efficacy (Rigby & Slee, 1993). School environments, family, and peer relationships can all contribute to the development of work readiness skills. In academic settings, such skills can be developed through classroom instruction and other structured experiences. In the family environment, children often learn decision-making, scheduling, and communication skills. Within peer relationships, children learn social (e.g., communication) and prosocial (e.g., empathy, kindness) skills. Children's academic, family, and social environments can be shaped in ways that promote positive work readiness skills, which lead to positive career and psychological health outcomes (Turner & Lapan, 2013).

Fourth, constructing a clear understanding of one's self, the world of work, and one's fit within the world of work is a foundational concept in vocational psychology that can be incorporated and developed during childhood and adolescence. Of note, there are several challenges that children and adolescents may experience when constructing this understanding. These challenges include gender-based circumscription of vocational goals and expectations, career decision-making readiness, and school-to-work transition (Turner & Lapan, 2013). Gender-based circumscription of vocational aspirations, a component of Gottfredson's (2002) developmental approach within vocational psychology, refers to limiting or narrowing one's vocational options based on societal views and messages surrounding "appropriate" occupations related to one's gender identity. This process of circumscription begins in early childhood and continues through adolescence. Narrowing and eliminating one's vocational options through this process of circumscription is associated with individuals choosing to not pursue careers that may otherwise be a good fit based on interest, identity, and efficacy. For example, societal messaging can lead female-identifying individuals to avoid STEM (science, technology, engineering, and mathematics) careers, despite potentially strong fit (e.g., Lapan & Jingeleski, 1992). To help counter these effects, career development interventions with youth can incorporate personal reflection on how socialization has impacted one's views of potential careers and help young people develop a sense of self and their fit within the world of work (Turner & Lapan, 2013).

Within the construction of one's occupational fit, another challenge involves career decision-making readiness. According to Piaget's (1977) theory of cognitive development, during adolescence individuals shift to more abstract thinking, which can involve thinking about future outcomes and one's future self, including one's self in the world of work. Assisting adolescents in developing cognitive maturity surrounding career decision-making can contribute to positive outcomes, including career commitment and problem-solving skills (Patton & Creed, 2001). Cognitive-based career interventions during adolescence can incorporate training in various skills related to career decision-making, including problem-solving, identifying possible courses of action, evaluating options, and implementing a plan of action (Lapan, 2004; Turner & Lapan, 2013). Yet another challenge involves

school-to-school and school-to-work transitions, processes that can be complex and are associated with negative emotions for some young people. For instance, transitioning from elementary to junior high school may involve anxieties surrounding increased workload and new peer relationships, and this transition has been associated with decreases in self-esteem (Seidman et al., 2003; Zeedyk et al., 2003). Interventions focused on assisting children and adolescents through school-to-school and school-to-work transitions have recommended the use of appropriate social support resources (e.g., parents, peers, teachers) and the implementation of learning activities in school curricula focused on forging connections between school and work and developing flexible decision-making skills.

Fifth, the crystallization of personally valued vocational interests usually occurs during adolescence and early adulthood. This process involves reflecting on personal values, clarifying occupational goals, and making an initial commitment to pursuing these goals (Turner & Lapan, 2013). Adolescents' aspirations are influenced by economic and social factors and constraints as well, including perceived and actual limits and barriers that may impede their opportunity to fully express their interests (Chaves et al., 2004). Educational and social environments can provide opportunities for adolescents to explore their interests and expand their awareness of vocational possibilities (Turner & Lapan, 2013).

Finally, self-regulated learning refers to the process of setting and planning learning-focused goals, monitoring one's own motivation and performance on learning activities, and reflecting on the outcomes of those activities, which in turn can impact planning for future learning goals and activities. Self-regulated learning is associated with academic performance and achievement, positive self-expectations, and goal motivation (Lapan, 2004). Schools, communities, and families can provide opportunities and resources for children and adolescents to develop skills associated with self-regulated learning (Turner & Lapan, 2013).

Studies investigating the utility of the ICM model have posited that the aforementioned components of the model account for 65–75% of the variance in several vocational outcomes, including positive self-attributions, vocational identity, and career-related self-efficacy expectations (Turner et al., 2006). The ICM model has also served as the foundation for a career intervention for use with adolescents. When compared to a traditional career counseling intervention (i.e., completion of an interest inventory, discussion of results, and engagement with occupational exploration), the ICM intervention was associated with greater work readiness skills, self-efficacy related to career goals, and emotional support (Turner & Conkel, 2010).

Clinical Reasoning Model and Approach to Assessment

In this section, we present a clinical reasoning model through which a counselor can aid a child or adolescent through the practical application of ICM. As emphasized in P-E Fit theory, career development interventions often involve endeavoring to

increase self-understanding in a manner that can help clients align their personal characteristics with opportunities afforded by their environment. For this reason, in contrast to a traditional psychological assessment strategy focused on diagnosing the problem, in career development the assessment functions as a primary element of the intervention itself. This type of assessment process can serve to set children and adolescents down a path that stimulates their ongoing career development, which has been associated with improved well-being (e.g., Uthayakumar et al., 2010). Subsequently, the processes through which a psychologist may help facilitate these career development benefits for youth are described using the ICM approach (see Fig. 18.1).

The first task associated with ICM is to assess, and help foster, career-related self-efficacy. As asserted in Social Cognitive Career Theory (Brown & Lent, 2019; Lent et al., 2002), individuals often draw from previous experiences or outcomes to inform present levels of self-efficacy. For many adults, this can often involve drawing from previous work experiences; however, work experience is not required for this process. Many youth have limited work experience from which to draw, but nevertheless have relevant experiences in other domains, such as school and leisure. Asking a child questions about academic performance can be helpful for assessing self-efficacy in germane areas. For example, asking “how good are you at math?” is more likely to give a direct understanding of a child’s self-efficacy in mathematics than it is to be an assessment of “objective” abilities. Of course, it is important to recognize that answers to such questions are influenced by mental health concerns experienced by the individual, most notably depression and anxiety (Zunker, 2008). Other contributors to self-efficacy include contextual affordances, including the extent to which one holds marginalized identities that can induce barriers to the development of self-efficacy (Brown & Lent, 2019). Through a lens of preventing and intervening upon factors that can lead to mental health distress, it is important to acknowledge the roles economic constraints and marginalization can play in making positive career development more difficult (Duffy et al., 2016, 2018). Still, research suggests that increased awareness of these factors can mitigate their potentially pernicious effects. For example, empirical evidence indicates that Black youths’ sense of connection to their racial or ethnic identity and understanding of the extent to which other groups are oppressed may lessen the harmful effects of discrimination on self-efficacy and academic achievement (Sellers et al., 1998; Wong et al., 2003), and in turn on their well-being. Thus, a multiculturally competent psychologist working to facilitate youth career development will likely seek to facilitate appropriate conversation and exploration of ways in which discrimination, marginalization, and other contextual factors have and/or have not influenced their client in a way relevant to their self-efficacy.

Forming a vocational identity is a key aspect of ICM (Lapan, 2004), as well as traditional P-E Fit approaches. Holland et al. (1980) defined vocational identity as “possession of a clear and stable picture of one’s goals, interests, and talents” (p. 1191). Face-valid questions from a career counselor probing about what a young person is “good at” or “likes” have the potential to help clients take stock of their own vocational identity. Here as well, it is important to consider that in the absence of

substantial work experience, these questions may be directed toward both the academic and leisure realms. Indeed, a psychologist can benefit from helping children or adolescents identify how they may translate an area of leisure interest (e.g., drawing) into possible relevant career paths (e.g., art teacher, artist, art director). In working to increase adolescents' understanding of their vocational identity, it is best to use these techniques in conjunction with formal assessments of individual differences constructs such as interests, values, personality, abilities. Given its validity for predicting academic and job satisfaction, interests are perhaps the best starting place. One useful instrument for these purposes is the Strong Interest Inventory (Donnay et al., 2004), although several alternative measures of interests with strong psychometric properties are available (cf. Dik & Rottinghaus, 2013). Online assessment systems such as PathwayU (<http://pathwayu.com>) that assess multiple constructs also offer key advantages in comprehensiveness and efficiency (Copeland et al., 2011). Here again, psychologists are urged to be mindful of the potential influence of mental health concerns such as mood disorders, which can have a distorting effect on individuals' ability to form an accurate view of their interests and strengths (Zunker, 2008).

Work readiness skills represent the third component of ICM (Lapan, 2004; Turner & Lapan, 2013). There are several strategies for assessing work readiness. Perhaps the most straightforward approach is through the Social/Prosocial/Work Readiness Skills subscale of the Structured Career Development Inventory (Lapan, 2004). This scale uses items like "I get along well with people who have authority over me" to assess the extent to which youth may be prepared to express themselves in the world of work. It is also important that psychologists supplement measures of work readiness with information derived through counselor behavioral observation, especially regarding the social skills facet of work readiness. Assessing relevant personality traits can also be helpful, given robust connections between components of work readiness like positive work habits (e.g., punctuality, attention to detail) and personality traits such as conscientiousness (Ozer & Benet-Martínez, 2006). One starting point is the use of personality inventories, such as the Big Five Inventory (John et al., 2012), which can provide useful information regarding these attributes. Likewise, scores derived through other sources such as the California Psychological Inventory can provide useful information of this nature (Gough & Bradley, 2002). Formal instruments like these can be deployed in addition to asking simple, practical questions about personality, such as "How would your friends describe you?" Such strategies also serve to identify potential mental health vulnerabilities that may disrupt the development of work readiness skills. Regardless, it is important that counselors view work readiness as a malleable component of youth career development. While personality aspects may predispose youth to express particular behaviors relevant to work readiness, evidence suggests that work readiness skills can be significantly altered through intervention (e.g., Turner & Conkel, 2010).

Crucial to ICM's (Lapan, 2004; Turner & Lapan, 2013) tasks for career development is enhancing understanding of one's self, the world of work, and alignment between the two. While formal assessment tools and practical career counseling tactics can aid in increasing clients' understanding of themselves, these strategies

do not address how to aid clients in comprehending the other two components of this task. Regarding one's understanding of the world of work, career counselors can direct children and adolescents (as well as adults) through the use of online occupational databases, which are designed to inform individuals of this information. For example, those in the United States, Canada, and many other nations can help youth navigate the Occupational Information Network (O*NET), which is an expansive database maintained by the U.S. Department of Labor. The O*NET, and databases like it, is optimally used in supplement with a counselor seeking to help provide guidance regarding how a youth's particular burgeoning work personality may align with various options presented within the database. Here as well, some online assessment systems (e.g., PathwayU, which is described in the forthcoming case example) offer the advantage of packaging individual differences assessments with accurate and up-to-date occupational information. Independent of the particular tools used, career exploration is enhanced when one's motivation to explore is high; such motivation can be undermined by underlying mental health concerns (e.g., lethargy rooted in depression, fear rooted in anxiety).

ICM proposes that youth are aided by going beyond discerning interests toward crystallization of personally valued vocational aspirations (Lapan, 2004; Turner & Lapan, 2013). Turner and Lapan (2013) note that "crystallization requires adolescents to weigh their values...clarify their vocational goals, and begin to commit to occupational preparation" (p. 551). Indeed, the discernment of youths' values is an important step in this process. While interest measures may point psychologists in a helpful direction (see Rottinghaus & Zytowski, 2006), values may also be assessed through ipsative/rank-order values sorting measures. Engaging in such activities, coupled with questions, such as "what things are important to you when you think about your career?" can help elucidate values. When values are clarified, vocational goals and steps for how to engage in occupational preparation also become clearer. As psychologists approach these topics, they are encouraged to offer guidance drawing from established "critical ingredients" in career interventions that have demonstrated efficacy (cf. Brown, 2017), while maintaining awareness of possible mental health vulnerabilities that may disrupt the process.

Finally, ICM notes the importance of empowering students toward academic achievement and self-regulated learning (Lapan, 2004; Turner & Lapan, 2013). Key to this process is helping students set self-determined goals and then engage in regulation of their goal-directed behavior. Psychologists can use open-ended inquiries to assist youth in discerning particular vocational pursuits in which they would like to engage as early as in the first session by asking questions such as "Where would you like to be by the end of our work together?" They can also assist youth in maximizing goal specificity and attainability while ensuring goals remain self-generated. Psychologists may also draw from empirical evidence of effective interventions designed to teach self-regulation tactics. One example is found in Duckworth et al.'s (2016) study in which high school students were educated on techniques for eliminating distractions (e.g., putting one's phone away), which was found to significantly increase the extent to which students reached their study goals. Attention to managing potentially disruptive attention and hyperactivity deficits is also important, where necessary (Dipeolu, 2011).

Perspectives and Approaches to Mental Health Prevention and Intervention

The overall goals of the ICM model include promotion of career awareness, acquisition of career development skills, and support of school success outcomes (Turner & Lapan, 2013). Given the known linkages of educational and career success with mental health and well-being (Zunker, 2008), the model is fundamentally preventative in nature, building on the assumption that fostering school and career success offers one path to warding off potential mental health concerns that might otherwise be triggered. The model is not intended to serve as an intervention strategy specifically for addressing mental health concerns when they emerge, but using this same logic, the promotion of educational and career success can impart a sense of hope and optimism that may serve to ameliorate symptoms of mental health concerns such as those stemming from depression and anxiety. Engagement with ICM tasks during childhood and adolescence can support the career development process and educational and occupational success (Conkel-Ziebell et al., 2018), and empirical evidence suggests that improved career development promotes enhanced psychological well-being (e.g., Uthayakumar et al., 2010).

Case Example

Derrick is a 17-year-old 11th-grade student who expressed concern rooted in feelings of uncertainty about his future. He was raised in a stable family by parents who often expressed the value of a strong education; they also work in education themselves, his father as a consultant with an educational technology company, and his mother as a religious education director at their local church. Derrick was adopted from eastern Europe as an infant, yet appears to have developed secure attachments with his parents, who speak in glowing terms about their son. The family lives a modest but comfortable lifestyle and enjoys the privileges experienced by many White middle-class families. Derrick noted that he struggles with procrastination but considers himself a bright student, especially in subject areas that he enjoys most, such as history. He listed science and English as subject areas to which he is generally averse, due in part to some disappointing experiences with teachers, and in part because he finds them “boring.” Nevertheless, Derrick earns mostly As and Bs and is currently enrolled in two Advanced Placement (AP) courses.

Counselor interaction with Derrick begins with a broad, open-ended conversation about his current situation and goals. Derrick expressed that he plans to graduate from high school after grade 12 and pursue a bachelor’s degree at a 4-year university, but is unsure what to study. When pressed, he noted that he would study business if he had to choose now, but is mostly unclear what aspects of business would be most appealing. When pressed further, he offered: “I think it would be fun to build a team of employees, earn enough money to pay them well, and support

their personal development.” When asked to imagine a dream scenario in his future, he pointed to two possibilities. First, consistent with his leisure interests in playing, following, and watching sports, he noted that evaluating talent as a scout or a General Manager for a basketball franchise would be exciting to him. Second, he expressed that working as a land developer seemed interesting, especially the idea of taking an empty space and building a commercial structure with businesses that satisfied the demands and interests of the community. Both roles, Derrick suggested, would offer him a feeling of accomplishment, and one strength he would bring to them is the ability to make rational decisions that account for analytics, rather than emotional decisions that downplay or disregard the available data.

In this interaction, Derrick’s career-related self-efficacy was assessed informally, without the use of formal assessments. He expressed confidence in his ability to succeed as a student, pointing to his track record. (Past performance, as noted earlier, is a key predictor of self-efficacy—as is encouragement from others; both appear to be working in Derrick’s favor.) In terms of his extracurricular involvement, Derrick reported that he is extensively involved in sports (mostly running cross-country and track) and performing arts (playing low brass instruments in multiple bands and in an orchestra pit for the school’s annual stage musical). These experiences appeared to have equipped Derrick with goal directedness, the ability to manage his time, and achieve high-performance standards, but they also prevented Derrick from accruing formal employment experience, outside of occasional odd jobs. As a result, his level of work readiness required further exploration and possibly further development. However, Derrick’s performance as a student and ability to manage multiple additional roles while maintaining supportive relationships with a small but loyal and vibrant group of peers are positive indicators that bode well for his work habits and future social and prosocial competence.

In terms of vocational identity, Derrick offered somewhat vague descriptions of his interests, values, and goals. Despite his concern about his uncertain future, he did not express immediate urgency in narrowing his career choices; this is developmentally appropriate for someone planning on attending a university in 2 years, but it pointed to the need to engage in efforts to increase both his self-awareness and his knowledge of opportunities potentially available to him. To facilitate this, Derrick was invited to complete PathwayU, an online career assessment system that measures interests, values, and personality traits, among other attributes, available at <http://pathwayu.com>. The interests and values assessments within PathwayU are derived from the U.S. Department of Labor’s Work Importance Profiler (McCloy et al., 1999a) and Work Importance Locator (McCloy et al., 1999b), and their scores have strong evidence of reliability and validity. Because interests and values serve as important starting points for career choice interventions, and form the basis of PathwayU’s proprietary career match process, Derrick was instructed to focus on those two assessments in particular.

Derrick’s results (see Fig. 18.2) from the interest inventory revealed an overall low-to-moderate elevation of scores, with none exceeding the midrange, a profile that can reflect either symptoms of depression or relatively narrow interests. When the former possibility was explored using a risk assessment and a symptom

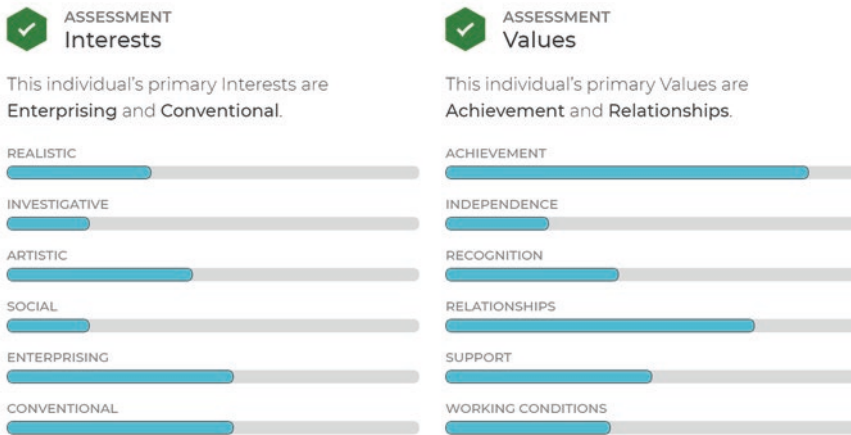


Fig. 18.2 Derrick's interests and values results presented in the PathwayU online assessment system (<http://pathwayu.com>). Modified and reproduced by special permission of the Publisher, jobZology®. Further reproduction is prohibited without the Publisher's written consent

checklist, Derrick denied experiencing anything more than fleeting periods of negative mood. The evidence of consistently high-functioning and positive engagement across multiple domains (academic, social, athletic) suggested more weight be attributed to the latter explanation than the former. Indeed, Derrick expressed that he indicated “like” responses only to those activities about which he was felt he was passionate, and selected “dislike” to everything else. His scores revealed that Enterprising and Conventional were his highest interest domains, and Artistic was a secondary interest. When reminded of what these types captured (e.g., Enterprising reflects enjoyment of persuading others via business, sales, managing, or politics; Conventional reflects enjoyment of detail, structure, and data; Artistic reflects enjoyment of opportunities to engage in self-expression), Derrick explored ways they fit with his experience. For example, he could see how his curiosity about business and using data analytics in scouting athletes were reflected in his Enterprising and Conventional scores, respectively. Similarly, his enjoyment of music and the thought of developing an empty plot of land (e.g., a “blank canvas”) into structures for people to enjoy reflected Artistic interests. He noted that satisfying these themes seemed important in his future educational and career choices.

In terms of work values, Derrick's scores revealed that Achievement was his highest value, and Relationships were second. This, too, seemed to Derrick to align with his experience; his goal-directed academic behavior was driven by a need for achievement, and the camaraderie he experienced in athletics and band were examples of the importance of enjoying coworkers and desiring to be of service to others. Other values also seemed important to Derrick yet had comparatively low scores, such as Support and Recognition, but it was noted that the values instrument used a forced-choice format requiring him to essentially rank order his values. Therefore,

Using Career Matches

Based on your assessment results, PathwayU calculates your fit to nearly 1,000 career paths. That's quite a few!

It can be helpful to start by looking at the themes among your matches using the Careers by Subject Area view.

Subject areas listed toward the top show where you have a high concentration of strong matches. Subject areas listed toward the bottom tend to be a weaker fit for you. Click into each subject to view the specific career paths in each area.

If you would like to view your matches across all subjects, use the View Options dropdown to change your view.

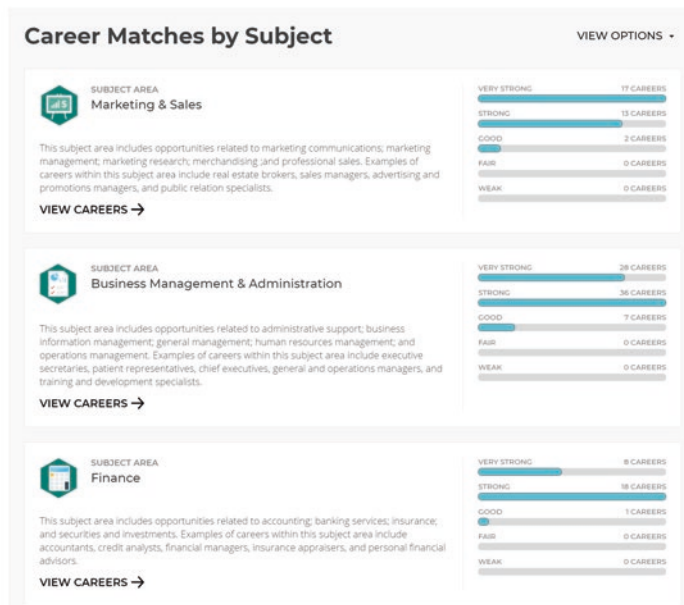


Fig. 18.3 Derrick’s Career Match results are presented in the PathwayU online assessment system (<http://pathwayu.com>). Modified and reproduced by special permission of the Publisher, jobZology®. Further reproduction is prohibited without the Publisher’s written consent

low scores may still reflect important values, but the highest scores are likely to function as “non-negotiables”—if these aren’t satisfied in his career path, it may be very difficult for him to experience satisfaction.

Derrick recognized the importance and utility of articulating his uniqueness using the language of interests and values; it enhanced his self-understanding. The next step was to examine results from PathwayU’s Career Match tool, which combines an individual’s interests and values data to recommend career paths (drawn from the O*NET) predicted to fit well. For Derrick, the largest proportion of Very Strong matches was found in Marketing & Sales, Business Management & Administration, and Finance subject areas (see Fig. 18.3). Among the strongest-matching occupational titles were Marketing Manager and Public Relations Specialist. Both of these are traditional business-related job titles, but Derrick noted that sports franchises also required these roles, which led to some reflection on the full range of business-related activities that might keep him connected with athletics. With respect to finance, Derrick noted that his interest in advanced metrics when analyzing sports performance transferred well to the notion of using advanced metrics for analyzing financial markets—this piqued his curiosity regarding finance-related career paths. Reading information about different occupational titles (many augmented with “day-in-the-life” videos) on a screen is a helpful starting point, but for an especially helpful understanding of preferred career paths, conducting

informational interviews with experienced workers within those jobs is essential. Derrick recognized this as an important next step in his process of establishing a sense of direction.

Recognizing that he still has some time before beginning his postsecondary education, Derrick identified three process goals to pursue in the next steps of his journey. First, as noted previously, he expressed intent to talk with people (via informational interviews) who are active in careers in business, sports, and finance—especially where those three things intersect. Second, he declared an interest in finding at least seasonal work, both to earn money but also to experience the workings of a business from the vantage point of an entry-level intern. Third, noting that he had found a brief online course on sports management through his local library, he indicated that he intended to complete it—and others, if he enjoys it sufficiently. All three of these goals serve as excellent pathways toward developing a more detailed awareness of self and opportunities, greater work readiness skills, and habits that stimulate self-regulated learning. When talking through them, Derrick's mood brightened and his sense of optimism and excitement was palpable.

Summary and Conclusion

Psychologists and educators interested in holistic approaches to promoting mental health among youth recognize the importance and value of encouraging school success and adaptive career development. In this chapter, we described the Integrative Contextual Model of Career Development (Lapan, 2004), a useful approach to fostering youth career development in ways that promote both well-being and psychological health.

The ICM offers clear strengths as a model for informing career intervention with children and adolescents. First, as an integrative model, it draws from multiple established career development theories. Besides broadening the evidence base available to support the model, this approach permits psychologists to focus their intervention efforts on the most developmentally relevant needs for a particular student or group of students. For example, the model draws from SCCT by prioritizing the importance of developing career-related self-efficacy (Lent et al., 1994), an ongoing effort that reflects an iterative process of learning from one's accomplishments, from peers, and from the encouragement they receive from adults. The model also draws from person–environment fit theory (e.g., Holland, 1997) by building toward an alignment of one's self-understanding with opportunities and needs in the world of work. Yet in doing so, it also incorporates awareness of key barriers in this process proposed by Gottfredson's (2002) developmental theory, highlighting the constricting roles of sex-role stereotypes and occupational prestige. This flexible approach recognizes the limits inherent in adopting any singular theoretical strategy, opting instead to incorporate constructs and processes from whichever theory is best suited to address an individual's particular needs at a particular time.

Second, by drawing attention to the developmental processes that predict school- and work-related outcomes, the ICM also provides insight on the concrete steps that psychologists and educators can take to help youth increase their career awareness and build the strategies and skills they need to succeed. The model recognizes that “young people should be (a) given developmentally appropriate career information, (b) assisted in confronting gender biases at an early age, (c) provided opportunities to participate in technology-enhanced mentoring, and (d) introduced to specialized careers that require earlier planning and educational attainment that begins in high school” (Turner & Lapan, 2013, p. 557). Psychologists and educators can increase the odds of good outcomes by addressing these objectives via helping youth develop positive self-efficacy beliefs and attributional styles, articulate a vocational identity, learn work-readiness skills, construct an understanding of the self and one’s fit to opportunities and needs in the work world, crystallize their vocational interests, and establish a habit of self-regulated learning.

Third, it is worth emphasizing that pursuit of positive school- and work-related outcomes via assessment and intervention also prevents the onset of negative mental health outcomes (Blustein, 2008) and promotes general well-being (Dik et al., 2019). Psychologists who stress the importance of treating “the whole person,” incorporating all aspects of human experience, view the educational and work domains as key pathways through which broader competencies can be developed and human growth, potential, and health can be optimized. Attending to career development using an integrative approach like ICM is thus a critical element of a comprehensive approach to promoting positive youth development.

References

- Blustein, D. L. (2006). *The psychology of working: A new perspective for career development, counseling, and public policy*. Lawrence Erlbaum Publishers.
- Blustein, D. L. (2008). The role of work in psychological health and well-being: A conceptual, historical, and public policy perspective. *American Psychologist*, 63(4), 228–240. <https://doi.org/10.1037/0003-066X.63.4.228>
- Brown, S. D. (2017). Meta-analysis and evidence-based career practice: Current status and future directions. In J. P. Sampson, E. Bullock-Yowell, V. C. Dozier, D. S. Osborn, & J. G. Lenz (Eds.), *Integrating theory, research, and practice in vocational psychology: Current status and future directions*. Florida State University Libraries. <https://doi.org/10.17125/svp2016.ch8>
- Brown, S. D., & Lent, R. W. (2019). Social Cognitive Career Theory at 25: Progress in studying the domain satisfaction and career self-management models. *Journal of Career Assessment*, 27(4), 563–578. <https://doi.org/10.1177/1069072719852736>
- Chaves, A. P., Diemer, M. A., Blustein, D. L., Gallagher, L. A., DeVoy, J. E., Casares, M. T., & Perry, J. C. (2004). Conceptions of work: The view from urban youth. *Journal of Counseling Psychology*, 51(3), 275–286. <https://doi.org/10.1037/0022-0167.51.3.275>
- Cochran, L. (1997). *Career counseling: A narrative approach*. Sage Publications.
- Conkel-Ziebell, J. L., Turner, S. L., & Gushue, G. V. (2018). Testing an integrative contextual career development model with adolescents from high-poverty urban areas. *The Career Development Quarterly*, 66(3), 220–232. <https://doi.org/10.1002/cdq.12144>

- Copeland, L. Y., Dik, B. J., McLaren, M. R., Onder, C., Wolfson, N. E., & Kraiger, K. (2011). Recommendations for using computer-assisted career guidance systems (CACGS) in career counseling practice. *Journal of Psychological Issues in Organizational Culture*, 2(3), 86–94. <https://doi.org/10.1002/jpoc.20070>
- Davis, R. V., & Lofquist, L. H. (1984). *A psychological theory of work adjustment: An individual differences model and its application*. University of Minnesota Press.
- Dik, B. J., Duffy, R. D., Allan, B. A., O'Donnell, M. B., Shim, Y., & Steger, M. F. (2015). Purpose and meaning in career development applications. *The Counseling Psychologist*, 43(4), 558–585. <https://doi.org/10.1177/0011000014546872>
- Dik, B. J., O'Connor, W. F., Shimizu, A. B., & Duffy, R. D. (2019). Personal growth and well-being at work: Contributions of vocational psychology. *Journal of Career Development*, 46, 31–47. <https://doi.org/10.1177/0894845317730642>
- Dik, B. J., & Rottinghaus, P. J. (2013). Assessments of interests. In K. F. Geisinger, B. A. Bracken, J. F. Carlson, J.-I. C. Hansen, N. R. Kuncel, S. P. Reise, & M. C. Rodriguez (Eds.), *APA handbook of testing and assessment in psychology* (Testing and assessment in clinical and counseling psychology) (Vol. 2, pp. 325–348). American Psychological Association. <https://doi.org/10.1037/14048-019>
- Dipeolu, A. O. (2011). College students with ADHD: Prescriptive concepts for best practices in career development. *Journal of Career Development*, 38, 408–427. <https://doi.org/10.1177/0894845310378749>
- Donnay, D. A. C., Morris, M. L., Schaubhut, N. A., & Thompson, R. C. (2004). *Strong Interest Inventory® manual: Research, development, and strategies for interpretation*. Consulting Psychology Press.
- Duckworth, A. L., White, R. E., Matteucci, A. J., Shearer, A., & Gross, J. J. (2016). A stitch in time: Strategic self-control in high school and college students. *Journal of Educational Psychology*, 108(3), 329–341. <https://doi.org/10.1037/edu0000062>
- Duffy, R. D., Autin, K. L., England, J. W., Douglass, R. P., & Gensmer, N. P. (2018). Examining the effects of contextual variables on living a calling over time. *Journal of Vocational Behavior*, 107, 141–152. <https://doi.org/10.1016/j.jvb.2018.04.003>
- Duffy, R. D., Blustein, D. L., Diemer, M. A., & Autin, K. L. (2016). The psychology of working theory. *Journal of Counseling Psychology*, 63(2), 127–148. <https://doi.org/10.1037/cou0000140>
- Gottfredson, L. S. (1981). Circumscription and compromise: A developmental theory of occupational aspirations. *Journal of Counseling Psychology*, 28(6), 545–579. <https://doi.org/10.1037/0022-0167.28.6.545>
- Gottfredson, L. S. (2002). Gottfredson's theory of circumscription, compromise, and self-creation. In D. Brown (Ed.), *Career choice and development* (4th ed.). Jossey-Bass.
- Gough, H. G., & Bradley, P. (2002). *California Psychological Inventory manual*. Consulting Psychologists Press.
- Hall, D. T. (1996). *The career is dead--long live the career: A relational approach to careers* (1st ed.). Jossey-Bass Publishers.
- Hartung, P. J. (2020). Life-span, life-space career theory and counseling. In S. D. Brown & R. W. Lent (Eds.), *Career development and counseling: Putting theory and research to work* (3rd ed., pp. 95–127). Wiley.
- Hirschi, A. (2012). Vocational identity trajectories: Differences in personality and development of well-being. *European Journal of Personality*, 26(1), 2–12. <https://doi.org/10.1002/per.812>
- Holland, J. L. (1997). *Making vocational choices: A theory of vocational personalities and work environments* (3rd ed.). Psychological Assessment Resources.
- Holland, J. L., Gottfredson, D. C., & Power, P. G. (1980). Some diagnostic scales for research in decision making and personality: Identity, information, and barriers. *Journal of Personality and Social Psychology*, 39(6), 1191–1200. <https://doi.org/10.1037/h0077731>
- John, O. P., Donahue, E. M., & Kentle, R. L. (2012). *Big five inventory [Data set]*. American Psychological Association. <https://doi.org/10.1037/t07550-000>
- Lapan, R. T. (2004). *Career development across the K-16 years: Bridging the present to satisfying and successful futures*. American Counseling Association.

- Lapan, R. T., & Jingeleski, J. (1992). Circumscribing vocational aspirations in junior high school. *Journal of Counseling Psychology, 39*(1), 81–90. <https://doi.org/10.1037/0022-0167.39.1.81>
- Larose, S., Ratelle, C. F., Guay, F., Sénécal, C., & Harvey, M. (2006). Trajectories of science self-efficacy beliefs during the college transition and academic and vocational adjustment in science and technology programs. *Educational Research and Evaluation, 12*(4), 373–393. <https://doi.org/10.1080/13803610600765836>
- Lent, R. W., Brown, S. D., & Hackett, G. (1994). Toward a unifying social cognitive theory of career and academic interest, choice, and performance. *Journal of Vocational Behavior, 45*(1), 79–122. <https://doi.org/10.1006/jvbe.1994.1027>
- Lent, R. W., Brown, S. D., & Hackett, G. (2002). Social cognitive career theory. In D. Brown (Ed.), *Career choice and development* (4th ed.). Jossey-Bass.
- McCloy, R., Waugh, G., Medsker, G., Wall, J., Rivkin, D., & Lewis, P. (1999a). *Development of the O*NET computerized work importance profiler*. National Center for O*NET Development.
- McCloy, R., Waugh, G., Medsker, G., Wall, J., Rivkin, D., & Lewis, P. (1999b). *Development of the O*NET™ paper-and-pencil work importance locator*. National Center for O*NET Development.
- Negru-Subtirica, O., Pop, E. I., & Crocetti, E. (2015). Developmental trajectories and reciprocal associations between career adaptability and vocational identity: A three-wave longitudinal study with adolescents. *Journal of Vocational Behavior, 88*, 131–142. <https://doi.org/10.1016/j.jvb.2015.03.004>
- Negru-Subtirica, O., Pop, E. I., Luyckx, K., Dezutter, J., & Steger, M. F. (2016). The meaningful identity: A longitudinal look at the interplay between identity and meaning in life in adolescence. *Developmental Psychology, 52*(11), 1926–1936. <https://doi.org/10.1037/dev0000176>
- Ozer, D. J., & Benet-Martínez, V. (2006). Personality and the prediction of consequential outcomes. *Annual Review of Psychology, 57*(1), 401–421. <https://doi.org/10.1146/annurev.psych.57.102904.190127>
- Parsons, F. (1909). *Choosing a vocation*. Creative Media Partners, LLC.
- Patton, W., & Creed, P. A. (2001). Developmental issues in career maturity and career decision status. *The Career Development Quarterly, 49*(4), 336–351. <https://doi.org/10.1002/j.2161-0045.2001.tb00961.x>
- Piaget, J. (1977). *The development of thought: Equilibration of cognitive structures*. Viking Press.
- Powell, D. F., & Luzzo, D. A. (1998). Evaluating factors associated with the career maturity of high school students. *The Career Development Quarterly, 47*(2), 145–158. <https://doi.org/10.1002/j.2161-0045.1998.tb00548.x>
- Rigby, K., & Slee, P. T. (1993). Dimensions of interpersonal relation among Australian children and implications for psychological well-being. *The Journal of Social Psychology, 133*(1), 33–42. <https://doi.org/10.1080/00224545.1993.9712116>
- Rottinghaus, P. J., & Zytowski, D. G. (2006). Commonalities between adolescents' work values and interests. *Measurement and Evaluation in Counseling and Development, 38*(4), 211–221. <https://doi.org/10.1080/07481756.2006.11909783>
- Savickas, M. L., & Super, D. E. (1993). Can life stages and substages be identified in students? *Man and Work: Journal of Labor Studies, 4*, 71–78.
- Savickas, M. L. (2013). The theory and practice of career construction. In S. D. Brown & R. W. Lent (Eds.), *Career development and counseling: Putting theory and research to work* (2nd ed., pp. 147–183). Wiley.
- Savickas, M. L., & Baker, D. B. (2005). The history of vocational psychology: Antecedents, origin, and early development. In W. B. Walsh & M. L. Savickas (Eds.), *Handbook of vocational psychology* (3rd ed., pp. 15–50). Lawrence Erlbaum Associates.
- Savickas, M. L., & Super, D. E. (1993). Can life stages and substages be identified in students? *Man and Work: Journal of Labor Studies, 4*, 71–78.
- Seidman, E., Lambert, L. E., Allen, L., & Aber, J. L. (2003). Urban adolescents' transition to junior high school and protective family transactions. *The Journal of Early Adolescence, 23*(2), 166–193. <https://doi.org/10.1177/0272431603023002003>

- Sellers, R. M., Chavous, T. M., & Cooke, D. Y. (1998). Racial ideology and racial centrality as predictors of African American college students' academic performance. *Journal of Black Psychology, 24*(1), 8–27. <https://doi.org/10.1177/00957984980241002>
- Super, D. E. (1980). A life-span, life-space approach to career development. *Journal of Vocational Behavior, 16*(3), 282–298. [https://doi.org/10.1016/0001-8791\(80\)90056-1](https://doi.org/10.1016/0001-8791(80)90056-1)
- Turner, S. L., Alliman-Brissett, A., Lapan, R. T., Udipi, S., & Ergun, D. (2003). The career-related parent support scale. *Measurement and Evaluation in Counseling and Development, 36*(2), 83–94. <https://doi.org/10.1080/07481756.2003.12069084>
- Turner, S. L., & Conkel, J. L. (2010). Evaluation of a career development skills intervention with adolescents living in an inner city. *Journal of Counseling & Development, 88*(4), 457–465. <https://doi.org/10.1002/j.1556-6678.2010.tb00046.x>
- Turner, S. L., & Lapan, R. T. (2013). Promotion of career awareness, development, and school success in children and adolescents. In S. D. Brown & R. W. Lent (Eds.), *Career development and counseling: Putting theory and research to work* (2nd ed., pp. 539–564). Wiley.
- Turner, S. L., Trotter, M. J., Lapan, R. T., Czajka, K. A., Yang, P., & Brissett, A. E. A. (2006). Vocational skills and outcomes among Native American adolescents: A test of the Integrative Contextual Model of career development. *The Career Development Quarterly, 54*(3), 216–226. <https://doi.org/10.1002/j.2161-0045.2006.tb00153.x>
- Uthayakumar, R., Schimmack, U., Hartung, P. J., & Rogers, J. R. (2010). Career decidedness as a predictor of subjective well-being. *Journal of Vocational Behavior, 77*(2), 196–204. <https://doi.org/10.1016/j.jvb.2010.07.002>
- Wong, C. A., Eccles, J. S., & Sameroff, A. (2003). The influence of ethnic discrimination and ethnic identification on African American adolescents' school and socioemotional adjustment. *Journal of Personality, 71*(6), 1197–1232. <https://doi.org/10.1111/1467-6494.7106012>
- Zeedyk, M. S., Gallacher, J., Henderson, M., Hope, G., Husband, B., & Lindsay, K. (2003). Negotiating the transition from primary to secondary school: Perceptions of pupils, parents and teachers. *School Psychology International, 24*(1), 67–79. <https://doi.org/10.1177/0143034303024001010>
- Zunker, V. G. (2008). *Career, work, and mental health: Integrating career and personal counseling*. SAGE.

Chapter 19

Thematic Integration of Child and Youth Mental Health Practice in Counseling Psychology



José F. Domene

Abstract Areas of knowledge and core values within the field of counseling psychology have been infused into each of the chapters within the counseling psychology section of this book. Therefore, even though Dik and colleagues, Owens, Hanson and colleagues, and Socholotiuk have all described their own way of providing psychological services to child and youth clients, every one of these approaches clearly aligns with the specialization of counseling psychology.

Introduction

In the United States and Canada, counseling psychology is recognized as a distinct specialization within professional psychology by national professional associations and many, though not all, psychology regulatory bodies (Wada et al., 2020). Although counseling psychologists' scope of practice and expertise may overlap substantially with our colleagues who are trained as clinical and school psychologists, the specialization has several distinguishing characteristics that arise from the specific historical development of our profession and our approaches to professional practice (Bedi et al., 2011; Gelso et al., 2014). For example, the American Psychological Association (2008) identifies several areas of knowledge that counseling psychologists specialize in across the life span: (1) Healthy aspects and strengths of clients (whether being seen as individuals, couples, families, groups or organizations); (2) environmental/situational influences (how cultural, gender, and lifestyle issues shape people's experiences and concerns); (3) issues of diversity and social justice (e.g., advocacy); (4) the role of career and work in peoples' lives. Similarly, the Canadian Psychological Association has endorsed a definition of counseling psychology that includes the following core values: (1) counseling psychologists view individuals as agents of their own change and regard an individual's

J. F. Domene (✉)
University of Calgary, Calgary, AB, Canada
e-mail: jfdomene@ucalgary.ca

preexisting strengths and resourcefulness and the therapeutic relationship as central mechanisms of change; (2) the counseling psychology approach to assessment, diagnosis, and case conceptualization is holistic and client-centered; and it directs attention to social context and culture when considering internal factors, individual differences, and familial/systemic influences; and (3) the counseling process is pursued with sensitivity to diverse sociocultural factors unique to each individual (Beatch et al., 2009, p. 22).

As revealed in the first chapter of this section, Ada Sinacore's career path also affirms the knowledge, values, and perspectives of our specialization. Her efforts to infuse multicultural and feminist perspectives throughout her teaching, her focus on promoting change at the systems/organizational level in her own practice, and her national and international leadership in advocating for social justice and promoting human rights at the level of policy all provide examples of ways that an individual can live out their professional identity as a counseling psychologist. Sinacore's ongoing legacy goes beyond the example she provides; her ongoing contributions to the profession in Canada, Chile, and Taiwan (including her current work as President of the Canadian Psychological Association) have brought to the profession as a whole some of the things that make counseling psychology particularly relevant to the current American and Canadian sociopolitical context. Before elaborating on these connections, it is worthwhile to consider how all the ways of working with children and youth described in this section align with counseling psychology's approach to practice.

Guiding Frameworks and Clinical Reasoning Approaches

In all of the preceding chapters in this section, the authors' clinical reasoning approaches align with and proceed directly from their guiding frameworks. That is, each author describes a clinical reasoning process that reflects the core tenets of the theory that they use for underlying their clients' life contexts, as well as their theory of what is important in conducting mental health assessment, prevention, and intervention. Therefore it is useful to discuss these guiding frameworks and clinical reasoning approaches together in considering how well the approaches that Dik and colleagues, Owens, Hanson and colleagues, and Socholotiuk present reflect a distinctly counseling psychology way of understanding mental health in children and youth.

Dik and colleagues describe their work as being guided by Lapan's Integrative Contextual Model (ICM) of career development to promote optimal educational and career development outcomes for young people. Their framework and clinical reasoning approach assume that focusing on youths' educational and career development will also have positive consequences for their well-being and psychological health. Their clinical reasoning focuses on understanding where the client is relative to the six developmental tasks of the ICM model to identify where the client is in relation to those tasks. Problem areas within those tasks then become the target for

subsequent assessment, prevention, and intervention activities. Owens' guiding framework also attends to young people's career development, although this area of functioning is only one area of clients' lives that is a focus of her framework. Specifically, Owens describes her framework as the Strengths-Based Inclusive Theory (S-BIT) of Psychotherapy, explaining that the three core assumptions and four theoretical propositions of S-BIT overlap with her Strengths-Based Inclusive Theory of Work (Owens et al., 2019). Her approach to clinical reasoning uses the assumptions and propositions of S-BIT to understand what is occurring for the client, and what aspects of their life need to be assessed and addressed in counseling. Owens particularly emphasizes the importance of considering clients' strengths in addition to their areas of struggle. Her approach to clinical reasoning also emphasizes the need to understand how a client's cultural, developmental, environmental, and societal contexts have influenced their current situation, as well as how these context can be leveraged to improve their mental health and well-being.

Hanson and colleagues' and Socholotiuk's guiding frameworks and clinical reasoning approaches place less emphasis on career development and more emphasis on assessment. Nonetheless, both chapters also emphasize the holistic, humanistic, and context-sensitive ways of working with child and youth clients. Hanson and colleagues' guiding framework combines Collaborative/Therapeutic Assessment (C/TA) with Measurement-Based Care (MBC), although they emphasize that they implement C/TA and MBC in a client-centered way. An implication of their client-centered approach to C/TA and MBC is that, in their clinical reasoning, they emphasize the importance of actively collaborating with and privileging the perspective of the client. Furthermore, they propose that the process of developing an understanding of the client can be conducted in a way that is therapeutic for the client, thus blurring the distinctions between assessment and interventions. Socholotiuk's guiding theoretical framework also emphasizes a client-centered approach to developing an understanding of the client. Her Humanistic Empirical Assessment framework emphasizes the appropriate selection and use of appropriate psychological measures and clinical interviewing, where "appropriate" is defined in terms of the specific client and their life context. As such, her clinical reasoning model focuses on interpreting assessment results in a way that attends to the complexities of the specific client's developmental context and considers the perspectives of multiple informants in the client's life.

Prominent across all these theoretical frameworks and approaches to clinical reasoning is an emphasis on the ways that the external contexts of a child or youth's life, including diversity and social-cultural influences and other forms of diversity, may be contributing to their situation. Consistent with the core knowledge and values of counseling psychology, the approaches described in the preceding chapters also assume that clients come to counseling with strengths that need to be attended to, either explicitly as articulated in Dik and colleagues' and Owens' approaches, or implicitly by adopting a client-centered perspective, as indicated by Hanson and colleagues and Socholotiuk. Furthermore, it is perhaps not a coincidence that the two chapters written by authors from the United States describe explicit

connections between their approaches and young people's career development, which is consistent with the American Psychological Association's (2008) description of counseling psychologists' specialized knowledge base.

Approaches to Mental Health Assessment

The preceding chapters indicate that counseling psychologists in the United States and Canada use a wide range of assessments when working with children and youth, and approach the assessment process itself in somewhat individualized ways. Building on their ICM model, Dik and colleagues discuss the importance of assessing all six aspects of a young person's life that are identified as central to ICM. Although the question of what to assess is consistent, they explain that the assessment process can be conducted using a variety of measures, interview questions, and career-specific exploration tools such as O*NET and PathwayU. In addition, they recognize the ways that external contexts, such as economic constraints and marginalization can interfere with optimal career development, and highlight the need to explore "ways in which discrimination, marginalization, and other contextual factors have and/or have not influenced their client." Within her S-BIT of Psychotherapy, Owens proposes an approach to assessment that she calls the Balanced Diagnostic Impressions (DICE-PM) Model. Her DICE-PM acronym identifies the core components of this approach: (1) Diagnosis, (2) Individual strengths and weaknesses, (3) Cultural assets and struggles, (4) Environmental resources and deficits, (5) Physical wellness and health concerns, and (6) Mental health. She also argues that a balanced approach to assessment that focuses on strengths in addition to deficits/problems should be an important part of any assessment process that a counseling psychologist may engage in. Moving away from the question of what areas of a child or youth's life should be the focus of assessment, Hanson and colleagues focus on the assessment process; they present a six-stage, semi-structured approach to conducting mental health assessment. Their approach is agnostic in terms of the specific measures that are recommended or proposed to be useful but adheres to the principles of C/TA and MBC. To elaborate, their approach emphasizes the integration of assessment and prevention/intervention, rather than conceptualizing assessment as a distinct component of providing psychological services to young people. Finally, Socholotiuk's approach to assessment is grounded in Messick's theory of validity, where the focus is on validating the meaning of score interpretations rather than the selection of "valid measures" per se. Thus, she emphasizes the evaluation and integration of all available evidence and theoretical rationales for making diagnostic conclusions about the client. Furthermore, she asserts that the client's specific context should be considered in the choice of measures used in assessment, and so should the underlying values, including potential negative consequences, of using a particular measure with a client.

Despite their differences in emphasis, the chapters from Dik and colleagues, Owens, Hanson and colleagues, and Socholotiuk all clearly demonstrate that

assessment is a core aspect of counseling psychologists' scope of practice and, furthermore, that there are approaches to assessment that are highly congruent with our specialization. All the authors emphasize the importance of proceeding in a holistic and client-centered way that attends closely to external, situational, and contextual influences when assessing children and youth. Furthermore, a majority of the chapters also address the need to attend to the young person's strengths and to consider social justice issues (e.g., marginalization; discriminatory use of assessment results) in the assessment process. It must be clarified that school and clinical psychologists may also emphasize these considerations in their approaches to assessment. Nonetheless, together, the client-centered, context-focused, strengths-based, and justice-sensitive approaches to assessment described in the preceding chapters are aligned with the specialized knowledge and central values of counseling psychology.

Approaches to Prevention and Intervention

The situation is similar for the approaches to prevention and intervention that are described by Dik and colleagues, Owens, Hanson and colleagues, and Socholotiuk: Although psychologists from other specializations are likely to recognize and resonate with some aspects the approaches described in these chapters, these approaches also shed light on how counseling psychologists conduct their counseling work with children and youth. Across the four chapters, there is less focus on implementing a particular set of intervention or prevention activities. Instead, the authors highlight the ways that their guiding frameworks, clinical reasoning approaches, and approaches to mental health assessment lead to the selection of a wide range of specific intervention or prevention activities, with the overarching questions being, "does the specific intervention or prevention activity fit with the underlying approach," and "is the activity appropriate for the specific client's situation?" In light of the previous descriptions of how the authors all have guiding frameworks, clinical reasoning approaches, and assessment approaches that are consistent with a counseling psychology perspective, it follows that their approaches to prevention and intervention also align with our specialization.

To elaborate, the focus of Dik and colleagues' approach is to promote successful human development with the occupational and educational domains of a young person's life. As such, it is not designed to inform psychologists' provision of mental health interventions per se. Instead, they propose that their approach serves a prevention function in supporting child and youth mental health. Given the literature revealing substantial connections between career/education and mental health (e.g., Hudson Breen & Lawrence, 2021), Dik and colleagues are justified in their proposition that promoting improved functioning and outcomes in the former will enhance a young person's well-being such that they are less likely to require mental health interventions. Socholotiuk's chapter is similar in that she does not delineate a specific approach to mental health prevention and intervention. Instead, she provides an in-depth description, illustrated by her case description, of how her

humanistic empirical assessment approach can be integrated into the counseling process. As such, she demonstrates how counseling psychologists can utilize her approach within their overall mental health prevention and intervention work. Specifically, she describes how to maintain a therapeutic focus in (1) the referral questions are framed, (2) the process of obtaining consent to treatment, (3) the way that the assessment process is conducted, (4) the interpretation of information obtained, and (5) the way that findings are communicated to clients. Hanson and colleagues also describe an approach to mental health prevention and intervention that is intertwined with their approach to assessment. Their MBC approach to practice uses information from ongoing assessment of clients to guide the selection of interventions and to determine whether there is a need to change the intervention strategy to prevent client deterioration. Finally, Owens' approach expands the psychologist's focus beyond intervention and prevention to address the promotion of positive well-being as a core component of working with child and youth clients. Within her S-BIT of Psychotherapy, a counseling psychologist may draw on a variety of techniques to facilitate goals related to prevention, intervention, and well-being promotion, as long as those techniques align with the core assumptions and theoretical propositions of her approach and are developmentally appropriate for the client. Owens also provides several examples of the kinds of techniques that are compatible with her S-BIT of Psychotherapy and that can be adapted to the client's developmental state: hope-promoting strategies, motivational interviewing, solution-focused therapy, behavior therapy, and techniques to promote empowerment.

Future Directions and Conclusion

The preceding chapters provide innovative and practical suggestions for counseling psychologists to work with children and youth to approach their practice in ways that are congruent with our specialized knowledge and core values. However, it must be recognized that these approaches are not static; in the future, they are likely to change in response to the authors' ongoing practice experiences, the emergence of research findings that challenge the status quo, and the evolving sociopolitical landscape of the United States and Canada. Similarly, counseling psychology as a specialization has and will continue to adapt in response to similar forces in the academy and in society.

The way that counseling psychology has integrated emerging technologies into practice provides a salient example of our need to adapt to external circumstances. Counseling psychology has over 50 years of history with using computers to facilitate practice, particularly in terms of providing career guidance (Harris-Bowlsbey, 2013). This history is reflected in some of the tools used in the case illustrations provided in the Dik and colleagues and Hanson and colleagues chapters. However, the COVID-19 pandemic of the early 2020s greatly accelerated the adoption of technologies to allow psychologists to work remotely, to the point where many psychologists believe that remote service delivery has become a permanent part of their

practice (Pierce et al., 2021). Therefore, in the not so distant future, discussions of how to approach clinical reasoning, assessment, prevention, and intervention are likely to need to address how we can and should adapt our work, when providing services to children and youth through the computer screen.

Another new direction in which counseling psychology will need to grow and adapt as a profession is to respond in a meaningful way to social movements seeking to challenge inequities and injustices in society, such as the MeToo movement, Black Lives Matter, and, in Canada, calls to implement Truth and Reconciliation to redress the destruction and trauma to indigenous communities caused by the residential school system (Fellner et al., 2020; Gómez & Gobin, 2020). Specifically, as Sinacore and others have explained, there is a need to more fully integrate advocacy into our scope of practice. Consequently, it is likely that counseling psychologists in the future will be expected to articulate our approaches to advocacy alongside our descriptions of how we approach assessment, prevention, and intervention. The Integrated Social Justice Consultation Model that Sinacore describes in her legacy chapter, as well as the numerous ways in which she has promoted justice and human rights through her involvement in national and international associations for psychology, provide clear examples of how it is possible to integrate advocacy into counseling psychology practice.

To conclude, Sinacore's legacy chapter and the other four chapters in the counseling psychology section of this book each describe distinct ways of working to address and improve mental health in children and youth. Nonetheless, at this point, it should be evident they all share some underlying themes reflecting the way that counseling psychology as a specialization approaches practice. As counseling psychology, and the profession of psychology as a whole, respond to future changes in American and Canadian society, I look forward to discovering how the approaches presented in this section, and in our book as a whole, will grow and adapt to continue meeting the needs of children and youth.

References

- American Psychological Association. (2008). *Counseling psychology*. <https://www.apa.org/ed/graduate/specialize/counseling>
- Beatch, R., Bedi, R. P., Cave, D., Domene, J. F., Harris, G. E., Haverkamp, B. E., & Mikhail, A. M. (2009). *Counselling psychology in a Canadian context: Report from the executive committee for a Canadian understanding of counselling psychology*. Report commissioned by the Counselling Psychology Section 24 of the Canadian Psychological Association. <https://cpa.ca/docs/File/Sections/Counselling/CPA-CNPSY-Report-Final%20nov%2009.pdf>
- Bedi, R. P., Haverkamp, B. E., Beatch, R., Cave, D., Domene, J. F., Harris, G. E., & Mikhail, A.-M. (2011). Counselling psychology in a Canadian context: Definition and description. *Canadian Psychology*, 52(2), 128–138. <https://doi.org/10.1037/a0023186>
- Fellner, K. D., Ansloos, J., Ouellette, N. L., & Villebrun, G. D. (2020). Reconciling relations: Shifting counselling psychology to address truth and reconciliation. *Canadian Journal of Counselling and Psychotherapy*, 54(4), 638–660. <https://doi.org/10.47634/cjcp.v54i4.70661>

- Gelso, C. J., Nutt Williams, E., & Fretz, B. R. (2014). *Counseling psychology* (3rd ed.). American Psychological Association. <https://doi.org/10.1037/14378-000>
- Gómez, J. M., & Gobin, R. L. (2020). Black women and girls & #MeToo: Rape, cultural betrayal, & healing. *Sex Roles: A Journal of Research*, 82(1–2), 1–12. <https://doi.org/10.1007/s11199-019-01040-0>
- Harris-Bowlsbey, J. (2013). Computer-assisted career guidance systems: A part of NCDA history. *The Career Development Quarterly*, 61, 181–185. <https://doi.org/10.1002/j.2161-0045.2013.00047.x>
- Hudson Breen, R. E., & Lawrence, B. (2021). A call for enhanced training and action on the intersections of mental health, decent work, and career in counselling and psychotherapy. *Canadian Journal of Counselling and Psychotherapy*, 55(1), 28–50. <https://doi.org/10.47634/cjcp.v55i1.68542>
- Owens, R. L., Allan, B. A., & Flores, L. Y. (2019). The strengths-based inclusive theory of work. *The Counseling Psychologist*, 47(2), 222–265. <https://doi.org/10.1177/0011000019859538>
- Pierce, B. S., Perrin, P. B., Tyler, C. M., McKee, G. B., & Watson, J. D. (2021). The COVID-19 telepsychology revolution: A national study of pandemic-based changes in U.S. mental health care delivery. *American Psychologist*, 76(1), 14–25. <https://doi.org/10.1037/amp0000722>
- Wada, K., Kassan, A., Domene, J. F., Bedi, R. P., Kintzel, F., & West, A. M. (2020). The future of counselling psychology education and training in Canada: A post-conference reflection. *Canadian Journal of Counselling and Psychotherapy*, 54(4), 572–594. <https://doi.org/10.47634/cjcp.v54i4.70773>

Chapter 20

Conclusion: Thematic Integration of Child and Youth Mental Health Practice Across School, Clinical, and Counseling Psychology



Jac J. W. Andrews

Abstract This chapter summarizes and integrates the information presented by the authors within this book relative to guiding frameworks, clinical reasoning approaches, and mental health assessment, prevention, and intervention that promote the well-being of children and youth within and across the disciplines of school, clinical, and counseling psychology.

The authors of this book have provided chapters that provide information on clinical decision-making and how those decisions develop in professionals across the disciplines of school, clinical, and counseling psychology and with respect to the mental health assessment, prevention, and intervention of children and youth and their well-being. All the authors have provided their guiding frameworks for psychological practice, their clinical reasoning approach, mental health assessment approach, and ways to provide prevention and intervention for children and youth relative to their mental health. In every one of the chapters, we are reminded of the importance of situation and context, the influence of many dynamic and intersecting events (e.g., parenting influences, social–environmental influences), and the impact of developmental processes that shape the development and maintenance of mental health within and across children and adolescents.

The chapters in this book present the individual experiences of the authors concerning their involvement and address of mental issues of children and adolescents. Hence, because of the nature and scope of this book, their experiences are selective and representative of their own professional state and journey. Therefore, they may not reflect the experiences of all psychologists within and across the disciplines of school, clinical, and counseling psychology. Nevertheless, all the authors underscore a consensus of general understanding of mental health assessment, prevention, and intervention. In this regard, while there are some differences across the

J. J. W. Andrews (✉)
University of Calgary, Calgary, AB, Canada
e-mail: jandrews@ucalgary.ca

disciplines of school, clinical, and counseling psychology, there is also a similarity of frameworks and approaches. For example, there is more focus within school psychology on academic skill and function of children and adolescents, linguistically diverse children and youth, early identification, intervention, and enhanced service system integration, and school misfits. There is more emphasis in clinical psychology on clinical practice guidelines, the influence of family and parenting on externalizing behavior, and considerations of children and youth with behavior and mood disorders. There is more emphasis in counseling psychology on feminist perspectives, career development, collaborative and therapeutic assessment and care, and positive psychology. However, psychologists across the disciplines are more the same than different relative to their address of mental health issues of children and youth with respect to their intellectual, emotional, social, and behavioral adjustment. More specifically, the authors in the book who represent the disciplines of school, clinical, and counseling psychology present a common focus with respect to the influences of contextual factors and supports relative to mental health across children and youth (e.g., social, cultural, developmental, environmental), as well as their common support for the implementation of evidence-based approaches to assessment, prevention, and intervention. Moreover, all authors indicated the importance of recognizing, understanding, and focusing on child and youth strengths and assets along with their weaknesses and indicated their support for social advocacy and social justice relative to the well-being of children and youth.

Importantly, the authors in this book bring consensus to the view that the mental health of children and youth includes consideration of the antecedents and consequences of mental health issues, the personal and interpersonal challenges they face, as well as the variable cultural contexts, variant gender qualities, multiple cross intersections of strengths and weaknesses, and the many barriers impeding equity and inclusion. They also highlight the complexity of mental health of children and youth and the importance of psychologists within and across the disciplines of school, clinical, and counseling psychology to be well trained, knowledgeable, skillful, wise, and understanding in their work with children and youth and their life journeys, which requires psychologists to be empathic, personable, and adaptable.

One of the unique features of this book was to present the legacy of distinguished researchers, scholars, and practitioners in school, clinical, and counseling psychology. The legacy chapter authors were asked to provide information about their beginnings as a researcher and scholar in their discipline; their journeys related to their research and scholarship; their highlights from their research and scholarship; their significant learnings and developments; their theoretical and empirical insights from their work; their practical applications from their research and scholarship; their insights about clinical reasoning, assessment, prevention, intervention with respect to child and youth mental health, their current perspectives and implications about their research and scholarship; and their plans for future research and scholarship. In this regard, Don Saklofske provided specific examples from his research, teaching, and practice that were drawn from his descriptions of intelligence, emotional intelligence, and resilience. Catherine Costigan shared examples from her

research that focused on family and ecological influences on mental health, concentrating in particular on her research with families who have immigrant and refugee backgrounds and on the interventions she and her colleagues have developed. Ada Sinacore highlighted her theoretical work in the areas of feminism, multiculturalism, social justice, and human rights. Although the three legacy authors differed in their personal and professional life journeys in school, clinical, and counseling psychology, there were also many similarities across the authors based on past and current journeys as researchers, scholars, and practitioners. They all presented themselves in ways that suggested strength of character, courage of conviction, and the importance of principles and values in their work. They all paid tribute to the collaborations they had and have with mentors and colleagues. They all noted the importance of research and theory in their work. They all characterized themselves as being passionate, curious, and interested in their psychological work. They all indicated how cultural, familial, and social systems, structures, and values influence the identities of children and youth. They all shared interest in building capacity and empowerment. They all represented themselves as science practitioners although they also indicated a confluence of subjectivity and objectivity in their work. They all presented a mindful-strategic approach to clinical reasoning and implicated the importance of critical thinking. They also noted the importance of attending to the intersections of diversity, equity, inclusion, human rights, and social justice as well as to the importance of advocacy for the well-being of children and adolescents.

The primary focus of the book has been on the mental health assessment, prevention, and intervention of children and youth toward promoting their well-being within and across the disciplines of school, clinical, and counseling psychology. Authors were instructed to provide chapters with respect to the focus of the book and with particular attention to their guiding framework, clinical reasoning approach, mental health assessment approach, and approach to prevention and intervention that was to be further exemplified by a case study. The decision to format and structure the book around these primary areas was because of the perspective that these are not only critical areas that psychologists within and across the disciplines of school, clinical, and counseling psychology attend to and are accountable for to their address of mental health issues and challenges of children and youth but also because it provided a way for this book to present a confluence of guiding frameworks, clinical reasoning and mental health assessment approaches, and approaches to prevention and intervention. Guiding frameworks are considered to be the conceptual bases for how psychologists approach their understanding and address of mental health issues of children and youth that are typically associated with their clinical reasoning approaches (case conceptualization, clinical assessment, clinical judgment, critical thinking, and professional knowledge, experience, and accountability) that underscores and forms their decisions about how to deliver prevention and intervention services for promoting the well-being of children and adolescents (see Fig. 20.1).

As noted in the introduction chapter of this book, the authors in the sections of school, clinical, and counseling psychology were asked to present their guiding frameworks, clinical reasoning approaches, approaches to mental health



Fig. 20.1 Guiding framework for promoting child and youth well-being

assessment, and experiences with and examples of prevention and intervention. As would be expected, the authors focused their chapters on their particular interests and experiences relative to the mental health of children and youth.

In the school psychology section, Judith Wiener provided a chapter that focused on the assessment of culturally and linguistically diverse children and adolescents. Matthew K. Burns and his colleagues provided a chapter that focused on a way to facilitate the success of students in reading and math. Doris Paez provided a chapter that focused on creating solutions for children who do not fit into a majority society, and Shannon Stewart provided a chapter that focused on an integrated assessment-to-intervention approach to enhance integrated care.

In the clinical psychology section of the book, Martin Drapeau provided a chapter that focused on the importance of considering research and clinical practice guidelines when delivering clinical services. Amori Yee Mikami provided a chapter that provided information relative to the peer relationship problems of children and youth with ADHD and focused on psychosocial interventions. David Kopala Sibley presented a chapter that focused on a dynamic-interactionist framework with reference to mood disorders in children and adolescents. In this chapter, the role of parenting and child development is highlighted along with the influences of temperament and personality states and traits leading to the use of such approaches as mindfulness-based cognitive therapy and emotion-focused therapy. Jen Theule provided a chapter that focused on children's behavior relative to parents' degree of intersection of

nurturance and warmth and structure particularly regarding the development of externalizing behaviors.

In the counseling psychology section, Krista Socholotiuk's chapter emphasized a humanistic-client-centered approach for developing an understanding of children and youth with consideration of the complex interplay of temperament and proximal and distal influences. Rhea Owens' chapter attended to young people's career development by taking a strengths-based approach with emphasis on cultural, developmental, environmental, and societal contexts. Bryan Dik and colleagues described their work in their chapter as being guided by Lapan's Integrative Contextual Model (ICM) of career development to promote optimal educational and career development outcomes for young people. William Hansen and his colleagues focused on collaborative therapeutic assessment and measurement-based care in their chapter that addresses growth and change by way of self-verification, self-enhancement, self-efficacy, and self-discovery and guided by collaboration, openness, and respect.

As noted previously and discussed below, although there are some differences within and across the disciplines of school, clinical, and counseling psychology relative to psychologists guiding frameworks, clinical reasoning approaches, mental health assessment approaches, and ways for prevention and intervention of mental health concerns of children and youth based on the information presented in the chapters, there is also much in common across the authors in this book relative to the focus areas of the book and their chapters.

Guiding Framework

Across the chapters within the school psychology section of the book, the authors highlighted guiding frameworks they refer to related to their theoretical and conceptual foundation for better understanding and addressing the mental health issues facing the children and youth they have worked with. For example, the developmental and ecological systems frameworks were noted by authors as the basis for foundational conceptualization. In addition, the authors noted the importance of implementing early intervention and school-based mental health services to reduce barriers, provide equitable services, and improve long-term individual, family, and social outcomes. They also noted the targeting of interventions within a skill-by-treatment approach involving the identification of the most fundamental skills with which children and youth struggle.

Across the chapters in the clinical psychology section of the book, the authors highlighted various guiding frameworks they refer to concerning their theoretical and conceptual foundation for better understanding and addressing the mental health issues facing the children and youth they have worked with. For example, family systems theory, attachment theory, resilience theory, and dynamic-interactionist models were noted by authors as their basis for foundational conceptualization. In addition, authors noted the importance of considering research and

using evidence-based practices when delivering clinical services, the importance of identifying risk factors and protective factors within families, the importance of considering ecological contexts and social inequities that shape the trajectories of health and well-being, and the importance of peer relationships of children and youth.

Across the chapters in the counseling psychology section of the book, the authors highlighted various guiding frameworks they refer to concerning their theoretical and conceptual foundation for better understanding and addressing the mental health issues facing the children and youth they have worked with. For example, humanistic theory, developmental theory, and the integrative contextual model were noted by authors as their basis for foundational conceptualization. In addition, authors noted the importance of a strengths-based approach for addressing well-being, the importance of considering cultural, environmental, societal, and developmental influences on mental health, the importance of establishing preventative buffers against problematic health symptoms, the importance of interconnecting assessment with prevention and intervention efforts and approaches and the importance of considering the individualistic self-efficacy, self-regulation abilities, and self-identity across children and youth.

Although all the authors presented guiding frameworks as a basis of their theoretical and conceptual foundations for addressing the mental health of children and youth, there is consensus for considering health problems and possible discordance between the developmental issues of the children and youth relative to environmental demands. Hence, the importance of addressing mental health problems in contextually sensitive ways. There was a shared recognition for the importance of gaining and understanding the thoughts, feelings, and behaviors of children and youth in association with their strengths and deficits within their situational contexts and empowering children and youth to achieve healthy balance and growth.

Clinical Reasoning Approach

A psychologist's clinical reasoning approach interacts with their guiding framework. Across the chapters within the school psychology section of the book, the authors highlighted the clinical reasoning approaches they use for better understanding and addressing the mental health issues facing the children and youth they have worked with. For example, some authors noted using an integrative approach for assessment, prevention, and intervention with particular attention to biological, psychological, social-cultural aspects relative to the experience of children and youth and implementing principles for guiding the clinical reasoning process (e.g., respect for people and persons).

Across the chapters in the clinical psychology section of the book, authors highlighted the clinical reasoning approaches they use for better understanding and addressing the mental health issues facing the children and youth they have worked with. For example, the consideration of person-by-environment models, state-trait

models of personality, temperament–psychopathology interactions, the intersection of nurturance and structure of parents, the personal identity formation of children and youth, and the consideration of structural levels of influence such as power structures that benefit some and disadvantage others.

Across the chapters in the counseling psychology section of the book, the authors highlighted clinical reasoning approaches they use for better understanding and addressing the mental health issues facing the children and youth they have worked with. For example, authors noted the importance of considering issues of social justice and diversity within clinical reasoning approach, the importance of being holistic and child and youth-centered (e.g., by increasing child and youth engagement, responsibility-taking, self-understanding, and increased compliance), and being guided by collaboration, humility, openness, curiosity, compassion, and respect.

Although all the authors presented particular clinical reasoning approaches for addressing the mental health of children and youth, there is consensus for focusing on the strengths of children and youth and their interaction with the challenges they face, being collaborative in approach, and considering ecological contexts in clinical reasoning approach.

Mental Health Assessment Approach

Central to providing prevention and intervention for children and youth toward promoting their well-being is a psychologist's approach to mental health assessment. Across the chapters within the school psychology section of the book, the authors highlighted various mental health assessment approaches they use for better understanding and addressing the mental health issues facing the children and youth they have worked with. For example, authors noted the importance of establishing trust and being sensitive and empathic in the assessment process, using social justice–oriented assessment, facilitating insight and imparting knowledge in the assessment process, ensuring that assessment is driven more toward intervention than classification, understanding, and focusing on strengths and adaptive skills in a context that facilitates rather than impedes learning, development, and adjustment, using analytical and critical thinking skills within the assessment process, and implementing valid and reliable assessment techniques.

Across the chapters in the clinical psychology section of the book, authors highlighted mental health assessment approaches they use for better understanding and addressing the mental health issues facing the children and youth they have worked with. For example, authors noted the importance of conducting interviews with children and adolescents along with their parents as well as using parent and child and youth self-report measures and issue-focused questionnaires; other authors noted the importance of getting full descriptions of the mental health concerns and conducting functional behavior analysis to determine what is driving the behaviors of

the child or youth and the importance of assessing their peer relationships by way of interviews, sociometric approaches, and behavioral observations.

Across the chapters in the counseling psychology section of the book, the authors highlighted various mental health assessment approaches they use for better understanding and addressing the mental health issues facing the children and youth they have worked with. For example, authors noted the importance of integrating assessment within prevention and intervention, the importance of considering and assessing ways in which discrimination, marginalization, and context influence the lives of the children and youth, balancing the assessment of strengths with the assessment of deficits, and the importance of determining the interaction of the social context relative to the mental health concerns of the child or youth. In addition, the authors highlighted the important steps to undertake in the assessment process such as determining the nature and scope of the referral by listening, valuing, exploring the input of the child or youth and significant others (e.g., parents), considering the benefits and risks relative to the assessment process (e.g., diagnosis of mental disorder), the importance of careful selection and appropriate administration of assessment measures, the importance of accountable evaluation and synthesis of gathered information, and respectful and constructive communication of the results. The authors also noted the importance of considering contextual supports and resources for concerns identified in the assessment process, and the considerations of identified concerns through the assessment process with respect to normative development and associated developmental processes.

Although all the authors presented particular mental health assessment approaches for better understanding and addressing the mental health of children and youth, there is consensus about ensuring the appropriate procedures in the assessment process (e.g., determining the nature and scope of the referral problem; conducting background information collection and review; diligent focus on the selection and use of assessment measures; careful and accountable evaluation of assessment data, sensitive, respectful, and constructive reporting and feedback; attention to the contextual and cultural influences (e.g., nationality, ethnicity, social class, religion)) as well as to possible barriers, and linking assessment information to prevention or intervention strategies and programs.

Prevention and Intervention

Central to providing prevention and intervention for children and youth to promote well-being are the guiding frameworks, clinical judgment, clinical reasoning, and assessment approaches that lead to the recommendation and follow-up. Across the chapters in the school psychology section of the book, authors highlighted various prevention and intervention considerations and examples they have undertaken for better addressing the mental health issues facing the children and youth they have worked with. For example, authors noted the importance of a multi-tiered approach in providing prevention and comprehensive evidence-based intervention in schools.

Authors also highlighted the importance of considering the protective and risk factors, cognitive-behavioral strengths and weaknesses, social-cultural factors, family factors, school and classroom factors, resilience factors in designing and delivering interventions. In addition, the authors discussed the importance of cross-sector collaborations, meaningful engagements with family, training and supporting school personnel relative to the provision of interventions, the targeting of specific skill acquisition and performance, and ensuring that preventions/interventions are strategic and practical.

Within and across the chapters in the clinical psychology section of the book, the authors highlighted various intervention considerations and examples they have undertaken for better addressing the mental health issues facing the children and youth they have worked with. For example, the authors noted the importance of using clinical practice guidelines in support of evidence-based interventions, and the use of multiple systems and coordination between them that are culturally tailored and multifaceted. In addition, the authors presented the importance of infusing behavioral management approaches and social-skills training with interventions, and the consideration of psychotherapy, pharmacotherapy, parental training, mindfulness-based cognitive approaches, and emotion-focused therapy.

Across the chapters in the counseling psychology section of the book, the authors highlighted various intervention considerations and examples they have undertaken for better addressing the mental health issues facing the children and youth they have worked with. For example, some authors noted the importance of career and education within mental health interventions, and ensuring the developmental appropriateness and child and youth empowerment. In addition, authors highlighted the importance of imparting a sense of hope and optimism that may buffer some of the mental health symptoms, and providing interventions that reduce negative outcomes and enhance positive outcomes.

Although all the authors presented particular intervention considerations and approaches for addressing the mental health of children and youth, there is consensus that promotion of well-being is a core component of prevention and intervention, that there is appropriate attention to the individual situations of the children and youth, and that there be attention to social justice and advocacy for children and youth beyond the individually delivered preventions and interventions for addressing child and youth well-being.

In the end, the chapters in this book exemplify the essence of the quote at the beginning of the introduction chapter and presented again at the end of this concluding chapter:

From our shared thinking relative to applied psychological research, theory, and practice and our shared psychological clinical experience, we can be both validated and enriched relative to our developing wisdom and excellence with respect to our services to children and youth. Andrews, 2017.

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