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Cross-Cultural Assessment of Psychological Trauma and PTSD

Edited by

John P. Wilson

and

Catherine So-kum Tang

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Foreword

By Matthew J. Friedman MD, PhD
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It is now well recognized that exposure to a traumatic event may be a defining experience that elicits courage, resourcefulness, and magnificent expressions of the human spirit. On the other hand, such exposure may also precipitate pain, suffering, despair, and chronic psychiatric problems. Furthermore, these two outcomes are not mutually exclusive. People who have performed heroically when confronted by tsunamis, genocidal strife, or abusive violence may also suffer from adverse psychological consequences for decades or a lifetime.

The introduction of posttraumatic stress disorder (PTSD) in 1980 into the American Psychiatric Association's third edition of its Diagnostic and Statistical Manual (DSM-III) has provided scientists and clinicians with a powerful conceptual tool with which to understand human responses to catastrophic events. Since 1980, epidemiologists, anthropologists, and mental health clinicians have understood the importance of trauma to individuals, societies, and cultures. The transformative power of traumatic events to alter personal and collective trajectories is universal.

With this recognition comes the challenge to understand how such posttraumatic transformations are expressed around the globe. Do such reactions exhibit universal (etic) characteristics that are comparable from one cultural milieu to the next? Or are such etic approaches another example of a western scientific imperialism that fails to assign proper weight to culture-specific (emic) idioms of distress?

PTSD has become a battleground on which the etic–emic controversy has raged (Osterman and de Jong, in press). Although I believe that these two perspectives are complementary, others have complained that PTSD is actually a Euro-American culture-bound syndrome that does not apply

to traditional cultures (Summerfield, 2004). Whereas it is indisputable that PTSD has been detected around the world in both industrialized and developing societies (Green et al., 2003; Marsella et al., 1996; Osterman & de Jong), it remains an open question whether PTSD is the best idiom of distress from one culture to the next.

The horrific wars and genocidal events of recent years have produced new opportunities for integrating different cultural models of traumatic stress with empirically based approaches to diagnosis and treatment. It is clear that Western conceptual and clinical approaches that focus primarily on individual psychopathology must be expanded to incorporate collective cultural, psychosocial, and historical considerations.

This book provides an excellent framework within which to consider the complex overlapping of culture, trauma, behavioral reactions, and collective consequences within a global context. It is a significant step forward toward standardizing the understanding of PTSD during an era of rapid globalization throughout the world. In short, it is a significant achievement that provides a provocative, scholarly, and comprehensive synthesis that should be mandatory reading for both the scientific and humanitarian communities.

Green, B. L., Friedman, M. J., de Jong, J., et al. (Eds.). (2003). *Trauma interventions in war and peace: Prevention, practice, and policy.* Amsterdam: Kluwer/Plenum.

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Preface

By John P. Wilson

This book attempts to break new ground in the field of traumatology. As the field has advanced in its scientific knowledge, it has also become more globalized in nature as this body of scientific and clinical information has been utilized in nearly all parts of the world, especially in situations of disaster (e.g., 2004 Tsunami; Hurricane Katrina), wars (e.g., Iraq, Bosnia), political oppression and genocide (e.g., Darfur, Sudan), and to other types of traumatic events. Therefore, there is a need for a reference work that extends beyond the limitations of Western methods of assessing and understanding psychic trauma. It is our hope that this book and its successors will begin a process that eventually will lead to integrative global knowledge of how to employ culturally sensitive ways to understand psychological reactions to traumatic life experiences for culturally and ethnically diverse populations.

The book is organized into three parts. Part I focuses on theoretical and cultural considerations in the cross-cultural assessment of psychological trauma and posttraumatic stress disorder (PTSD). There are six chapters in this section. Part II concerns assessment methods and contains four chapters. Part III examines trauma and cultural adaptation in six unique chapters.

In Chap. 1, John P. Wilson presents a broad conceptual overview of culture, trauma, and the assessment of posttraumatic syndromes in a global context. He raises issues regarding the importance of the field of traumatology to create an agenda for the development of culturally sensitive assessment processes and procedures. In a similar way, he presents 21 core questions for understanding culture, trauma, and posttraumatic syndromes. Wilson also suggests by looking at mythology, universal themes of the relationship between traumatic life experiences and patterns of posttraumatic adaptation can be evaluated from literature and its reflection of human struggles across different cultures throughout time in human history.

In Chap. 2, Lisa Tsoi Hoshmand presents a rich chapter on the understanding and assessment of trauma and its aftermath from a cultural–-ecological perspective. As she notes, "the definition of trauma entails the cultural and ecological symptoms that mediate human experience and provide resources for 'coping and meaning making.'" This chapter discusses many critical issues concerning the assessment of trauma from a cultural–ecological perspective. These critical issues include, but are not limited to, the following (1) one cannot assume pretraumatic normality of development for persons living in abnormal, chaotic, persistent, threatening, and unstable environments; (2) the issues concerning culture-specific versus universal adaptations to trauma and extreme stress has not been resolved conceptually and empirically; (3) there are different patterns of response to conditions of prolonged items of a threatening or depriving nature to those of acute, shorter traumatic exposure; (4) knowledge about the understanding of trauma in different cultures is evolving in an era of globalization; (5) it is important to understand and assess both individual and community resilience; (6) understanding the different types of threat to basic needs for human security; (7) developing valid psychometric measures for cross-cultural research as well as clinical protocols, field-based process models, and qualitative methods of assessment. Hoshmand continues her discussion of the need for education and academic applications to help train future clinicians and researchers.

In Chap. 3, Siddharth Shah examines ethnomedical practices for international psychosocial efforts in disaster and trauma. He begins by defining ethnomedical competence and ethnomedicine as the study culturally embedded or alternative beliefs and practices for health care. He details how neocolonial, largely Western practices, have assumed the transportability and relevance to other cultures. Shah challenges the validity of such assumptions and, instead, argues for ethnomedical competence in which there are symmetrical learning processes that are democratic in nature. To illustrate his point, he presents a case history of the 2004 Tsunami in which he learned from a Sri Lankan colleague and spiritual healer named Ranjan, who employed traditional healing practices to aid victims of the disaster. Shah describes the spiritual healers' gifts and techniques and contrasts them with how modern psychiatry would have approached the distressed and traumatized victims of the flood waters. He notes that Ranjan's techniques were applied to wide ranges of psychological problems with clearly observable success which would likely be criticized by Western scientific standards as quackery.

Shah goes on in this chapter to outline the evidence for shortcomings in ethnomedical competence and references recent efforts by the World Health Organization to create standards by which to assess the effectiveness of interventions in situations of extreme stress, disaster, and trauma. Finally, he concludes his chapter with a set of guidelines to counteract

neocolonial processes that might be counterproductive in non-Western cultures.

In Chap. 4, Yael Danieli examines the issues of assessing trauma across cultures from a multigenerational perspective. Drawing on her previous research, Danieli emphasizes the time and process mechanisms in assessing the diverse and complex forms of posttraumatic adaptation. For example, in discussing massive psychic trauma such as the Holocaust, the wars in Bosnia and Rwanda, she argues that "only a multidimensional, multidiscipline integrative framework" can fully understand the effects across families, communities, cultures, and nations themselves. To this end, Danieli revisits the extensive literature as it pertains to the cross-cultural assessment of trauma and PTSD. Further, her analysis includes the importance of resilience and trauma assessment among generations. Moreover, among the most important aspects of assessing traumatic effects is the knowledge of the mechanisms of the transmission of trauma. How does it occur? What are the specific mechanisms and processes? What are the implications of clinical and psychometric assessment? What are its effects on the life-cycle and the next generation? In this regard, she discusses the importance of culture as a transmitter, buffer, and facilitator of healing and recovery from experiences of extreme stress.

In Chap. 5, Richard Dana discusses the increasingly important cross-cultural issues of culture and competence training with special reference to refugee populations. He begins by noting that there are over 20 million displaced persons worldwide. Many of these persons have been victims of torture, trauma, and political persecution. As a consequence they face not only psychological sequela, but also problems associated with resettlement, acculturation, and asylum seeking. By use of two summary tables, Dana lays out a broad range of issues that are central for the assessment of posttraumatic consequences. In the first table, he makes comparisons of ethnic minority mental health practices in Europe and the United States. These identified practices include (1) monitoring/research; (2) specific services; (3) professional training; (4) counseling/psychotherapy; (5) service user involvement; and (6) racial/xenophobia in services. In the second table, an organization is created to identify assessment objectives, domains, and adaptation outcomes. The objectives include psychopathology, holistic health, and acculturation. For each of the objectives there is a corresponding domain of inquiry. For example, for psychopathology, the domain is clinical diagnosis and the *adaptation outcome* is medical model symptom reduction. For holistic health, there are six areas for assessment: core adaptation, posttraumatic growth, strength, resilience, wellbeing, and salutogenesis. Similarly, for the objective of acculturation, there are six areas for assessment: cultural identity, ethnic identity, racial identity, acculturative stress, coping skills, and social support.

By using these two tables as conceptual roadmaps, Dana discusses in detail each component in terms of refugee assessment practices and cultural competency training. He concludes his thoughtful analysis by saying, "there is no consensus within or between host countries on the necessity for culture-specific, research-informed assessment practices . . . culturally competent research and simultaneous development of training resources within relevant professional areas in host societies are of overarching importance for refugees and asylum seekers."

In Chap. 6, Boris Drozdek and John P. Wilson present an overview of the subtle and complex issues of assessing psychological trauma in asylum seekers. Based on the authors' previous research (Wilson & Drozdek, 2004) case histories of clients from Azerbaijan, East Timor, Chechnya, Iran, Sri Lanka, and Bosnia are presented to illustrate the critical issues that face mental health professionals who are trying to holistically understand the clients for whom they have responsibility.

The authors begin by noting that trauma does not occur in a vacuum and neither does the assessment process. Trauma victims in general and asylum seekers in particular, have endured and survived a broad range of traumatic stressors such as war, dislocation, torture, detention, rapes, interrogations, political persecution, etc. Through these experiences they also suffer different types of losses which include their property, houses, jobs, homeland, social status and roles, and in come cases, a loss of self and identity. Thus, the professional conducting the psychological assessment must become familiar with their nature and impact within the phenomenological perspective of the asylum seeker. As the authors note, in many countries in Europe and the Western hemisphere, the individual may only have 48 h to present evidence of being endangered in their country of origin in order to gain official status as an asylum seeker. And, even if granted initial access to the process of seeking asylum, there are many secondary stressors they will endure in the months that lay ahead e.g., seeking financial assistance, housing, and social support. In most cases, there are language barriers and fears of fully disclosing their traumatic events in their native land. Thus, many clients suffer depression, anxiety, and social phobias on top of their posttraumatic sequela associated with traumatic exposure. It is for these reasons that the authors discuss obstacles in communication between a health professional and asylum seekers. Beyond these clearly identifiable communication barriers is the paramount question of how to create a safe treatment environment. Drozdek and Wilson argue that the trauma victim must feel secure and safe in the context of the assessment environment and/or treatment setting. These considerations give rise to the need for understanding explanatory models and cultural relativity. Following a discussion of cultural relativity, the authors raise the question of how to check the accuracy of the trauma history. A set of guidelines is presented with a recognition

that the trauma story unfolds over time and the assessor rarely obtains a complete and full reporting of the traumatic experience, precisely because the event overwhelmed the normal coping resource of the person and requires sufficient time and assistance to process and integrate the extraordinary experiences into the self and personality.

In Chap. 7, Catherine So-kum Tang discusses the assessment of PTSD and psychiatric co-morbidity in contemporary Chinese society. She begins the chapter with an overview of traditional Chinese medicine (TCM), its concepts and practices. The concepts of Yin and Yang, the Wu-Hsing system, Qi and the meridias of the human body are discussed and embedded conceptually with traditional Chinese concepts like yaean, fenshui, and ren. Having created a historical and culture-specific background concerning TCM, Tang next compares the diagnostic manual used in mainland China (CCMD-3) to the DSM-IV and ICD-10. Similarities and differences are highlighted, especially for the category of PTSD. She then proceeds to discuss the recent research in China on PTSD and reviews the questions and assessment procedures that have been employed to study such traumatic events as the SARS virus, the 2004 Tsunami, earthquakes, traffic accidents, and other traumatic events. As Tang notes, 94% of all published research on trauma in English and the five non-Western, non-English publications are not widely known to traumatologists. Her chapter concludes with a highly focused discussion of challenges for a future research and the need to continue to move toward globally standardized measures of psychic trauma, PTSD, and culturally sensitive approaches to diagnosis and assessment.

In Chap. 8, Kathleen Nader presents a comprehensive overview of culture and the assessment of trauma in children and adolescents. She begins with four case histories of children from different cultural backgrounds who experienced traumatic experiences (1) a sibling who witnesses his brother killed in a motor car accident; (2) Liberian soldiers killing villagers; (3) a Native American adolescent whose brother was shot to death; and (4) a school playground shooting of a 7-year-old girl. These case illustrations set the stage for Nader's examination of the many complex factors involved in the cross-cultural psychological assessment of posttraumatic sequela in youths.

Nader first reviews and then discusses the factors associated with the assessment of culturally diverse groups, which include ethnicity, confounding variables, traumatic stressors, the nature of subcultures and their unique qualities. Second, she reviews the literature and national cultures and the special nuances that must be taken into consideration such as differences in emotional expression, reporting practices, parent reporting, self-descriptive interpretations of symptoms and behaviors, culture and personality, gender differences, families and acculturation, risk and resilience factors.

In a systematic way, Nader then lays out the important issues, for the assessment process. This section of the chapter is a step-by-step checklist of critical clinical considerations that are essential when conducting cross-cultural assessments with youths. There is also a presentation about using measures and questionnaires with youths and the problems of translations and back translations of commonly used psychometric instruments. For example, she states, "effective assessment and treatment of youth necessitates cognizance of age as well as culture-related issues and personal qualities. Translating measures or using a translator to question an adult requires understanding the ways in which specific emotional states, behaviors, and other symptoms are described and viewed within the culture." The chapter concludes with a discussion of how assessment procedures have implications for treatment.

In Chap. 9, Charles Marmar and his associates discuss the peritraumatic dissociative experiences questionnaire (PDEQ). To set the proper perspective, it should be noted that during the past two decades, the issues of dissociative reactions in traumatic situations has reached "center stage" in mapping the possible psychiatric sequela in posttraumatic adaptation. Indeed, one would phrase the central question asking simply, "what happens psychobiologically when an individual manifests a peritraumatic dissociative (i.e., concurrent to the event), during a powerful traumatic experience?" In essence, this conceptual question gave birth to the development of the PDEQ and the research that has subsequently emanated from it in many parts of the world and in many diverse cultures.

The authors begin their chapter with a brief but focused background on the PDEQ, noting its birth and refinement on earlier research on Vietnam War veterans in the United States. They review this developmental research and how it culminated in the final version of the instrument and its psychometric properties for the ten-item scale. Once having established its reliability and validity, the authors, collaborators, and fellow researchers began using the scale to study the relationship between self-reported peritraumatic phenomenon and the later development or absence of PTSD. In a condensed historical sense, the research program accelerated rapidly and a plethora of studies began examining scores of the PDEQ and subsequent development of PTSD, thus raising more theoretical questions as to the cognitive/psychobiological processes involved with human response to overwhelming or subjectively perceived threat. Why is it that the tendency to dissociate in the face of perceived threat is empirically and causally associated with PTSD? And is this pattern of relationship the same across cultures?

In the balance of the chapter, the authors review research from Germany, Israel, Japan, Brazil, Turkey, China, and elsewhere. This impressive and growing body of knowledge clearly presents *evidence-based knowledge* of the convergence and coherence of research identification that

peritraumatic phenomenon are beyond cultural boundaries and, perhaps a more universal human form of adaptation and coping with situations of extreme stress.

In Chap. 10, Daniel Weiss presents a comprehensive overview of the Impact of Events Scale (IES-R), one of the most widely used psychometric scales for the assessment of PTSD and PTSD symptoms. This chapter is rich in its complexity and comprehensiveness. Weiss begins his chapter with a review of the history of the scales' development and psychometric properties. As pertains to this book, he notes that the electronic databases reveal 1,147 citations (P.I.L.O.T.S.) and 515 in the psychinfo database of the American Psychological Association. In terms of international use and translation, the Impact of Events Scale – Revised (IES-R) can be found in Chinese, French, German, Japanese, Spanish, Bosnian, Dutch, Italian, Norwegian, Persian, and other languages. Moreover, Weiss illustrates that, as one might expect, it has been used to measure PTSD symptoms for many traumatic stressors, ranging from severe medical illness to war-related problems in many cultures throughout the world.

For these international and cross-cultural studies, there is an analysis of the relevant psychometric statistics regarding reliability, validity, and factor structures of the IES-R scale. In his conclusion, Weiss notes: "The Impact of Events Scale – Revised has generated a number of formal international versions, several informal versions that have appended in the context of a typically oriented peer-reviewed publication, and a number of unpublished international versions. At the level of basic psychometric properties, the published data suggests impressive concordance in terms of internal consistency, test-relevant reliability, and subscale correlations even though the networks used have not employed all aspects of a comprehensive and exhaustive approach that is admittedly challenging and expensive to undertake."

In Chap. 11, Walter Renner, Ingrid Salem, and Klaus Ottomeyer present an impressive quantitative and qualitative study of asylum seekers for three different countries – Chechnya, Afghanistan, and West Africa. The aim of the study was to evaluate cultural differences in PTSD symptomatology using the Impact of Events Scale – Revised (IES-R), the Harvard Trauma Questionnaire, and the Clinicians Administered PTSD Scale (CAPS-1). Additionally, other measures were used to assess psychiatric symptoms beyond PTSD and for their purpose of the Hopkins Symptom Checklist – 25, the Bradford Somatic Inventory and the Social Adaptation Self-Evaluation Scale were employed. Based on item scores but not total scores for the scales, discriminant analyzes correctly classified 92% of the participants. In the qualitative part of the study, clinical protocols were recorded and subjected to classification into five areas (1) factors that prevent or embrace symptoms; (2) factors identified as stressful; (3) symptoms related to PTSD; (4) personal and cultural views of the traumatic events

reported; and (5) other outcomes. The results showed that the Chechnya group had more somatic symptoms and irritability. The West Africa group was distressed over being idle while seeking asylum. The Afghan group expected relief through education and training. They concluded that more studies of an empirical nature are necessary with a framework of culture-sensitive assessment.

In Chap. 12, Roberto Lewis-Fernandez, Alfonso Martinez-Taboas, Vedat Sar, Sapana Patel, and Adeline Boatin examine the cross-cultural assessment of the phenomena of mental dissociation. This comprehensive chapter is noteworthy for its review of the research literature from many parts of the world, extending beyond American and European publications to other cultures in Asia, the Middle East, and elsewhere. The chapter is organized into sections, each of which could stand alone as a condensed review and overview on the multifaceted dimensions for the clinical and scientific understanding of dissociation. These subsections include (1) definitions of dissociation; (2) somatoform dissociation; (3) dissociation and psychosis; (4) trauma and dissociation; (5) normal and pathological dissociation; (6) cross-cultural perspectives and conceptualization of dissociation; (7) assessment methodologies; (8) research with psychiatric populations; (9) community studies of dissociation; (10) case studies; (11) research with academic undergraduate populations; and (12) translations of measures of dissociation. The authors conclude this rich and interesting chapter by noting "that the cross-cultural assessment of dissociation summarized available data on the extent to which global diversity of dissociative phenomena are tapped by existing measures and classifications. To a large degree, the work in Turkey and Puerto Rican communities lends support to the usefulness of standard international assessments in cross-cultural research on dissociation. In nearly every instance, measures developed in one setting still had adequate psychometric properties in another cultural region. At the same time, however, it is clear that in order to fully characterize the dissociative nature of certain forms of pathology, new measures need to be developed."

In Chap. 13, Derek Silove, Zachary Steele, and Adrian Bauman examine a current controversy in the study of war trauma. To state the controversy simply, it is whether or not PTSD or forms of psychopathy are the inevitable outcome of exposure to traumatic events. The other side of the coin is the argument that such sequela is not inevitable and many, if not most victims/survivors, manifest resilience and good long-term adjustment, despite expectable short-term postevent distress.

The authors begin their chapter with a review of the literature regarding the controversy. They note, in this regard that, "this emerging evidence base rather than arriving at premature conclusions on the basis of a priori etic or emic assumptions about the appropriateness of the trauma model in such settings." In this regard, the chapter, by use of a comparative table,

presents 13 sets of propositions and critiques of trauma and PTSD and pragmatic responses to them based on the current, cumulative scientific literature.

Having set the stage about the controversy, the authors next present an illustrative research project on Vietnamese immigrants living in Australia. The chapter details the participants and methodology on a large-scale (N = 1,161) Vietnamese sample and matched Australian controls. The study found many significant findings among which is that "trauma remained the most powerful predictor of mental disorder in the Vietnamese, 11 years after resettlement with exposure to 3+ trauma being associated with an eightfold risk of mental disorder (compared to a fourfold risk in Australians)." After discussing the clinical and applied implications of the research data, the authors conclude that "the data show that trauma and PTSD remain important to the overall mental health of the community 11 years after resettlement in a Western community and that the concentration of trauma-related problems amongst the subgroup with the most severe trauma exposure. For those with lesser exposure, traumatic stress symptoms are moderated by the restorative effects of living in a safe and secure environment."

In Chap. 14, Raphael, Delaney, and Bonner present a clearly conceptualized historical and psychological perspective on the assessment of trauma for Australia's indigenous people, the Aboriginals. This chapter begins with an overview of the cultural and personal losses suffered by the 60,000-year-old aboriginal people, the oldest in the world. As with Danieli's chapter, the authors point out that culture-sensitive assessment must be viewed from a perspective of collective, cumulative traumatization across in time and generations. They note, correctly, that the destruction and decimation of Aboriginal culture involved a large range of traumatic stressors: loss, grief, subjugation, and being social outcasts by the colonial government. The authors quote statistics gathered in recent years that show that rates of mortality and morbidity of nearly every conceivable source and measure that illustrates the levels of cultural loss and forms of psychosocial pathology. Aboriginal people die young and suffer mental health maladies (e.g., depression, alcoholism, suicide, PTSD, domestic violence, etc.) at higher rates than the non-aboriginal cultures. In short, being Aboriginal means being at risk for medical and psychiatric maladies in living.

In terms of assessing traumatic reactions, measures of stressors of daily living show that those with seven or more life-event stressors were 51/2 times more likely to have significant behavioral and mental health problems. However, as with issues of assessment in culturally sensitive ways, there are currently two standardized protocols for the proper assessment of the ways that Aboriginal people process their difficult life-experiences.

In terms of clinical engagement and psychosocial assessments, the authors examine several core issues in work with Aboriginal people which includes (1) culturally appropriate processes, recognizing the limits of ones own belief system and being sensitive to those of others; (2) qualities of the relationship (e.g., trust, context, personal knowledge) to those being assessed and cultural disparities; (3) the diversity of the histories, culture(s), and the context of the evaluation; (4) the necessity for informed collaboration with other professionals; and (5) sensitivity and trust, the creation of empathic attunements with respect for historically significant cultures and background.

As pertains to trauma manifestations among Aboriginal people, the chapter details a broad set of traumatic issues such as trauma and grief, endemic training, maladaptive behavioral patterns, and the need to assess cultural transmissions of trauma constellations. Finally, the authors discuss the interplay between traumatic assessment and clinical approaches to treatment.

In Chap. 15, J. D. Kinzie examines the combined psychosocial and pharmacological treatment of refugees from a cross-cultural perspective. Kinzie brings decades of experience from his work with various refugee populations in Oregon, USA. He begins by noting that the responsible treatment of refugees is complex and difficult. More importantly, he notes that there is relatively little systematic research that has attempted to examine combined psychotherapeutic and pharmacological approaches to the treatment of non-Western populations, who are refugees or, on the other hand, in need of treatment in their country of origin.

Kinzie presents several case histories of patients from the Intercultural Psychiatric Program at Oregon Health and Science University. In this chapter, Kinzie "walks" the reader through the treatment process of the patients, much as a clinical professor of medicine would do in an educational sense with residents in psychiatry. He provides a detailed list of diagnostic, differential diagnostic, and clinical considerations for the proper and successful diagnosis of the patients' problems in relation to the specific traumas they endured prior to asylum seeking as a refugee in the United States. Moreover, he provides accumulated medical and clinical wisdom about the use of medication in conjunction with "customized" psychotherapy approaches adapted for the care of diverse refugee populations. The chapter concludes with a set of seven specific guidelines for combined treatment recommendations.

In Chap. 16, Westermeyer and Her present a fascinating account and history of their professional work with Hmong refugees. They begin their chapter with background information about the Hmong people, known as the "Montash" people in Laos, Vietnam, Thailand, and China, indigenous to the Annamite mountain region of Southeast Asia. After the end of

the Vietnam War, Hmong refugees sought asylum in the US as they aided American military forces during the war.

In presenting a discussion of obstacles to assessment and care, the authors discuss critical issues that include (1) language and the differential semantic meaning of words; (2) interpretation, as there are two major dialects in Hmong language which can post significant problems when using interpreters for psychological assessment and clinical treatment approaches; (3) suspicion and mistrust are features of some Hmong patients, partly due to their abandonment by the US at the end of the Vietnam War. The authors provide several anecdotal illustrations. For example, "when Hmong people die in the United States, is it true that they are cut into pieces and put into tin cans and sold as food?"; (4) belief system differences can impede proper diagnosis and evoke countertransference reactions due to inaccurate understanding of culturally based differences in beliefs; (5) history of traumatic experiences, rooted in the Hmong history with many foreign countries and groups (North Vietnam, Pathet Lao, etc.) are extensive. The authors make an analogy to the experience of Native Americans in terms of genocidal warfare and ethnic cleansing. They point out that the power of these reports may evoke significant distress in the clinical assessor. Further, they note that PTSD is not the only expectable psychological sequela, as other anxiety, depression, and phobic disorders are prevalent.

In the next section of this comprehensive chapter, the authors discuss the need to understand Hmong social organization, i.e., how families and communities are organized and can be mobilized to provide needed social support. As part of this "larger perspective" of Hmong culture is an understanding that opium use was common among the Hmong in their natural culture. However, when they immigrated to the US, suffered from the effects of addiction, the need to find sources of supply, to receive treatment for their withdrawal symptoms, including suffering mood and anxiety disorders, had to be addressed by treatment providers in a culturally sensitive way as not to disgrace their integrity.

The chapter concludes with an examination of childbirth, child rearing, and childhood development as it pertains to how cognitive structures and ideological systems of belief are formed within the Hmong Society. To conclude the chapter, the authors discuss the application of psychotherapies to Hmong patients: behavior modification, interpersonal therapy, and network therapy. Similar to Kinzie's recommendation in Chap. 14, there is also a discussion of the combined use of medication with psychotherapy.

Contents

PART II: ASSESSMENT METHODS

PART III: TRAUMA AND CULTURAL ADAPTATION

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Part I

Theoretical and Conceptual Considerations in the Cross-cultural Assessment of Psychological Trauma

Chapter 1

The Lens of Culture: Theoretical and Conceptual Perspectives in the Assessment of Psychological Trauma and PTSD

John P. Wilson

INTRODUCTION

The relationship between trauma and culture is an important one because traumatic experiences are part of the life cycle, universal in manifestation and occurrence, and typically demand a response from culture in terms of healing, treatment, interventions, counseling, and medical care. To understand the relationship between trauma and culture requires a "big picture" overview of both concepts (Marsella & White, 1989). What are the dimensions of psychological trauma and what are the dimensions of cultural systems as they govern patterns of daily living? How do cultures create social–psychological mechanisms to assist its members who have suffered significant traumatic events?

Empirical research has shown that there are different typologies of traumatic experiences (e.g., natural disasters, warfare, ethnic cleansing, childhood abuse, domestic violence, terrorism, etc.) that contain specific stressors (e.g., physical or psychological injuries) that tax coping resources, challenge personality dynamics (e.g., ego strength, personal identity, self-dimensions), and the capacity for normal developmental growth (Green, 1993; Wilson, 2005; Wilson & Lindy, 1994). Traumatic life events can be simple or complex in nature and result in simple or complex forms of post-traumatic adaptation (Wilson, 1989, 2005). Similarly, cultures can be simple or complex in nature with different roles, social structures, authority systems, and mechanisms for dealing with individual and collective forms of trauma. For example, dealing with an accidental death of one person is

significantly different from coping with the aftermath of the worst tsunami disaster in the history of humankind (2004) that caused massive death of thousands, destruction of the environment and the infrastructure of cultures. In this regard, it is important to understand how cultures utilize different mechanisms to assist those injured by different forms of extreme stress experiences. The injuries generated by trauma include the full spectrum of physical and psychological injuries. In terms of mental health and counseling interventions, this includes a broad range of posttraumatic adaptations that include posttraumatic stress disorder (PTSD), mood disorders (e.g., major depression), anxiety disorders, dissociative phenomena (Spiegel, 1994), and substance use disorders. In terms of mental health care, cultures provide many alternative pathways to healing and integration of extreme stress experiences which can be provided by shamans, medicine men and women, traditional healers, culture-specific rituals, conventional medical practices, and community-based practices that offer forms of social and emotional support for the person suffering the adverse, maladaptive aspects of a trauma (Moodley & West, 2005). But how does culture influence an individual's reaction to trauma? How do they make sense of their experiences in situations of extreme stress? In this regard, Smith, Lin, and Mendoza (1993) state: "Humans in general have an inherent need to make sense out of and explain their experiences. This is especially true when they are experiencing suffering and illness. In the process of this quest for meaning, culturally shaped beliefs play a vital role in determining whether a particular explanation and associated treatment plan will make sense to the patient . . . Numerous studies in medical anthropology have documented that indigenous systems of health beliefs and practices persist and may even flourish in all societies after exposure to modern Western medicine . . . These beliefs and practices exert profound influences in patients' attitudes and behavior . . ." (p. 38).

CASE HISTORY

To illustrate how culture shapes belief systems and influences the perception of traumatic events and their subsequent processing and integration into cognitive structure of meaning and attribution, let us consider the following case example.

In 1985 I attended an intertribal "pow wow" on the Lakota Sioux Indian reservation in South Dakota (Sisseton-Whapeton). The pow wow was a 4-day event for Vietnam War veterans and their families. The event contained Native American ceremonies and rituals to honor the veterans for their military service and sacrifices. These ceremonies included sweat lodge purification (Lakota Warrior "sweat" for healing), the Red Feather induction ceremony, traditional communal singing and dancing, potlatch

sharing of gifts, and ceremonial fires with "talking circles" and communal dinner with the eating of traditional foods.

During this pow wow, I had the opportunity to meet several Lakota Sioux Vietnam combat veterans. Among them was a veteran whom I will refer to as Tommy Roundtree (not his real name). Tommy was a two-tour combat veteran who had been highly decorated for his valor and courage in combat with the 101st Airborne Brigade between 1967 and 1969. Tommy grew up on the Rosebud reservation of the Sioux Nation in South Dakota. He was an athletic, tall, handsome man with black hair and ruddy dark skin. In many respects, he had a "Hollywood" character that resembled the famous actor, Erroll Flynn.

When I met Tommy, he was dressed in traditional tribal clothing and had his face painted. Visibly noticeable were the scars on his chest and back from when he had participated in Sun Dance ceremonies in which the participants were skewered with straps to a pole located in the center of a pow wow arena. The straps are skewered into pectoral and upper back muscles by small bones or sticks. At the climax of the Sun Dance ceremony, which involves dancing and blowing through a small bone, the celebrant, at the critical time, leans back and releases himself from the straps which link him to the pole. The skewers tear the skin and cause bleeding. The Sun Dance ceremony is a physically arduous process and requires stamina, mental concentration and preparation, including a Sweat Lodge purification prior to the actual Sun Dance itself. In traditional ways, it is thought that the ritual aids in the development of spiritual strength. When I observed Tommy's scars, he immediately told me that he had done three Sun Dances during his life, two prior to deployment to Vietnam. I told him that I had read about the ceremony and others that were part of Lakota culture. It was at this point that he said, "You know, John, I would like to talk with you about my Vietnam War experiences, but I am afraid that you will think I am crazy or psychotic if I tell you how I understand what happened to me there and since coming home from the war." I responded that I have great respect for traditional Native American culture, especially Lakotan, and would like to hear his story. He smiled nervously at me as I looked at him straight in the eyes and said, "Well, okay, let's talk."

We found a quiet spot in the pow wow grounds and began to talk. In the background, the pulsating beat of the tom-tom drums could be heard along with the singing of traditional songs. Tommy explained that prior to his deployment to Vietnam, the tribal elders prepared him in various ways for going to war. He was taught to sing his "death song" if fatally wounded. He was instructed as to how to use his native cosmology and natural connection to the earth and its creatures to help him stay alert and knowledgeable about danger and threats. Tommy said, "In Vietnam, I would ask the insects to be my eyes while I slept to look for the enemy;

I asked the trees to signal me if the enemy is creeping towards me." He continued by saying that during active combat with his M-16 automatic rifle, he would sometimes see a blue protective shield surrounding him that deflected enemy bullets away. Tommy said that other times during combat he could hear his grandmother speaking to him, saying not to worry and that he was going to live and be free from injuries or death. He added that his grandmother's voice told him that if he did get shot, to sing his "death song" so that ancestral spirits would be with him to join him and provide care and assistance to the other world (heaven).

Tommy asked me if I thought he was psychotic or delusional. I replied that I did not believe that he was "crazy" or psychotic. However, I asked him how he dealt with his war trauma after coming home from Vietnam. Tommy said, "John, I will show you our way of healing" and arranged for me to participate in a Lakota Sweat Lodge with a sacred pipe carrier of the Sioux Nation. He also arranged for me to observe and participate in several other rituals and ceremonies for healing and well-being. Afterward, he explained to me that his perspective of the Vietnam War was different from that of the white Anglo-American culture that he volunteered for military service to honor agreements his ancestral grandfathers made about fighting for their "land and way of life." He continued by saying that by keeping to the traditional ways, abstaining from alcohol, and working to help others who had adverse residual traumatic war injuries, he could live with harmony and balance in all his affairs in life. This he explained, was the Lakota way, the great circle of life.

THE MYTHOLOGY OF THE HERO, TRAUMATIC ENCOUNTERS, AND PERSONAL TRANSFORMATION

The mythologist Campbell (1949, 1991) researched the universality of myths in many of the world's literature, including the myth of "the Hero" who journeyed into "zones of danger" only to emerge transformed in mind, body, and spirit. Figure 1 presents an illustration of this important myth which includes personal encounters of trauma, disaster, and war. In brief the core elements of the Hero and trauma survivor's journey include:

- A life journey that can begin at any point in life-cycle development
- The encounter with trauma, loss, bereavement, and disaster
- The entry and exit from a zone of danger with powerful or supernatural forces
- The four tests of the human spirit
- Trauma and the great cycle of living and dying
- The return of the Hero and the task of transformation upon re-entry

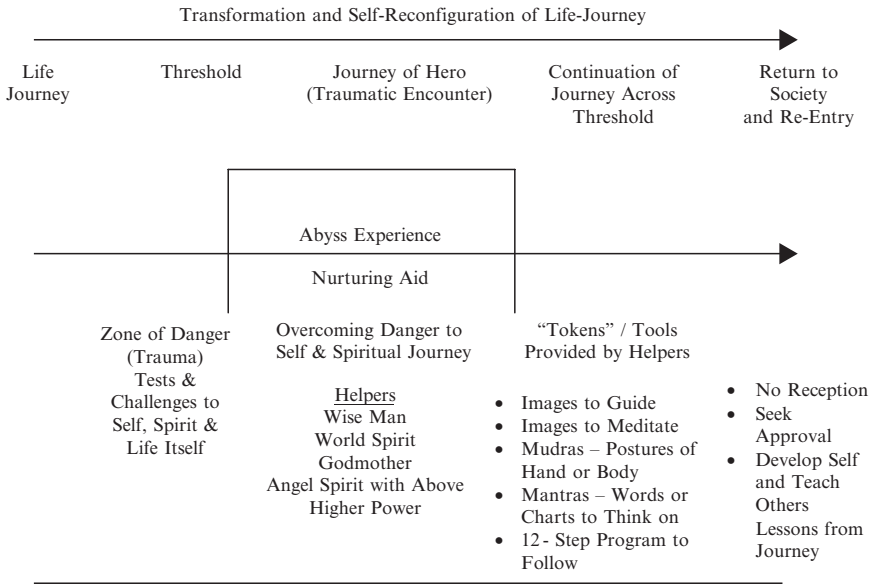

Figure 1. Mythology and the journey of the Hero: the Abyss Experience and transformation of psychic trauma (Source: © Wilson, 2005)

As discussed by Campbell (1991), the mythology of the Hero concerns the travails of ordinary people through extraordinary experiences. In some cases, the myths characterize the life journey, beginning with youthful innocence and naiveté and the eventual encounter with powerful forces of seemingly insurmountable proportions. There are many variations on the themes of this myth and how the individual is transformed by the nature of his or her experience. For example, young men become war-hardened combat veterans; the apprentice shaman enters the "underworld" of spiritual entities; the knight of the king's realm challenges dragon beasts and the search for sacred, lost objects that have secret powers. The mythological journey of the Hero is also the journey and psychological sequela of the trauma survivor. They both encounter dark, sinister, life-threatening forces and then cross a threshold to re-enter normal life and society. The power of life-threatening dark forces constitutes the nature of the Abyss Experience (Wilson, 2005). During the Abyss Experience, the individual confronts the specter of death, extreme threats, and overwhelming immersion into traumatic stressors. Upon re-entry into society after the Abyss Experience, the survivor faces the task of transformation and the psychic metabolism of these experiences. As part of this process, the mythical Hero is assisted by "helper guides" who take the form of wise old men, a spirit guide, a deceased elder relative, an

angelic person or another person who has had a similar experience (e.g., a recovering addict, war veteran, etc.).

After the Abyss Experience, the trauma survivor (Hero) faces the arduous and painful task of re-entry where he or she is met with additional stressors and psychic burdens. Contrary to expectation, the hero or survivor does not receive a warm welcome from those left behind. Campbell (1991) notes that there are three prototypical patterns: (1) no reception; (2) the search for approval, validation, and confirmation of one's journey, travails, and suffering; and (3) the need to share his or her story of survival and teach others in generative ways (Campbell, 1991).

Upon re-entry into the culture of origin, the trauma survivor, like mythical Hero, encounters some or all of the following reactions to his or her journey and life-transforming experiences:

- The absence of recognition of the true nature of suffering, sacrifice, and survival
- The absence of recognition of the perils endured
- The absence of appreciation for personal injuries and changes
- The absence of treatments, health care, or opportunities to engage in traditional healing rituals
- The emergent realization that meaning must be created out of the traumatic experience

According to Campbell (1991), mythology suggests that the heroic survivor seeks to find pathways to healing. Thus, we can identify six consequences of healing pathways within the diversity of culture: (1) restore harmony in mind, body, and spirit; (2) restore vital physical and mental energy; (3) promote well-being through mindfulness and psychic integration; (4) empower personal energy for life-course development; (5) access and utilize treatments available in the culture; and (6) develop healing practices that promote resilience.

TRAUMA, CULTURE, AND POSTTRAUMATIC SYNDROMES: THE CORE QUESTIONS

The concept of traumatic stress and the multidimensional nature of cultures requires a conceptual framework by which to address core issues that have direct relevance to understanding the nature of trauma as embedded within a culture and its assumptive systems of belief and patterns of behavioral regulation. Marsella (2005) has noted that healing subcultures have at least five distinct elements: "(1) a set of assumptions about the nature and causes of problems specific to their world view and construction of reality; (2) a set of assumptions about the context, settings, and requirements for healing to occur; (3) a set of assumptions and

procedures to elicit particular expectations, emotions, and behaviors; (4) a set of requirements for activity and participation levels and/or roles for patient, family, and therapist; and (5) specific requirements for therapist training and skills expertise criteria" (p. 3). These sets of assumptions are useful as they define a necessary conceptual matrix for examining how different cultures handle psychopathology, behavioral disorders, and complex posttraumatic syndromes. To be clear, I am not using the term posttraumatic syndrome as synonymous with PTSD, although it certainly includes the narrow, diagnostic definition of the disorder. Rather, posttraumatic syndromes involve a broad array of phenomena that include Trauma Complexes, Trauma Archetypes, posttraumatic self-disorders (Parsons, 1988), posttraumatic alterations in core personality processes (e.g., five-factor model), identity alterations (e.g., identity confusion), and alterations in systems of morality, beliefs, attitudes, ideology, and values (Wilson, 2005). The experience of psychological trauma can have differential effects to personality, self and developmental processes, including the epigenesis of identity within culturally shaped parameters (Wilson). Given the capacity of traumatic events to impact adaptive functioning, including the inner and outer worlds of psychic activity (Wilson, 2004a), it is critically important to look beyond simple diagnostic criteria such as PTSD (Summerfield, 1999) to identify both pathogenic and salutogenic outcomes as individuals cope with the effects of trauma in their lives. As I have argued elsewhere (Wilson, 2005), the history of scientific research on PTSD is badly skewed (perhaps for reasons of historical necessity) toward the study of psychopathology rather than on human growth, self-transformation, resilience, and optimal functioning.

When we address the question of how individual cultures deal with psychological trauma in its diverse forms, it is useful to examine commonalities and differences among approaches to counseling, healing, psychotherapies, treatments, and traditional practices. If traumatic stress is universal in its psychobiological effects (Friedman, 2000; Wilson, Friedman, & Lindy, 2001), are therapeutic interventions, in turn, designed in culture-specific ways to ameliorate the maladaptive consequences of dysregulated systems of affect, cognition, and coping efforts (Marsella, Friedman, Gerrity, & Scurfield, 1996; Wilson, 2005; Wilson & Drozdek, 2004)? If so, what are the differences in therapeutic approaches to dealing with trauma? To answer this question further examination of the core questions pertaining to culture and the patterns of posttraumatic adaptation is required.

Table 1 presents 21 core questions concerning the relation of culture to traumatic life experiences. These core issues serve to frame the later discussion about the commonalities and differences in culture-specific and transcultural approaches to counseling and mental health care.

Table 1. Core Questions for Understanding Culture, Trauma, and Posttraumatic Syndromes

1. Is the experience of psychobiological trauma the same in all cultures?
2. Are the emotional reactions to trauma the same in all cultures?
3. Is the psychobiology of trauma the same in all cultures?
4. Does culture act as a filter for psychic trauma? If so, how do internalized beliefs, culturally shaped patterns of coping and adaptation govern the posttraumatic processing of traumatic experiences?
5. Are traumatic experiences universal in nature across cultures? Are traumatic experiences archetypal for the specter?
6. If trauma is archetypal for humankind, what are the universal characteristics across all cultures?
7. Does culture determine how individuals respond to archetypal forms of trauma? Are posttraumatic syndromes and Trauma Complexes culture specific in nature?
8. Are there cultural-based syndromes (not necessarily PTSD) of posttraumatic adaptation? If yes, what do they look like? What is their psychological status?
9. How do cultures develop rituals, medical–psychological treatments, religious practices, and other institutionalized mechanisms to assist persons who experience psychic trauma?
10. Are there culture-specific and universal mechanisms to help persons recover from trauma?
11. What does cultural mythology tell us about the experience of trauma?
12. What are the great myths in cultural literature that concern individual and collective trauma?
13. What are the psychological and cultural functions of mythology? How do they relate to the cross-cultural understanding of trauma?
14. What is the Abyss Experience in mythology and how does it relate to the psychological study of trauma?
15. What does mythology tell us about culture-specific rituals of psychic trauma?
16. How do forms of traumatic experiences relate to the universal myth of the Hero as protagonist?
17. How does modern psychology standardize the assessment and treatment of trauma across cultural boundaries?
18. Do pharmacological treatments of posttraumatic syndromes work equally well in all cultures?
19. Is the unconscious manifestation of posttraumatic states the same in all cultures?
20. What are the mythological images of the life cycle and the transformation of consciousness by trauma?
21. What cultural belief systems underlie cultural approaches to healing and recovery from trauma?

Source: Wilson, 2005.

1. *Is the experience of psychological trauma the same in all cultures?* This question addresses the issues of how cultural belief systems influence the perception and processing of trauma. For example, Kinsie (1988, 1993) noted that among Cambodian refugees who had suffered multiple life-threatening trauma during the Khmer Rouge regime, many who suffered from PTSD and depression understood their symptoms in the light of their Buddhist beliefs in karma as a station in life, an incarnate level of being and fate. Hence, Western psychiatric views of suffering and depression may not exist within a Buddhist ideology per se. Personal suffering may be seen from a religious–cosmological perspective of the meaning of life. If a culture does not have linguistic connotations of a pathogenic nature (e.g., PTSD), how then does the person construe acute or prolonged effects of extreme stress experiences? In a discussion of depression and Buddhism in Sri Lanka, Obeyesekere (1985) stated: "How is the Western diagnostic term depression expressed in society whose predominant ideology of Buddhism states that life is suffering and sorrow, that the cause of sorrow is attachment or desire or craving, that there is a way (generally through meditation) of understanding and overcoming suffering and achieving the final goal of cessation from suffering or nirvana?" (p. 134). Hence, sorrow, suffering, depressive symptoms, traumatic memories, disruptions in sleep patterns, and other trauma-related symptoms will likely be construed in a similar manner, especially since depression is a component of PTSD (Breslau, 1999).
2. *Are the emotional reactions to psychological trauma the same in all cultures?* Scientific evidence, especially neurobiological studies, has documented that affect dysregulation, right hemisphere alterations in brain functioning, and strong kindling phenomena are universal in PTSD (Friedman, 2000; Schore, 2003). If there is a common set of psychobiological changes associated with either PTSD or prolonged stress reactions, is the emotional experience universal in nature (e.g., hyperarousal, startle, anger, irritability, depressive reactions) or do cultural belief systems "override" or attenuate the magnitude or severity and intensity of dysregulated emotional states?
3. *Is the psychobiology of trauma the same in all cultures?* This question is similar to the one above. If extreme stress impacts the human organism in the same manner irrespective of culture, does the organism react in exactly the same way? Or, do cultural belief systems act as perceptual filters to the cognitive appraisal and interpretation of traumatic stressors? For example, in the 1988 Yunnan earthquake in a rural, peasant area of China, over 400,000 people

were impacted by the event which had not been previously experienced by most inhabitants. However, among the common explanations for the earthquake was that a great dragon was moving beneath the earth because he was angry with the people (McFarlane & Hua, 1993). Does such a mythical attribution influence the subsequent psychobiological responses to the disaster once it terminates? What if the dragon returns to his "rest" and "sleep"?

4. *Does culture (i.e., cognitive–affective belief systems) act as a filter for psychic trauma? If so, how do internalized belief system, culturally shaped patterns coping and adaptation govern the posttraumatic processing of traumatic experiences?* This question goes to the heart of the culture–trauma relationship. First, how does a culture define trauma? Is a trauma in one culture (e.g., natural disaster, incestuous relations, traffic deaths, political oppression, motor vehicle accidents, murder, etc.) necessarily viewed as a trauma in another culture? Second, what sets of expectations for resiliency in coping does the culture possess? For example, after the July 2005 terrorist bombings to transit systems in London, the general media and political leaders noted that the British people immediately returned to work the next day, rode the buses and subways, and manifest high levels of resilience. The Prime Minister, Tony Blair, made reference to how British resolve was evident during the bombing raids in WWII and that in 2005 such resilient resolve was once again transparent. Is this a cultural norm or expectation? How do cultural beliefs and values influence the postevent processing and cognitive interpretation of the traumatic stressor itself?
5. *Are traumatic experiences universal in nature across cultures? Are traumatic experiences archetypal for the species?* Research on PTSD has identified categories and typologies of traumatic life events and the specific stressors they contain (Green, 1993; Wilson & Lindy, 1994). While there is agreement on the nature and types of traumatic events, a more fundamental question is whether or not they are archetypal in nature. Elsewhere, I have discussed the unique nature of Trauma Archetypes and Trauma Complexes (Wilson, 2004a, 2005) and suggested that the experience of trauma is both universal and archetypal for the human species. However, culture shapes the way that individuals form Trauma Complexes after a traumatic experience and, once formed, articulate with other psychic complexities.
6. *If trauma is archetypal for humankind, what are the universal characteristics across all cultures?* This question is a corollary to the one above. Given that traumatic experiences are archetypal for the species what are the defining characteristics of the Trauma

Archetype? I have delineated 12 dimensions (see Table 3) of the Trauma Archetype and how they influence posttraumatic personality dynamics and adaptive behavior (Wilson, 2005).

7. *Does culture determine (i.e., shape, influence, design) how individuals respond to archetypal forms of trauma? Are posttraumatic syndromes and Trauma Complexes culture specific in nature?* Culture serves as a powerful socializing force, creating and shaping beliefs and regulating patterns of behavior and adaptation. For example, among many Native American people a "good world" is one defined by harmony and balance in "all things" and "all relations" in the environment and amongst people (Mails, 1991). Illness is thought to result from imbalance, loss of harmony, and being dispirited within oneself due to a loss of vital connectedness. Among some aboriginal native people, trauma is simply defined as that which causes one to lose balance in living with positive relations with nature and the human-made world. Moreover, within this cosmology, it was well known that certain events, such as warfare, could cause profoundly altered states of well being (i.e., dispiritedness) and necessitated healing rituals for the restoration of wholeness (Wilson, 1989, 2005).
8. *Are there cultural-based syndromes (cf. not necessarily PTSD) of posttraumatic adaptation? If yes, what do they look like? What is their psychological structure?* This core issue is among the most fascinating to consider and interesting to conceptualize since there may be unique ways that posttraumatic adaptations occur within a culture or subculture (e.g., trance states, dissociative phenomena, somatic illnesses, mythical attributions, etc.). How does culture provide awareness for posttraumatic syndromes to exist and be expressed? Are these forms of adaptation pathogenic or salutogenic in nature (Marsella, 1982)? What are the implications of culture-specific posttraumatic adaptations for culture-specific interventions?
9. *How do cultures develop rituals, medical–psychological treatments, religious practices, and other forms of institutionalized mechanisms to assist persons who experience psychological trauma?* This question attempts to identify the specific ways that cultures evolve and develop institutionalized and noninstitutionalized mechanisms and treatments for victims of trauma. This question is of significant research interest as it defines the areas in which commonalities overlap and in which culture-specific differences exist. As I will discuss later, it is my belief that each person's posttraumatic syndrome is a variation on a culturally sanctioned modality of adaptation which can then be "treated" by either generic or culturally specific practices.

10. *Are there culture-specific and universal mechanisms to help persons recover from psychological trauma?* How have cultures evolved specific rituals, treatments, or ceremonies to facilitate recovery from psychic trauma? For example, most Native American nations use the Sweat Lodge Purification Ceremony to "treat" states of dispiritedness, mental illness, alcohol abuse, depression as well as to instill spiritual strength (Wilson, 1989). The Sweat Lodge purification ritual has a unique structure and process and is embedded within the traditional cosmology of a tribe (e.g., Lakota Sioux). Under the guidance of a trained and experienced medicine person, the Sweat Lodge is used to restore "balance" through purification, sweating, and emotional catharsis (Mails, 1991; Wilson, 1989). This is just one example of many that exist among and between cultures to facilitate "stress reduction" and to alleviate suffering, including prolonged stress reactions after traumatic life events.
11. *What does cultural mythology tell us about the experience of trauma?* The discovery of how cultures deal with trauma can be found in the great mythologies of the world (Campbell, 1949, 1992). Mythology contains themes which converge across cultures, literary forms (e.g., epochs), and style. While it is the case that modern science, especially in the study of PTSD, has generated an impressive body of knowledge, it lacks carefully crafted cross-cultural studies of trauma, healing, and human adaptation (Wilson, 2005). However, from the pre-Greeks to the middle ages to our present time, the great mythologies of the world have chronicled the trials and tribulations of simple, ordinary, "heroic" figures and their individual journey which present profound challenges to life, spirit, body, and human integrity. Joseph Campbell's (1949) study of mythology has identified universal themes of the heroic figure whose journey of self-transformation in the life cycle is also about the universal stories of the trauma survivors. Analysis of the great mythologies is a rich source of inquiry as to the interplay between culture, traumatic events, and their transformation by facing challenges to existence itself.
12. *What are the great myths in cultural literature that concern individuals and collective trauma?* There are many great mythologies in cultures throughout the world (Campbell, 1991). The Great Mythologies are themes and stories about the human condition: adversity, jealousy, confrontation with powerful "zones of danger," the prospect of death, the process of individual transformation by confrontation with unconscious and external forces, and the difficult task of reentry into society after an adverse journey into the abyss of trauma (Wilson, 2005). Analysis of these myths thus illuminates the archetypal nature of trauma and the challenges it sets up for human development, healing, and the maintenance of personal integrity.

13. *What are the psychological and cultural functions of mythology? How do they relate to the cross-cultural understanding of trauma?* In his book, *Pathways to Bliss* (1992), Joseph Campbell outlines the four functions of mythology as (a) spiritual–mystical; (b) cosmological; (c) sociological; and (d) psychological. Each of these functions is revealed within mythology and has direct parallels to the nature of psychological requirements in dealing with the impact of trauma to self and psychological functioning. For example, trauma and traumatic life experiences form a reconciliation with unconsciousness and the meaning of life. This issue concerns directly the mythology of one's own life and the role trauma has played in it. For example, novels and autobiographies of war trauma of former combat soldiers typically characterize the horrific encounter with death, the existential questioning of the purpose of war and how such experiences subsequently shape life-course trajectory (Caputo, 1980). Traumatic experiences often force a self-effacing look at personal identity and consciousness. Trauma serves to put the individual in touch with their unconscious processes, including the disavowed, dark or "shadowy" side of personality. By carefully analyzing the functions of mythology within a culture we can identify how it is that culture shapes posttraumatic adaptation, growth, and the challenges of self-transformation.
14. *What is the abyss experience in mythology and how does it relate to the psychological study of trauma?* The Abyss Experience is a term I have coined to describe the "black hole" of psychological trauma – a vast chasm of dark, empty space in which terror and fear of annihilation exist (Wilson, 2004a, 2005). There are five dimensions of the Abyss Experience which include: (1) the confrontation with evil and death; (2) the experience of soul death with nonbeing; (3) a sense of abandonment by humanity; (4) ultimate loneliness and despair; and (5) cosmic challenge of meaning. For each of these five dimensions there are corresponding posttraumatic phenomena: (i) the trauma experience; (ii) self/identity; (iii) loss of connection; (iv) separation and isolation; and (v) spirituality and numinous sense. In the mythology of culture, these themes and aspects of the Abyss Experiences are always present and yet played out within the unique tapestry of a particular culture.
15. *What does mythology tell us about culture-specific rituals for psychological trauma?* The awareness of the Abyss Experience and the zones of danger through which the mythical hero figure traverses suggest that upon return to society from the zone of danger (i.e., trauma) the individual crosses a threshold of re-entry that often includes being ignored or rejected because of the overwhelming and often horrifying nature of his experience. Mythology suggests

that there may exist a "guide" or nurturant person, who helps a "cast light" as to the meaning of the traumatic experience and clues as to how to recover and integrate the experience without prolonged suffering or maladaptive avoidance behaviors (e.g., excessive drinking, alienation, anomie, emotional detachment, and numbing). It can be seen that culture has to have built-in wisdom as to the pathways to healing and the literature of mythology describes the nature and character of these life pathways.

16. *How do forms of traumatic experiences relate to the universal myth of the hero as protagonist?* The mythical hero traverses a journey and encounters powerful forces (e.g., trauma) which challenge mind, spirit, body, and sense of personhood. The travails of the protagonist are universal images of how psychic trauma creates hurdles in the process of living and finding meaning in life.
17. *What are the mythological images of the life cycle and the transformation of consciousness by trauma?* In mythology, the challenges of trauma can occur anywhere in the life span, from infancy to old age. However, no matter where trauma occurs in epigenetic development, it can influence the configuration of ego identity and transform personal consciousness about oneself, others, the meaning of death and the task of self-transformation. Elsewhere, I have described in detail the process of traumatogenic experiences with an ontogenetic framework of self-metamorphosis (Wilson, 2005). Understanding mythological and epigenetic frameworks of how trauma alters the trajectory of the life cycle has important implications for counseling and psychotherapy.
18. *How does modern psychology standardize the assessment and treatment of trauma across cultural boundaries?* This is a core issue in terms of the "globalization" of knowledge about the relation of trauma to culture. At present, we have no standardized ethic (universal) measurements of trauma and PTSD (Dana, 2005). Similarly, we do not have standardized cross-cultural treatment protocols for persons suffering from posttraumatic syndromes. There exist empirical and clinical voids in the knowledge base as to what "treatments" work best for what kinds of person and under what set of circumstances.
19. *Do pharmacological treatments of posttraumatic syndromes work equally well in all cultures?* This question is intriguing because it posts the controversy as to whether or not the psychobiology of trauma is the same across cultures and therefore treatable by pharmacological agents designed to stabilize the dysregulation in neurobiological functioning caused by extreme stress experiences. However, to date, there are a few comparative randomized clinical trials (RCT) of medications to treat PTSD in culturally diverse populations (Friedman, 2001). Yet, studies have shown that some antidepressant

medications are more efficacious in symptom reduction than others for non-Western populations with severe PTSD (Kinsie, 1988; Lin, Poland, Anderson, & Lesser, 1996).

20. *Is the unconscious manifestation of posttraumatic states the same across cultural boundaries?* This core question is complex and fascinating because it demands a method to assess unconscious processes cross-culturally (Dana, 1999) and to discern if unconscious memory encodes traumatic experiences in similar ways, perhaps in Trauma Complexes that are, in turn, shaped by cultural factors (Wilson, 2005).
21. *What conceptual belief systems underlie cultural approaches to healing and recovery from trauma?* In many respects, this issue deals with the most "pure" consideration of the trauma–culture relationship. How does the culture view "trauma" and employ methods to facilitate healthy forms of posttraumatic adaptation? What set of assumptive beliefs does the culture "bring" to the understanding of trauma? Within a culture, is trauma idiosyncratic or synergistic in nature? Are there differences between individual and cultural trauma? What does damage to the structure of a culture mean in terms of posttraumatic interventions? For example, Erikson (1950) noted that among the Lakota Sioux Indians in the United States, the loss of their nomadic mystical culture oriented around the Buffalo meant a loss of historical continuity and collective identity which was profoundly traumatic once the Lakota were interned on federal reservation lands that deprived them of their cherished patterns of living (Wilson, 2005).

CULTURE AND TREATMENT FOR POSTTRAUMATIC SYNDROMES

The ubiquity of traumatic events throughout the world has raised global awareness of PTSD as an important psychological condition that results from a broad range of traumatic experiences (e.g., war, ethnic cleansings, terrorism, tsunamis, catastrophic earthquakes, etc.). Economic globalization has "flattened the world" (Friedman, 2005) as technologies have changed the face of commerce and international marketplace. In a real sense, globalization has generated trends toward the homogenization of cultures and at the same time heightened awareness of distinct cultural differences. However, when it comes to the issue of cultural differences and posttraumatic syndromes (e.g., PTSD) it cannot automatically be assumed that advances in Western psychotherapeutic techniques can be exported and applied to non-Western cultures (Summerfield, 1999). Further, the literature on cultural competence has brought awareness of

Table 2. Cultural Convergence: Similar Principles?

Principle/Assumption	Native American	African (Zulu)	Indian (Ayurveda)	Chinese (TCM)
1. Harmony in relations (earth, people, society)	Yes	Yes	Yes	Yes
2. Vulnerability within person	Yes	Yes	Yes	Yes
3. Balance of biological and mental forms	Yes	Yes	Yes	Yes
4. Illness is imbalance, loss of harmony	Yes	Yes	Yes	Yes
5. Health is restoration of balance, harmony	Yes	Yes	Yes	Yes
6. Healing empowers vital energy	Yes	Yes	Yes	Yes

Source: Wilson, 2005.

the need for knowledge, sensitivity, and innovation when it comes to mental health treatment in non-Western cultures (White & Marsella, 1989). More recently, Moodley and West (2005) discussed the limitations of verbal therapies and presented a rationale for the integration of traditional healing practices into counseling and psychotherapy. While a discussion of the types of traditional healing practices (e.g., shamanism, medicine healing in aboriginal nations) is beyond the scope of this article, it is worthwhile to point out that there are culture-specific healing practices as well as overlaps in conceptual viewpoints about the assumptions that underlie traditional healing practices across different cultural groups. Let us consider for a moment four very different cultural views of healing: Native American; African (Zulu); Indian (Ayurveda), and traditional Chinese medicine (TCM) (Table 2). What do these Western, African, and Asian cultures assume about traditional healing and the cosmological (cf. one could also say mythological) assumptions they hold about physical and mental health?

Native American

In most North American aboriginal nations, healing is considered from the perspective of relations – balanced relations – between individuals and environment and the world at large (Mails, 1991). When sickness occurs it is generally assumed that there is an imbalance in the nature of "relations to all things" – that a loss of balance and harmony has occurred within the person and illness follows. Healing, then, is the empowerment

of the individual spirit with the great circle of life to restore balance and harmony with nature, others, and the Great Spirit (God). The medicine wheel and traditional shamanic (i.e., medicine) practices are used as a guide to understanding. Through traditional healing practices, rituals and ceremonies, the designated "medicine" person facilitates the restoration of a person's spirit and inner strength in order to restore their vital power to be in good balance, i.e., to have good relations of balance and harmony. More specifically, trauma can cause a loss of centeredness in the person and lead to a loss of "spirit," resulting in various forms of "dispiritedness," which includes depression, PTSD, dissociation, and altered maladaptive states of consciousness and being (Jilek, 1982; Mails, 1991; Poonwassie & Charter, 2005; Wilson, 1989).

South African (Zulu)

The Zulu culture in South Africa employs a view of mental and spiritual life that is intricately interconnected. Bojuwoye (2005) states: "The interconnectedness of phenomenal world and spirituality are two major aspects of traditional African world views. The world view holds that the universe is not a void but filled with different elements that are held together in unity, harmony, and the totality of life forces, which maintain firm balance, or equilibrium, between them. A traditional Zulu cosmology is an individual universe in which plants, animals, humans, ancestors, the earth, sky and universe exist in unifying states of balance between order and disorder, harmony and chaos" (p. 63). In Zulu culture, then, traditional healing practices have respect for this view and attempt to facilitate the restoration of a harmonious state of being in relation to these dimensions of the person's phenomenal world.

Indian (Ayurveda)

Indian healing, in the Ayurvedic tradition, views restorative practices as unifying mind, body, and spirit within the context of social conditions. Kumar, Bhurga, and Singh (2005) state: "According to Ayurvedal principles, perfect health can be achieved only when body, mind and soul are in harmony with each other and with cosmic surroundings. The second dimension in this holistic view of Ayurveda is the social level, where the system describes the ways and means of establishing harmony within and in the society. Mental equilibrium is sought by bringing in harmony three qualities of the mind in sattva, vajas and tamas" (p. 115). Thus, traditional Indian healers use time-honored practices (e.g., touching, laying of hands) to facilitate helping a person restore unity in the psyche. After the 2004 tsunami, such practices were used with success by local healers to aid victims who suffer from the stress-related effects of the disaster in India (Siddarth, in press).

Traditional Chinese Medicine

In traditional Chinese medicine, "mental illnesses are said to result from an imbalance of yin and yang forces, a stagnation of the qi and blood in various organs, or both" (So, 2005, p. 101). He further elaborates that "the driving forces behind this relationship are the entities of qi (virtual energy) and li (order). The oft-cited concepts of yin and yang, oppositional yet complementary in nature, are characteristics along the meridian channels of that compound to the specific organ of the body" (p. 101). Thus, TCM views health and illness as related to a balance of vital forces and that disruptions which effect their critical balance can result in physical or mental illnesses.

CULTURAL CONVERGENCE IN TRADITIONAL HEALING

Table 2 compares the different cultural approaches to healing across five basic dimensions that represent assumptions about the nature of illness and health: (1) harmony in relations (e.g., with earth, others, nature, society; (2) personal vulnerability within the person due to imbalance caused by external forces or inner conflict; (3) the importance of balance in biological and mental processes; (4) illness results from imbalance and loss of harmony; and (5) health is the restoration of balance and harmony in mind, body, and spirit. Thus, healing empowers vital energies contained within the person. By comparing different traditional cultural views and assumptions that underlie we can go further and ask how it is that culture deals with those who are severely traumatized by events of human design or acts of nature.

THE TREATMENT OF TRAUMATIC STRESS SYNDROMES IN CULTURAL CONTEXTS

In an influential and important critique of mental health programs in war-affected areas (e.g., Bosnia, Rwanda, etc.), Summerfield (1999) explicated seven fundamental assumptions that many of these programs embrace as justifications for interventions with programs derived from clinical efforts and research on psychotherapy in Western cultures, primarily the United States and Western Europe. These seven assumptions are as follows: "(1) experience of war and atrocity are so extreme and distinctive that they do not just cause suffering, they 'cause' traumatization; (2) there is basically a universal human response to highly stressful events, captured by Western psychological framework [cf. PTSD]; (3) large numbers of

victims traumatized by war need professional help; (4) Western psychological approaches relevant to violent conflict worldwide victims do better if they emotionally ventilate and 'work through' their experiences; (5) there are vulnerable groups and individuals who react to a specific target for psychological help; (6) wars represent a mental health emergency: rapid intervention can prevent the development of serious mental problems, as well as subsequent violence and wars; and (7) local workers are overwhelmed and may themselves be traumatized" (pp. 1452–1457). This same set of assumptions could safely be generalized to non-war zone countries in which there are catastrophic natural disasters (e.g., tsunami, earthquake) or other conditions of human rights violations by political regimes: "the humanitarian field should go where the concerns of survivor groups direct them, towards their devastated communities and ways of life, and urgent questions about rights and justice" (p. 1461). Moreover he notes that "the medicalization of distress, a significant trend within Western culture and non-globalizing, entails a mined identification between the individual and the social world, and a tendency to transform the social into the biological . . . consultants . . . have portrayed war as a mental health emergency writ large, with claims that there was an epidemic of `posttraumatic stress' to be treated, and also that early intervention could prevent mental disorders, alcoholism, criminal and domestic violence, and new wars in subsequent generations by nipping brutalization in the bud" (p. 1461). This conclusion by Summerfield raises a number of critical questions when it comes to the proper and efficacious treatment of posttraumatic syndromes in simple and complex cultures in the world.

POSTTRAUMATIC INTERVENTIONS: WHAT WORKS BEST FOR WHOM UNDER WHAT CONDITIONS?

To focus the central issues rather sharply, what types of counseling, interventions, treatments, practices, rituals, medicines, ceremonies, and therapies work best for whom and under what set of conditions? This seemingly simple and straightforward question turns out to be extraordinarily complex and multifaceted for several key reasons. First, we do not have sufficient scientific studies across cultures to begin to answer this question. Second, cultural competence has shown the need to explore assessment, diagnosis, and treatment within a sensitive cultural framework that reflects knowledge and understanding of a culture. Indeed, the World Health Organization (WHO) published a global plan for culturally competent practices that included mandates to insure the availability of traditional and alternative medical practices in safe and therapeutically useful ways (World Health Organization, 2002). Third, it cannot be

assumed that well-documented Western psychotherapies for PTSD, for example, are necessarily useful in non-Western cultures, especially therapies that rely heavily on verbal self-reports (e.g., CBT, psychodynamic). Fourth, there are a broad range of individual responses to traumatic events. It cannot be assumed "a priori" that PTSD is an inevitable outcome of exposure to extremely stressful life events. It is entirely possible that the concept of PTSD (cf. Western in conceptualization) is foreign and not readily understood in many cultures that do not utilize psychobiological explanations of illness or human behavior. Fifth, to understand "maladaptive" behavior consequences of trauma (and therefore traumatization) can only be meaningfully defined by cultural norms and expectations about "normal" and "abnormal" behavior. Human grief reactions are universal to death and loss but that does not make them pathological (Raphael, Woodling, & Martinale, 2004). Acute adjustment reactions for a short period of time are entirely expectable after the 2004 tsunami that destroyed towns, cities, even cultures and more than 250,000 people. But that does not make adaptational requirements pathological or PTSD symptoms an illness per se for the survivors. Sixth, it can be justifiably assumed that throughout centuries of human evolution, adaptive mechanisms, that wisdom exists in culture to deal with the human effects of extreme trauma. As noted earlier, the great mythologies of the world chronicle such events and the adaptational dilemmas they present for survivors. Such mythical themes point to the necessity of framing culture-sensitive perspectives on human resilience versus psychopathology (Wilson, 2005). These considerations allow us to now explore ten hypotheses about the relation of trauma to culture to posttraumatic adaptations and how mental health "treatments" can be construed in culturally competent ways.

TEN HYPOTHESES CONCERNING TRAUMA, CULTURE, AND POSTTRAUMATIC MENTAL HEALTH INTERVENTIONS

1. Each person's posttraumatic syndrome, state of psychological distress, or adaptational pattern is a variation on *culturally sanctioned* modalities of behavioral–emotional expression.
2. Healing and recovery from psychic trauma is *person specific*. There are multiple pathways and forms of treatment within a culture.
3. Each culture develops specific forms and mechanisms for posttraumatic recovery, stabilization, and healing (e.g., rituals, counseling practices, treatment protocols, medications, etc.). At any given time, cultures may not have available certain types of treatments that would be beneficial to people. These will either evolve in time or be adapted from other cultures.

4. Based on Trauma Archetypes, cultures contain the wisdom to develop mechanisms to facilitate the processing and integration of psychic trauma. Empathy, as a universal psychobiological capacity, underlies the development and evolution of culture-specific forms of healing (Wilson & Drozdek, 2004; Wilson & Thomas, 2004).
5. The concept of "mindfulness" in states of consciousness (traditionally associated with Buddhism) is a key mental process to self-transcendence and the integration of extreme psychic trauma into higher states of consciousness and personal knowledge. Mindfulness, in this regard, is personal awareness of the impact of trauma to living in one's culture of origin and how trauma has impacted the quality of life.
6. There is no individual experience of psychological trauma without a cultural history, grounding or background. Similarly, there is no individual sense of personal identity without a cultural reference point. Anomie and alienation are commonly produced by severely traumatizing experiences and are associated with forms of anxiety, distress, and depression (Wilson & Drozdek, 2004).
7. The rapid growth of globalization in the twenty-first century is creating new evolutions in a "world-universal" culture and the possibility of fusing cross-cultural modalities of treatment and recovery.
8. Posttraumatic therapies and traditional healing practices, in *culturally specific forms*, can facilitate resilience, personal growth, and self-transcendence in the wake of trauma (Wilson, 2005).
9. The pathways to healing are idiosyncratic and universal in nature. The pathways of healing vary in nature, purpose, duration, social complexity, and utilization by a culture.
10. Healing rituals are an integral part of highly cohesive cultures. Healing rituals evolve in situations of crisis, emergency, and threat to the social structure of society and culture. Healing rituals demand special roles and skills (e.g., shaman, crisis counselor, psychologist, medicine person, priest, etc.) to facilitate efforts for recovery and the psychic metabolism of trauma.

The ten hypotheses concerning the relationship of culture and trauma provide a framework for understanding the diversity of posttraumatic psychological outcomes. As Summerfield (1999) noted, it is prejudicial and scientifically unwarranted to assume that traumatic events at the individual or cultural (collective) level will always produce PTSD and the clinical need to intervene with programs and procedures developed primarily in Western cultures. For example, cognitive behavioral therapy (CBT) is the most validated psychotherapy for PTSD in the USA (Foa, Keane, & Friedman, 2000). But is CBT applicable to assisting victims of the 2004 tsunami who live in a non-English speaking culture in Aches,

Indonesia? Or, the survivors of the 2003 catastrophic earthquake in Bam, Iran, which killed over 30,000 people? Or, the mothers of genocidal warfare in the Sudan in 2005 whose children were murdered or starved to death? Or, Native American Vietnam war veterans living in traditional ways on the Navajo reservation in Arizona? These questions bring into focus critical assumptions that each person's posttraumatic adaptational pattern is a variation on culturally sanctioned modalities of coping with extreme stress experiences that impacts the psychobiology of the organism. Clearly, posttraumatic adaptations fall along a continuum from pathological to resilient (Wilson, 2005). At the pathological end of the continuum we find PTSD, dissociative reactions, brief psychosis, depressive disorder, and disabling anxiety states. In contrast, the resilient end of the continuum includes optimal forms of healthy adaptation, manifestations of behavioral resiliency in the face of adversity, and the resumption of normal psychosocial functioning (Wilson, 2005).

By examining the continuum of culturally sanctioned modalities of posttraumatic adaptation, the second and third hypotheses can be understood more precisely. Healing and recovery is *person specific* and there are *multiple pathways* to posttraumatic recovery, if they are needed. Considered from an evolutionary and adaptational perspective, cultures develop rituals, helper roles (e.g., shamans, mental health specialists, herbalists, medicine persons, physicians), ceremonies, and other modalities to facilitate recovery from distressing psychological conditions, including those produced by trauma (Moodley & West, 2005). Where such modalities of treatment do not exist or are inadequate, they will be developed and implemented as it is critical to culture to have functional and healthy members to carry out the critical day-to-day activities necessary to sustain commerce, family life, and the functions that define the identity and essence of the culture itself. For example, a culture that is sick, self-destructive, and dissolving due to warfare, political conflicts and revolution, and massive natural disaster or illness, will not thrive or maintain itself in a viable way.

The viability of culture in the face of collective trauma illustrates the sixth assumptive principle that there can be no experience of psychological trauma without a cultural history, grounding, or continuity of background. There is no individual sense of personal identity without a cultural reference point (Wilson, 2005). Personal identity within a cultural context includes a sense of continuity and discontinuity in life-course development which shapes personality and the coherency of the self-structure. Thus, there is no sense of personal identity without a cultural reference marker to counterpoint and define those events which seem to shape the formation of identity for the person. As an extension of this viewpoint, it can readily be seen that anomie and alienation (e.g., feeling

detached, separate, cut off, divorced, estranged, distanced, removed) from mainstream cultural processes is a potential consequence of severely traumatizing experiences and typically associated with anxiety, distress, and depression since the traumatic experience can "push" the person "outside" the customary boundaries of daily living. The potential of trauma to dysregulate emotions and set up complex patterns of prolonged stress cannot be dismissed as statistically infrequent (Kessler, et al., 1995). As Wilson and Drozdek (2004) have noted, this is particularly true when: (1) the trauma is massive and damages the entire culture; (2) the nature of trauma causes the person to challenge the existing moral and political adequacy of prevailing cultural norms and values; and (3) the trauma causes the individual to become marginalized within the culture and to be viewed as problematic, stigmatized, "damaged goods," or tainted by their experiences or posttraumatic consequences (e.g., physically disabled, disease infected, atomic radiation exposure; mentally ill, etc.).

The nature of how cultures deal with the social, political, and psychological consequences of trauma raises the issue of the availability of therapeutic modalities of healing and recovery. Stated simply, what does the culture provide to assist persons recover from different types of trauma? Examining this question is instructive since one can analyze the nature of formal, organized, and institutionalized mechanisms for recovery from trauma as well as informal, noninstitutionalized, or officially sanctioned modalities of care and service provisions. While a detailed analysis of these issues is beyond the scope of this article, it is nonetheless important when using a "crows nest" or "helicopter aerial" view of how cultures deal with those who suffer significant posttraumatic consequences of trauma, which include being displaced, homeless, unemployed, physically injured, and emotionally traumatized. Clearly, there are levels of posttraumatic impact to the social structures of culture and to the inner-psychological world of the trauma survivor. There are primary, secondary, and tertiary sets of stressors associated with trauma. In the "big view" of traumatic consequences, they intersect to varying degrees in affecting the patterns of recovery, stabilization, and resumption of normal living (Wilson, 1994).

A further understanding of the relation of culture and trauma can be analyzed from knowledge of the Trauma Archetype (Wilson, 2004a, 2005). The Trauma Archetype represents universal forms of traumatic experiences across time, space, culture, and history.

Table 3 presents a summary of the dimensions of the Trauma Archetype which has 11 separate but interrelated dimensions. The Trauma Archetype is a primordial type of human experience in which a psychological experience is encoded into personality dynamics. The Trauma Archetype gives birth to Trauma Complexes which, in turn, represent

Table 3. Trauma Archetype (Universal Forms of Traumatic Experience)

Dimensions
1. The Trauma Archetype is a prototypical stress response pattern present in all human cultures, universal in its effects and is manifest in overt behavioral patterns and internal intrapsychic processes, especially the Trauma Complex
2. The Trauma Archetype evokes altered psychological states, which include changes in consciousness, memory, orientation to time, space, and person, and appear in the Trauma Complex
3. The Trauma Archetype evokes allostatic changes in the organism (posttraumatic impacts, e.g., personality change, PTSD, allostatic dysregulation) which are expressed in common neurobiological pathways)
4. The Trauma Archetype contains the experience of threat to psychological and physical well-being, typically manifest in the Abyss and Inversion Experiences
5. The Trauma Archetype involves confrontation with the fear of death
6. The Trauma Archetype evokes the specter of self-de-integration, dissolution, and soul (psychic) death (i.e., loss of identity), and is expressed in the Trauma Complex
7. The Trauma Archetype is a manifestation of overwhelmingly stressful experience to the organization of self, identity, and belief systems, and appears as part of the structure of the Trauma Complex
8. The Trauma Archetype stimulates cognitive attributions of meaning and causality for injury, suffering, loss, death (i.e., altered core beliefs), which appear in the Trauma Complex
9. The Trauma Archetype energizes posttraumatic tasks of defense, recovery, healing, and growth, which include the development of PTSD as a Trauma Complex
10. The Trauma Archetype activates polarities of meaning attribution; the formulation of pro-social – humanitarian morality versus abject despair and meaninglessness paradigm
11. The Trauma Archetype may evoke spiritual transformation: individual journey/encounter with darkness: return/transformation/re-emergence, healing (Campbell, 1949). The evocation of a "spiritual" transformation is manifest in the Trauma Complex as part of the Transcendent Experience and the drive toward unification

Source: © Wilson, 2004.

how traumatic experiences are encapsulated in individualized ways in the psyche. Moreover, Trauma Complexes: (1) develop in accordance with the Trauma Archetype; (2) are comprised of affects, images, and perception of the trauma experience; (3) are mythological in form, symbolic in nature, and shaped by culture; (4) contain the specter of the extreme threat of annihilation; (5) articulate with other psychological complexes; (6) may become central in the self-structure; (7) contain motivational power; (8) are expressed in personality dynamics; (9) are primarily unconscious phenomena; and (10) contain forms of prolonged stress reactions, such as PTSD, dissociative, and anxiety disorders (Table 4).

The conceptualization of Trauma Archetypes and Trauma Complexes has much utility when looking at trauma and culture, since these concepts

Table 4. The Trauma Complex

1. The Trauma Complex is a feeling-toned complex which develops in accordance with the Trauma Archetype
2. The Trauma Complex comprises affects, images, perceptions, and cognitions associated with the trauma experience
3. The Trauma Complex is mythological in nature and takes form in accordance with culture and symbolic, mythological representations of reality
4. The Trauma Complex contains the affective responses of the Abyss Experience: fear, terror, horror, helplessness, dissociation
5. The Trauma Complex articulates with other psychological complexes and innate archetypes in a "cogwheeling," interactive manner. This includes the Abyss, Inversion, and Transcendent forms of traumatic encounters
6. The Trauma Complex may become central in the self-structure and reflect alterations in identity, ego processes, the self-structure and systems of personal meaning
7. The Trauma Complex contains motivational power and predisposition to behavior
8. The Trauma Complex is expressed in personality processes (e.g., traits, motives, altered personality characteristics, memory and cognition, etc.)
9. The Trauma Complex is primarily unconscious but discernible by posttraumatic alterations in the self and personality
10. The Trauma Complex contains the polarities of the Abyss Experience: diabolic versus transcendent which are universal variants in the search for meaning in the trauma experience

Source: © Wilson, 2004a, 2004b.

are universal in nature and not "wedded" to the concept of PTSD per se or Western perspectives of psychiatric illness. While a more extensive analysis of Trauma Archetypes and Complexes is not possible here due to page limitations, their relevance to the other assumptions about healing, recovery, and culture-specific forms of counseling, psychotherapy, or treatment is transparent and critical (Wilson, 2005).

First, it is necessary to understand, in culture-specific ways, the phenomenal reality of person. Wilson & Thomas (2004) have presented evidence that sustained empathy, as part of any treatment modality, is essential to facilitate posttraumatic recovery. Among other consequences of sustained empathic attunement, it helps the individual develop states of "mindfulness" as self-awareness of how a traumatic experience has impacted all levels of functioning, especially affect dysregulation (Schore, 2003). Mindfulness as a process of meditation is facilitative of higher states of consciousness and personal awareness of how a traumatic event may have impacted pre-existing beliefs about self, others, and nature. We can consider posttraumatic interventions, treatment, traditional healing practices, etc., as *culture-specific* forms designed to facilitate recovery, resilience, and the resumption of healthy living. The pathways to healing

are idiosyncratic and universal in nature and may vary greatly in their contexts, purpose, length, social desirability, and utilization within the culture. In highly cohesive cultures, there will be the use and prescription of rituals, practices, traditional methods of healing, etc. as they reflect archetypal forms of healing. Where such rituals and treatments do not exist, they will be developed by the culture in response to crises and threats to social structures vital to cultural continuity; hence the need for multiple modalities of treatment and specialists (e.g., counselor, shaman, medicine person, priest, doctor, etc.), who, "through the lens of culture," can assist in recognition of how a person has been changed, if at all, by psychological trauma.

So what does globalization portend for trauma treatment in the twenty-first century as the world "flattens" due to technological advances and commercial homogenization? In brief, the ready availability of scientific data on international databases for PTSDs (e.g., P.I.L.O.T.S. @ncptsd.org) enables clinicians, researchers, and patients to have instant access to information about PTSD, complex PTSD, treatment advances, pharmacotherapies, and much more. Second, the spread of knowledge has spurned unprecedented levels of international cooperation and the formation of international professional societies (e.g., ISTSS, International Society for Traumatic Stress Studies in 1985; Asian Society for Traumatic Stress in 2005) to share scientific data and clinical wisdom and to lobby for political and legislative changes on behalf of trauma victims. Third, globalization, to a certain extent, allows for homogenization, fusion, and experimentation with different modalities of counseling, psychotherapy, traditional healing practices, and modern medicine (e.g., traditional Chinese medicine). In a related way, globalization, driven by economic and political forces, is creating the emergence of "global culture" which enables the prospect of fusing cross-cultural modalities of treatment and subjecting them to scientific measures of efficacy. As this occurs, the answer to the question, "What works for whom and under what conditions?" will take on new meaning in terms of how we conceptualize the prolonged effects of extreme stress experience to the human psyche and as a holistically integrated organism. Beyond doubt, nineteenth- and twentieth-century conceptualizations of counseling and psychotherapy are cultural bound in nature and origin. The twenty-first century will witness the development and emergence of global conceptualizations of what constitutes trauma and how it gets healed. There will be developed a matrix of databases which cross-list cultures and the diversity of techniques employed to cope with states of traumatization. Moreover, as this convergence begins to occur, the scientific "gold standards" of what works for whom under what circumstances will take on meaning that transcends culture but not persons whose human suffering impels humanitarian care.

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Chapter 2

Cultural–Ecological Perspectives on the Understanding and Assessment of Trauma

Lisa Tsoi Hoshmand

This chapter is premised on the assumption that the definition of trauma entails the cultural and ecological systems that mediate human experience and provide resources for coping and meaning making. Furthermore, the detection of traumatic stress disorder implies that the stressful event has overtaxed personal and, in some cases, community capacities. It follows that in considering cultural and ecological factors in the understanding of trauma and trauma recovery, both community resources for resilience and personal resources for coping that are appropriated from culture should be assessed. This emphasis on the cultural and the ecological is in response to the limitations of individually focused western conceptions of trauma and concerns about medicalized approaches to trauma intervention that insufficiently account for contextual factors in trauma recovery (Argenti-Pullen, 2000; Burstow, 2003; Summerfield, 2004).

Cross-cultural trauma work provides the opportunity and challenge of deriving frameworks of understanding and practice that can have both local and global relevance. Although there has been some recognition of sociocultural and systemic factors in trauma, such as experienced by ethnic-minority or low-income populations, the related inquiry has largely focused on domestic concerns. The realities of global trauma work, however, require models of trauma assessment that reflect cultural and ecological diversity, as well as models of intervention that take into account global disparities and complex local histories (Marsella & Christopher, 2004; Wessells, 1999). Professionals in the trauma field have to confront the fact that pretrauma levels of normalcy cannot be presumed for groups that have experienced historical trauma, oppression, and culture loss

(Stam, Stam, Hudnall, & Higson-Smith, 2004; Whitbeck, Adams, Hoyt, & Chen, 2004), or be easily restored for people who live in a fragile state (Bracken & Petty, 1998; Green et al., 2003; Maynard, 1999). For many parts of the world, the relationship between the breakdown of civil society and trauma has to be examined. There is a growing consensus on the need to broaden the discourse on trauma and to develop trauma theory and practice that reflect cultural, ecological considerations in order to complement the prevailing individual, clinical focus.

Part of what has been missing from scientific discourse on trauma is the discussion of values, which is critical in a time of globalizing changes and concomitant cultural tensions and geopolitical conflicts. The nature of practice is such that the normative and the scientific are intertwined. This is beginning to be recognized by recent guidelines from the International Society for Traumatic Studies on international training in mental health and psychosocial interventions for trauma-exposed populations (Weine et al., 2002). The guidelines address humanitarian and cultural values in addition to the scientific values that inform professional work, acknowledging contextual challenges and the importance of an integrative approach across disciplines and different sectors. This author takes the view that multidisciplinary ideas such as found in the human security literature, and collaboration such as between clinical areas of psychology and community psychology or public health, can be helpful.

In this chapter conceptual and assessment issues in a cultural view of trauma are first acknowledged. Contributions from ecological perspectives are described next. An integrative human security framework is used to enable a more comprehensive conception and broadened discourse of trauma. Examples of assessment approaches consistent with cultural–-ecological perspectives, including ones that require further development, are presented under this framework. The chapter concludes with a discussion of the implications for future theory, research, and practice.

CULTURE AND TRAUMA: CONCEPTUAL AND PRACTICE ISSUES

The discourse on trauma reflects conceptual issues stemming from the inseparability of normative and scientific considerations. Certain types of events signal the use of the language of trauma on moral grounds alone, whereas other types of human experience may not be so labeled until there is an outcry for professional and societal attention. As the history of the trauma field has shown, the definition of and attitude toward trauma can affect the detection of trauma and the determination of base rates. As clinicians concern themselves with the impact of traumatic events on the well-being of individuals, social and community scientists weigh in on

the systemic nature of traumatogenic forces and the survivability of community and societal systems. Defining trauma by its impact and biopsychosocial sequelae, however, has not resolved theoretical questions about culture-specific versus universal adaptations to extreme stress.

Cultural dimensions not only add to the complexity of conceptualizing trauma, but also inevitably pose normative and value issues in the theoretical discourse of trauma. What could be regarded as an adaptive as opposed to a failed or incomplete reintegration after severe disruption of functioning has to be evaluated over time (Freedman & Shalev, 2000) and against appropriate cultural horizons (Chun, Moos, & Cronkite, 2006; Manson, 1997). Clinical judgments of adaptive versus ineffective responses to trauma must be informed by the knowledge of ethnocultural factors, including cultural idioms of distress, cultural schemas for meaning making as well as cultural resources and strategies for coping (Marsella, Friedman, Gerrity, & Scurfield, 1996; Rechtman, 2000; Stamm & Friedman, 2000; Wilson, 2006; Yeh, Arora, & Wu, 2006). Value judgments are involved in determining desired outcomes in trauma intervention, and in setting priorities for needs assessment in planning trauma services. In extreme conditions of prolonged trauma exposure, what constitutes an adaptive response may vary from the adaptive response to unexpected loss and adversity under otherwise normal circumstances (Wilson & Drozdek, 2004). There is much that is not known about cultural sources of human resiliency under prolonged adverse conditions. Wong, Wong, and Scott (2006) proposed that a positive psychology of transformation is needed when it comes to human survival and suffering, again attesting to the value-imbued nature of this subject.

The challenges of international trauma work in culturally diverse settings include not only normative but also political and resource issues that are seldom addressed in trauma training. Wessells (1999) commented on the power dynamics present when western professionals are involved in disaster work in less developed countries. Summerfield (1999) critiqued the assumptions brought to international trauma services in areas affected by war. Whether resources are available for proper trauma screening and assessment can be a basic problem, as is the resource need for trauma intervention. To the extent that the evaluation of responses to trauma intervention is one important form of assessment, the interlinked resource issues represent a realistic problem that can be compounded by political issues. These kinds of issues reflect ecological factors that require a different level of analysis than individual psychological factors.

Part of the difficulty with understanding trauma in varied cultural contexts is that our knowledge base is still evolving. How humans react to extreme stress is an area of ongoing research with some conclusive but incomplete information. While empirical evidence of physiological responses to stress seems to suggest a more or less universal psychobiology of

hyperarousal in response to trauma, the psychosocial and cultural mediation of stress is more complex and less predictable. The diathesis-stress model suggests that vulnerability to stress is a function of the maturity of the self-structure, the type of stressor, and how much exposure to stress is involved. Building on this model, Kira (2001) provides an improved taxonomy of stress response in trauma that includes values processing. According to Kira, five factors in human functioning that have been replicated cross-culturally are attachment, individuation, interdependence, performance, flexibility, and survival. A trauma assessment matrix that includes these factors as part of the value structure of the self that can mediate and at the same time be shaped by traumatic experience is presented. The interaction between this set of universal factors and the nature of the traumatic stressor, as moderated by sociocultural resources, further determines the degree of personal vulnerability in each case. A similar model should be developed at the community or group level in understanding collective vulnerability. Furthermore, threats that increase vulnerability at the two respective levels need to be assessed.

Although Kira's (2001) model offers a framework of assessment that includes both universal and culture-specific factors, the latter have not been operationalized. Eisenhruch (1991) suggests that the concept of cultural bereavement be included in the nosology for psychological trauma. Wilson (2006) proposes culturally based trauma archetypes as another conceptual tool in the cultural assessment of trauma. Cultural pathways in the processing of traumatic events could be operationalized for research and clinical purposes. The cross-cultural understanding and assessment of trauma requires further research and development, building on improved taxonomies. In this connection, Chun et al. (2006) argued against dichotomous typologies of coping such as active–passive or approach–avoidant when applied across cultures. They cited research that shows the effectiveness of cultural strategies in nonwestern settings that may be perceived as avoidant or passive in a western context. Survey instruments and interview protocols have to be developed to empirically validate heuristic classifications across cultures. It is likely that both universal and culture-specific or community-specific approaches are needed (Cooper & Denner, 1998) as complementary approaches in the cross-cultural assessment of trauma.

As stated at the outset, we cannot assess trauma impact and trauma response without examining cultural sources of resilience at both the personal and the community level. Bonnano (2004) challenged the assumptions associated with a deficit view of trauma, showing evidence of human resilience as a common response. With the notable exception of the multicultural work on stress and coping presented in Wong and Wong (2006), cultural sources of resilience and culture-specific forms of coping in the face of trauma have not been widely documented or understood.

Research on resilience has tended to focus on the personal level, with less emphasis on the community and group level. This is where an ecological approach can be helpful.

CONTRIBUTIONS FROM ECOLOGICAL PERSPECTIVES

Ecological perspectives in psychology were proposed by early theorists such as A. F. Brunswick and James Gibson. Barker (1968, 1978) promoted the concepts of psychological ecology and behavioral setting, which have been used by researchers and practitioners in behavioral psychology and environmental studies. Bronfenbrenner (1986) focused on the ecology of the family as a developmental context. Moos (1991) advanced environmental psychology with a socioecological model of human adaptation. He theorized that every life area comes with particular environmental stresses and resources for coping. In differentiating between the environmental system and the personal system in crisis and coping, he conceived of the two as having a bidirectional influence on each other. His research has encompassed school, work, and family settings and their interconnection, paving the way for ecological studies of human adaptation in context.

Ecological perspectives become especially relevant when cultural factors are considered. The cultural–historical has been addressed in Vygotsky's (1978) view of activity settings as the ecological context of learning and cognitive development, and applied by many educational researchers. Sasao and Sue (1993) defined cultural complexity by the extent to which an ethnic-cultural group is defined in an ecological, community context at both the individual and the collective level. Trickett (1996) argued that the ecological perspective is the conceptual vehicle for incorporating culture and context. Furthermore, ecological perspectives imply a contextualist philosophy of science, methodological pluralism, and paradigms of human diversity that include contextualist approaches to acculturation. An ecological framework is necessary for understanding culture and context in linking individual and collective levels of assessment and analysis.

Ecological perspectives have contributed to the trauma field in a number of ways. Wong (1993) and Hobfoll (1998) highlight the importance of cultural resources, theorizing that congruence between the demands and coping resources determines the outcome of stressful events. Wilson (2006) points to the importance of understanding cultural cosmologies in the treatment of posttraumatic syndromes globally. Cultural cosmologies and cultural systems are major aspects of human ecology that must be considered. Ecological perspectives also have brought attention to the systemic causes and collective transmission of trauma. The role of family system, community,

and structural and cultural factors in the larger society is emphasized, such as in Harvey's (1996) ecological model of trauma and trauma recovery, and Heise's (1998) integrated ecological framework of gender-based violence. Grauerholz (2000) discussed ecological approaches for linking personal, interpersonal, and sociocultural factors in child sexual abuse, and Zielinski and Bradshaw (2006) expounded on ecological influences in child maltreatment. These contributions call for the assessment of family, other social institutions, and community and cultural settings as ecological systems that are implicated in trauma and its developmental sequelae.

The transmission of trauma, intergenerationally and within groups, has been conceptualized in ecological terms. The collective transmission of trauma involves the historical and social–structural that should be included in the assessment of cumulative ecological risks that can perpetuate trauma. Prelow, Danoff-Burg, Swenson, and Pulgiano (2004) created an ecological risk composite score from the Multicultural Events Schedule for Adolescents and the Ambient Hazards Scale, and used it in assessing ecological stress and neighborhood disadvantage in African-American youth and Euro-American youth. They found cumulative ecological risk to be associated with poor psychological adjustment in youth, with perceived discrimination playing a significant role in the poor adjustment of African-American youth. In the assessment of groups for which cultural trauma is related to collective identity (Alexander, Eyerman, Giesen, Smelser, & Sztompka, 2004; Whitbeck, Chen, Hoyt, & Adams, 2004), the complex interaction between historical oppression, culture loss, and cultural adaptation is difficult to capture. One should take into account both the risk factors and cultural sources of resilience.

An ecological framework can be useful in the prevention of and response to trauma. Ecological perspectives have helped to extend current approaches to resilience and coping by considering ecological assets in the developmental trajectories of youth (Taylor et al., 2002; Theokas & Lerner, 2006). In preventing and responding to trauma, ecological assets should be assessed in relation to community capacity building. Concepts of community resilience such as psychological sense of community, neighborhood resilience, and community competence (Breton, 2001; Chavis, Hogge, McMillan, & Wandersman, 1986), or political and ecological resilience (Peterson, 2000), also are consistent with ecological approaches to trauma prevention and response. These ecological dimensions are especially important when considering low-income communities and ethnic minority populations.

Green (1996) pointed to the need to focus on ethnocultural and cross-national issues in disaster research. Marsella and Christopher (2004) concluded from their review of two decades of international, cultural, and ethnic minority studies of mental health response to disasters that disasters

pose special burdens in mental health for ethnic minority and developing country populations. How communities such as those affected by hurricane Katrina and the tsunami of 2004 fare could be assessed with ecological measures. Many research questions remain as to how different communities and cultural groups perceive risk, how risks translate into vulnerability, and how community resilience in response to disasters is manifested (Buckle, Marsh, & Smale, 2003). This is an area in which community psychology can make a significant contribution.

Although there has been progress toward the measurement of community concepts of resilience (Eng & Parker, 1994), the research however has not always focused on trauma per se. Meanwhile, the construct of resilience has been critiqued in terms of its operational clarity, the instability of the phenomenon of resilient adaptation to adversity, and heterogeneity in risks experienced and competence achieved by individuals viewed as resilient (Luthar, Cicchetti, & Becker, 2000). Further research is needed on protective as opposed to vulnerability factors, at both individual and group levels, and to explicate the multidimensionality and cultural variability of resilient adaptation. As stated previously, cultural resources for resilience should be considered an important part of the ecological assets in coping with stress and traumatic events. Generic assessment methods and cultural inventories can be designed to ascertain the cultural resources available in particular cultural and ecological settings. Again, the application of these ecological concepts to the trauma field is pending further development of instruments and assessment protocols that associate ecological assets and community resilience with trauma response.

The assessment applications of ecological perspectives may have been hampered by the individual focus in western psychology. Outside of environmental and community psychology, there have been few systematically validated ecological assessment instruments. In the area of public health Lochner, Kawachi, and Kennedy (1999) attempted to integrate the ecological concepts of collective efficacy, psychological sense of community, neighborhood cohesion, and community competence under the construct of social capital that can be measured with these various indicators. Using regression analysis, they were able to gauge the contribution of each indicator, illustrating a viable methodology for assessing the differential role of multiple ecological factors. These researchers concluded that much remains to be done in the development of ecological assessment methods. It is fair to state, with respect to the trauma field in particular, that the development of ecological assessment approaches has not kept up with ecological theorizing. Meanwhile, the ecological complexities of cross-cultural trauma work require a more comprehensive framework of understanding for guiding assessment and intervention.

LINKING THE CULTURAL WITH THE ECOLOGICAL IN HUMAN SECURITY

In the cultural–ecological view it is not sufficient to approach trauma assessment only clinically at the individual level, or possible to exclude normative judgment and social values. Given the difficulty of gauging pretrauma and posttrauma levels of normalcy under current global disparities, a framework is needed that takes into account what is valued in the human condition, what can be considered an acceptable level of normalcy, and what constitute threats locally and globally that may result in human trauma and suffering.

Bajpai (2000) presented a comprehensive framework for international humanitarian assistance from the perspective of human security. He provided a history of the evolution of the human security framework by the United Nations Development Program (UNDP) and the Canadian Consortium of Human Security (cchs.hq@ubc.ca) from a narrow focus on the political security of states to encompassing a broad spectrum of ecological and human factors in defining global human security. This framework identifies the following human security values: (a) economic security, (b) food security, (c) health security, (d) environmental security, (e) personal security, (f) community security, and (g) political security. These human security values refer to factors that often interact in producing major effects on the human condition. They also represent areas that can be threatened by local and/or global forces.

Local sources of threat to these areas of human security include poverty, precarious employment, health risks, lack of health facilities, natural disasters, crime, violence and abuse, cultural collapse, human rights violation and discrimination, repression, civil conflicts, and genocide. These threats are familiar contributors to trauma that have implications for development, institutional change, civil society, and policies on compensation for damages in case of injuries. Very importantly, the human security framework also acknowledges global or transnational threats that include population pressures, disparities in global income that result in environmental degradation, drug trafficking, international terrorism, and militarization and war. Bajpai (2000) pointed out that such an enormous array of threats that could result in trauma demands cooperation among different actors, related national and international policies, and the international endorsement of the concept of human security itself. For the trauma field, simultaneous work on these fronts through collaboration with other instrumentalities is crucial for the prevention and containment of traumatogenic forces.

The human security framework offers a comprehensive framework for clarifying the values fundamental to human well-being and civil society, as well as what constitute ecological threats that involve cultural collapse

and the violation of human rights. As these threats impact on personal safety and well-being as well as community assets, addressing them is central to efforts toward maintaining human security and reducing trauma. An ecological assessment of traumatogenic factors should include an inventory of both local and global threats to human security.

A human security framework enables a broadened discourse on trauma and its relationship with civil society as an ecological guarantor of optimal human conditions. Stamm, Stamm, Hudnall, and Higson-Smith (2004) proposed that revitalization and reorganization following cultural trauma and dissolution necessarily involve economic, sociopolitical, and spiritual systems and resources. The assessment of threats to the cultural and structural integrity of a society should be accompanied by the assessment of ecological assets for sustaining human security. This entails a focus that goes beyond physical infrastructure to human infrastructure. Peterson (2000), for example, proposes to integrate human and environmental dynamics in understanding ecological resilience. Adger (2000) also views social and ecological resilience as linked. A multidisciplinary approach is needed in understanding and assessing ecological resilience in relation to trauma caused by threats to human security.

ASSESSMENT APPROACHES CONSISTENT WITH A CULTURAL–ECOLOGICAL PERSPECTIVE

The cultural–ecological perspective implies methodological pluralism and the use of multi-method approaches for research and assessment. Psychometric approaches are to be complemented by clinical interviews, field-based community interviews, and other ethnographic and action research methods used in the ecological setting. These approaches can be further supplemented by large-scale epidemiological and quantitative studies.

The use of psychometric approaches in a cross-cultural context poses a number of problems including linguistic equivalence, response bias, and cultural validity issues (Keane, Kaloupek, & Weathers, 1996). These problems also apply to the clinical assessment of trauma (Wilson & Keane, 2004). Self-report instruments used in the trauma field tend to be concerned with traumatic experience and symptoms (e.g., Briere & Spinnazzola, 2005; Courtois, 2004). There are few psychometric measures of trauma and PTSD that are culturally validated. Stamm (1996) provided a most thorough summary and evaluation of instruments for assessing stress, trauma, and adaptation. Using the electronic PILOTS database on published international literature in traumatic stress, and distinguishing between clinical measures and research measures, he found only 13 measures available in languages other than English. Antonopoulou (2006) studied PTSD in victims of sex-related trafficking from Greece,

Maldavia, and Georgia, using the Trauma Syndrome Inventory (TSI) and the Brief Betrayal Trauma Survey (BBTS) in addition to the Battered Women Syndrome Questionnaire (BWSQ). She found significant differences in comparison with the general population of women in Greece, providing some cross-cultural data on these instruments. Though there has been some progress toward developing culturally valid measures, few of the currently existing trauma measures have been validated with cross-cultural populations.

The literature on resilience and coping reports various psychological instruments for individual measurement. Examples are the Adolescent Resilient Scale (Oshio, Kaneko, Nagamine, & Nakaya, 2003) and the Connor and Davidson Resilience Scale (Connor & Davidson, 2003). Cross-cultural data have not been reported on the majority of self-report measures of resilience. Furthermore, the measurement of resilience with a single self-report instrument is in many ways not consistent with ecological conceptions of resilience (Fergus & Zimmerman, 2005). Maddi and Harvey (2006) reviewed the research on hardiness across cultures and found only a few studies that show significant correlation of hardiness with cultural variables. The insufficient development of hardiness measures has left the relationship between culture and hardiness inconclusive.

Heppner et al. (2006) reported the development and validation of a Collectivist Coping Styles Inventory. This instrument was developed with an acceptable level of reliability on a sample of over 3,000 Taiwanese college students. Based on Asian values and western conceptual models for adaptation and problem resolution, it aims to represent an Asian perspective on coping in the event of trauma. Factor analyses suggested five areas, including family support, religion-spirituality, and private emotional outlets as well as meaning-oriented approaches and avoidance-detachment as control efforts. Although more research is needed in other Asian societies and with groups that have collectivist traditions, there is some evidence of concurrent validity of the inventory in terms of problem solving and resolution, psychological distress, and the impact of trauma on the lives of the participants.

Yeh et al. (2006) questioned the western bias against Asian cultural modes of affective control and fatalism in treating them as dysfunctional coping. They developed a Collectivistic Coping Scale, also based on East Asian collectivist values. Their research identified seven factors, including forbearance, fatalism, respect for authority, and intracultural coping, which are more characteristic of nonwestern cultures. Similar to the Heppner et al. (2006) research, family support was found to be a key coping strategy. As Wong (1993) pointed out, however, cultural assessment should distinguish between collectivist coping strategies that are associated with collectivist values, and collective coping strategies that draw on

the group as a communal resource. The former reflects the use of cultural resources; the latter, ecological resources.

Given the need for continuing cultural research on trauma, coping and resilience, it would be helpful to have a clearinghouse of cross-cultural data on the various related measures, in conjunction with which other ecological assessment approaches can be examined. As stated previously, the advance of assessment approaches depends on improved taxonomies and conceptual development. Schwarzer and Knoll (2003) reviewed the dimensions and distinctions in the conceptualization of coping, proposing mastery of demands and search for meaning as key concepts. They documented the use of qualitative assessment in studying the role of meaning, and emphasized the importance of assessing coping as a longitudinal process. After critically evaluating current measures of coping from a cultural perspective, Wong, Reker, and Peacock (2006) proposed a comprehensive approach based on the resource–congruence model. It includes the assessment of coping orientations and prototypes, further empirically refined and represented by the Coping Schemas Inventory. These cultural–ecological instruments can be used to shed light on the adequacy of ecological resources and culture-specific forms of coping in the face of trauma. Future research should further correlate the responses from such self-report instruments with interview data on community resources for coping and resilience.

In reviewing the psychometric assessment of trauma, Briere and Spinazzola (2005) recommended the combined use of preferably two psychometric measures or one instrument with clinical interviews. It would appear that if more than one measure is used, at least one should have a cultural–ecological focus. Examples of psychometric instruments that reflect an ecological emphasis are the measures of community cohesion (Buckner, 1988) and collective efficacy (Sampson, Raudenbush, & Earls, 1997) used in the assessment of ecological assets. Rasmussen et al. (2003) reviewed scales for environmental assessment in home, school, and work settings, citing some support for reliability and internal consistency. Validation of ecological measures of positive psychological assets in relation to coping with trauma, or convergently with other measures of ecological assets in responding to trauma, will be helpful.

Although structured clinical interviews can provide more nuanced phenomenological and behavioral information that is not obtained by psychometric instruments, there are also issues with recollection, effects on the informants, and ensuring qualified users (Weiss, 1997). Strand, Sarmiento, and Pasquale (2005) reported in their review of 35 measures of trauma in children and adolescents that many do involve the interview format. While most clinical interviews are conducted on an individual basis, there have been protocols that involve triangulating information from multiple informants. Goldin, Levin, Persson, and Hagglof (2003) described the use of a semistructured interview on child exposure to war

trauma in which Bosnian refugee children and teenage youths and their parents were interviewed. Such approaches could yield more valid information, but are not necessarily ecological in scope. As with psychometric measures, there is a continuing need to field-test interview protocols with more diverse trauma populations.

An example of an interview protocol that has been applied to diverse samples of adolescents in low-income neighborhoods is the Social Competence Interview (Ewart, Jorgensen, Suchday, Chen, & Matthews, 2002). It measures social–emotional regulatory mechanisms in response to chronic, health-damaging stress, and has been demonstrated to have a reliable rating system for African-American and White adolescents in high-risk communities. More culturally validated interview methods are needed in research that correlates ecological measures with individual stress regulation and coping among high-risk groups. Connor, Davidson, and Lee (2003) conducted a large-scale online survey of trauma survivors. They explored the contributions of spirituality, forgiveness, and anger to physical and mental health outcomes, using regression analysis. The need at this time is for clinicians and researchers to find culturally sensitive and ecologically valid instruments designed for the assessment of both trauma and resilience.

In the context of disaster management, field-based approaches probably are more appropriate than the use of psychometric measurement. The interaction between the field-based interviewer and the informant can have relational and stabilizing effects if handled with clinical and cultural sensitivity. This becomes a matter of training. Field-based interviews of community members can be conducted in the mode of ethnographic (Denzin & Lincoln, 2000) or action research (Hoshmand & O'Byrne, 1996; Reason & Bradbury, 2001). Because participatory action research involves the relevant constituencies in process-oriented problem finding and problem solving, it can be empowering and appropriately informed by local knowledge. Macy et al. (2004) describe a process of implementing community-based trauma assessment, intervention, and training that involved gathering information from different community constituencies in the manner of action research. Community leaders, politicians, citizens, and emergency workers were included in a series of information gathering for the purpose of planning psychosocial interventions in the aftermath of a community trauma. There was also evaluation of training outcomes in this case. Collaboration between clinical and community areas of psychology can help to develop best practice models for community-based trauma assessment and intervention in the future.

The field of public health addresses the social epidemiology of trauma nationally, such as in the National Comorbidity Survey (NCS) that provides base rates in the U.S. The data can be used for comparison with the findings on particular high-risk groups and communities, including war veterans and civilian populations with high trauma exposure.

For example, Prigerson, Maciejewski, and Rosenheck (2001) compared men who had combat trauma with men who had other traumas, as assessed by the NCS Revised Diagnostic Interview Schedule. They concluded that those exposed to combat trauma as their worst trauma were more likely to have lifetime PTSD and many related adjustment difficulties. This type of data is not always available, however, in countries that do not have a reliable epidemiological database.

Manson, Beals, Klein, Croy, and AI-SUPERPFP Team (2005) used interviews to study the nature and frequency of five types of trauma in American-Indian communities, examining the demographic correlates and demonstrating higher levels of trauma in these communities than what is found in the general population by the NCS survey. Such epidemiological measures of the prevalence of PTSD have to be linked with community ecological conditions and trauma response, beyond demographic correlates. Efforts in screening and early detection must take into account the problems of recruitment and retention due to cultural and realistic constraints (Niles, Newman, & Fisher, 2000). Secondary analysis of multiple ecological indicators, such as in the measurement of social capital described earlier (Lochner et al., 1999), should be conducted to understand the specific contributions of cultural resources and ecological assets to trauma prevention, response, and recovery.

Finally, the human security framework suggests that we should embark on the measurement of human security needs and their fulfillment, including assessing all threats to human security in particular cultural communities and ecological settings. Such research and assessment can be informed by existing approaches to evaluating trauma, resilience, prevention, and recovery. It likely involves large-scale epidemiological studies. Schlenger, Fairbank, Jordan, and Caddell (1997) discussed the relative merits and limitations of surveys, interviews, self-report psychometric instruments, and psychobiological measures as epidemiological methods for assessing trauma exposure and for case identification. They pointed to ethical and training issues as well as the need for multidisciplinary teams to implement such large-scale epidemiological research. The international community has to support such collaboration and the funding of such efforts.

IMPLICATIONS FOR THEORY, RESEARCH, AND PRACTICE

The conceptual contributions from a cultural–ecological perspective can complement the individual focus in theorizing about trauma. Cultural–ecological approaches bring much needed attention to the cultural context and ecological setting that are not always considered in individual clinical

assessment and intervention. Due to the fact that moral values and normative judgments are intertwined with the scientific description of stress, adaptation and suffering, a human security framework can further provide a broader base for trauma discourse and intervention globally. By encompassing a wide range of interrelated factors that affect the human condition and articulating universal human security values, it provides a more comprehensive understanding of traumatogenic forces, human vulnerability, and ecological risks. The human security framework requires practitioners and researchers to draw on multidisciplinary knowledge in addressing issues at both micro and macro levels. In ecological terms, when culture and context are linked with the individual level of analysis, both personal and group resources for coping will be considered in relation to individual and community resilience.

The cultural–ecological perspective implies the use of culturally sensitive research models and pluralistic research methods that can capture the ecological and the contextual. Culturally sensitive research and culturally validated assessment, such as presented in this volume and by Wong and Wong (2006) on stress and coping, would need to become widely practiced. Luke (2005) recommended statistical tools that are more suited to capturing and assessing contextual data. They include multilevel modeling, geographic information systems (GIS), social network analysis, and cluster analysis. Methodological pluralism is another requirement for research and evaluation from a cultural–ecological perspective. Barker and Pistrang (2005) discussed the practical implications of methodological pluralism for community research, and how to integrate multiple methods within a single study. They proposed four sets of criteria for appraising research under a pluralistic ethos, including criteria for qualitative and action research.

Assessment approaches need to be developed, not only for the evaluation of cultural–ecological resources, but also to evaluate system effectiveness and identify reasons for system breakdown during disasters or trauma and in its aftermath. In the medical trauma field surveys of state emergency medical services have been conducted, for example, with a trauma system inventory and reports of injury-related mortality rates (Nathens, Jurkovich, Rivara, & Maier, 2000). Similar evaluation should be conducted on the effectiveness of trauma systems in terms of psychological adaptation and the sustaining of cultural and community supports. Such evaluation research is critical to the ultimate goal of developing best practice models that reflect cultural–ecological considerations in the assessment of trauma and trauma intervention. The community-based work of Macy et al. (2004) included the evaluation of training outcome for psychosocial workers in the context of implementing trauma assessment and intervention. More system-wide evaluation of preparedness in trauma response would be necessary for all communities.

Such system evaluation also requires the development of protocols and evaluation measures that include cultural factors. Many lessons can be learned from the evaluation of disaster management about the emergency preparedness and efficacy of trauma intervention and other services in a given community. These lessons have to be reviewed in a critical dialogue that involves all parties concerned, with an openness to improving cultural competency in the delivery of emergency assistance and in the design of trauma response systems. Participatory action research can serve as a model for involving all relevant constituencies. Case study research methodology can be used to illuminate contrasting scenarios of community and group responses to trauma and to evaluate cultural and ecological resources for resiliency and coping. Multiple case studies that identify different prototypes of community response can contribute to the development of best practice models that include cultural–ecological considerations.

Trauma training must focus not only on cultural competency, such as reflected in the treatment guidelines of the American Psychiatric Association (American Psychiatric Association Steering Committee on Practice Guidelines, 2004) and the International Society for Traumatic Stress Studies (Weine et al., 2002), but also on ecological awareness and knowledge. This is also true for academic programs. Collaboration between clinical and counseling psychologists with community scientists and public health professionals should be emphasized in multidisciplinary curriculum and inquiry related to trauma that is found in academic programs. The realities of international humanitarian aid and trauma assistance are such that western trained professionals tend to be present at the scene for short periods of time. Not only does it not allow sufficient time for cultural immersion and culture learning, but it also prevents the development of ecological understanding necessary for effective work with the local communities.

A cultural–ecological approach must be process oriented and involve sensitive collaboration between outsiders and insiders who have knowledge of the ecological system. It needs to draw on multidisciplinary knowledge from the joint work of culturally competent clinicians, public health workers, and community scientists as well as other local constituencies. The scope of the trauma field has expanded to encompass wider communities of discourse and diverse groups of researchers and practitioners who need to work in unison toward maintaining human security values in a world that has allowed these values to be seriously compromised.

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Chapter 3

Ethnomedical Best Practices for International Psychosocial Efforts in Disaster and Trauma

Siddharth Ashvin Shah

This chapter argues that the contemporary practice of cultural competence falls short of ethnomedical competence. Ethnomedicine is the study of culturally embedded or alternative beliefs and practices for health care (Genest, 1978; Nichter, 1992). Interdisciplinary with medical anthropology, ethnomedical critique examines the processes by which societies abandon their culturally embedded practices in favor of modern practices. (Table 1)

Neocolonial processes, of which international relief aid and their local partner practices are a part, contribute to the abandonment of culturally embedded practices. Ethnomedical competence is a critical intellectual method by which democratic and *symmetrical* learning processes counteract neocolonial processes. Ethnomedical competence describes the capacity of individuals and organizations to discern, utilize, and preserve culturally embedded self-concepts and effective healing practices (Shah, 2006). Ethnomedically competent treatment modalities are pluralistic, mixing Western and non-Western treatments synergistically into "best practices.".

Without any intentional malevolence, the current process of spreading Western psychotherapies occurs under the influence of a detrimental dynamic. This dynamic undermines best practices and involves transference/countertransference perceptions of neediness, dependency, and abundance that presume the triumph of Western psychotherapy and biomedicine to treat trauma anywhere in the world (Spivak, 2003).

In December 2004 and January 2005, at the invitation of relief organizations responding to South Asian tsunami-affected people, I taught trauma recovery theory and treatment methods. I taught humanitarian

Table 1. Key Terms

Neocolonial – the present-day *asymmetrical* influence of the West over the non-West. Neocolonialism is an indirect form of control through which the West perpetuates its influence over underdeveloped nations through marketing, development work, relief aid, cultural exchange, and education
Cultural competence – the capacity of individuals and organizations to work effectively cross-culturally via appropriate behaviors, attitudes, policies, and structures. Treatment modalities remain Western; however, the presentation format is adapted to the recipient
Ethnomedical competence – term introduced in this paper meaning the capacity of individuals and organizations to discern, utilize, and preserve culturally embedded self-concepts and effective healing practices. This transpires in democratic and symmetrical learning environments so as not to be neocolonial. The treatment modalities become plural and hybrid, mixing Western and non-Western treatments
Ethnomedical critique – exposes deviations from ethnomedical competence; identifies ethnomedically incompetent practices

aid workers psychosocial first aid methods, crisis counseling "Do's and Don'ts," and self-care that included emotional ventilation, normalization of feelings, grounding techniques, and containing/holding as a group process. Special attention was given to recognizing compassion fatigue and burnout prevention in relief workers. In responding to psychological trauma with diverse populations, I spent a good deal of time and energy to ensure cultural competency as I taught trauma recovery protocols. Working within the purview of regional South Asian organizations, I inquired about and incorporated culturally embedded beliefs such as: (1) rituals for the dead, (2) involving religious leaders for community healing, and (3) fishing village customs.

OVERVIEW AND CONTEXTUAL PERSPECTIVE

As a North American (Western) professional of South Asian decent, I am configured by educational frameworks, interpersonal networks, and neocolonial empowerment. When I emailed colleagues that I was invited to work in tsunami-affected areas, I received unsolicited advice – as well as pdf files of trauma recovery protocols that I could test out with new populations. Without ever having worked in Asia, one colleague confidently told me he believed that his post-9/11 protocol for children was "culture-neutral." The emails and advice are emblematic of the Western resources and psychotherapeutic methods that flow into the developing world during times of mass crisis. I observed that organizations in South Asia, in keeping with the trend of westernizing mental health services, frequently absorbed Western psychotherapy and psychiatry.

While culturally embedded therapies such as pranayama and meditation were being promoted by resource-poor groups, international and local agencies were mostly skewed in using Western models of "evidence-based" relief. Culturally embedded therapies lacking Western benchmarks of evidence became the "Other" therapies. These "Other" treatments include South Asia's culturally embedded healing methods: therapeutic yoga, meditation, pranayama, Ayurveda, Siddha medicine, Unani, Tantric spiritualism, pranic healing, and shamanism. It is also worth noting that Western treatments are automatically given special privilege over countless alternative practices from other nations – including Reiki, traditional Chinese medicine, Korean ear acupuncture, Andean healing practices, Yoruba medicine, and others.

CASE STUDY USING ETHNOMEDICAL CRITIQUE – HEALING RESPONSES TO THE TSUNAMI

During my time in the tsunami-affected areas, I was accompanied by my Sri Lankan colleague Ranjan, a spiritual healer who works with mind, body, and spirit simultaneously. He was looking for an opportunity to treat people affected by the tsunami. To appreciate the place of ethnomedical competence, Ranjan should be regarded not only as a practitioner of alternative treatment, but also as a symbolic representative of neocolonial dynamic's blind spot. One of Ranjan's methods involves working with his hand to find special points on a participant's back and shoulders – encouraging that person into healthy alignment. With apparent ease, he can identify and heal mental and spiritual anguish without verbal communication or cognitive information regarding the participant's traumas. This ethnomedical treatment has no single name as it is a healing practice with shamanistic qualities, expressing itself differently in each practitioner. What an observer would witness is Ranjan moving into an altered state, spinning a crystal in one hand, and producing croaking/ burping sounds during a 20–40 min treatment. After the treatment, participants reported remarkable relief, sometimes describing how problems left their bodies because Ranjan seemed to provide a channel for exit.

While I had institutional invitations to teach Western views, Ranjan had no such platform to provide services. He started by treating a fatigued and emotionally depleted volunteer working at a shelter. When she emerged transformed, some tsunami-affected women who had seen the treatment approached Ranjan to help them with their suffering. Word soon got around that he could do remarkable things. Then, day after day, a line of people came for treatment. The people there had good access to sanctioned South Asian psychiatrists who were volunteering their time in the shelter; and some used those psychiatric services. However, some people used Ranjan exclusively and he got scores of referrals.

An observer at the shelter would have seen modern psychiatry and culturally embedded healing working on parallel tracks. A cynic may raise concern that a quack is selling unscientific remedies to a vulnerable population. Yet it must be mentioned that Ranjan volunteered his healing services for no remuneration and with no propaganda. A cross-cultural academic who questions Western psychotherapy's assumptions may ask the questions that Juris Draguns (2004) asks: "Is psychotherapy possible in the absence of verbal communication between the client and therapist? Must the therapist know and understand the client as a person, and is the gathering of biographical and experiential information indispensable for therapy to take place?"

Weeks later, I was marveling at how Ranjan successfully treated people of all ages and gender. I reflected on how seldom South Asian organizations employed healers like Ranjan, preferring instead Western-oriented mental health services. I believe this is a result of transference dynamics informed by neocolonialism by which institutions abandon culturally embedded and alternative treatments.

Why did I not do more from the beginning to employ Ranjan as a healer? This blind spot felt peculiar to me given the background of our relationship. Ranjan and I had not just met after the tsunami. He and I have known each other since 2002, when I lived with him for a month to apprentice in spiritual healing practices and develop my own style of hands-on healing. Having received treatment myself and having watched him treat others, I intimately knew Ranjan's capacities and the potency of his treatments to reach deep pain.

Even with my prior knowledge of Ranjan's effectiveness, and even with my integrative medicine identity that I cultivated in the West, I participated in isolating Ranjan, leaving him to advocate alone for his therapeutic role. During the initial days, when I was in demand by South Asian organizations, Ranjan was reduced to the role of observer and discussant. I argue that this is the result of the countertransference dynamics that Westerners have in international consulting relationships. The paternalistic dynamic involves stoking neediness and dependency against the foil of abundance and power. In this dynamic, the West acts as the omniscient parent, and the non-West is the needy child. In receiving "help," a child can feel conflict – sometimes playing out its dependency and sometimes striking out against the parent. The West, playing the abundant and charitable role, may be unable to see its faults or its shortcomings.

It is my belief that South Asian organizations and I were operating under the elite view that Western modes of relief are highly desirable and more effective for those needing care. In this view, culturally embedded and alternative practices remain underacknowledged and relegated to lower priority. The fact that Ranjan had to initiate services without institutional encouragement, and yet he was met with overwhelming demand by traumatized people, implies that latent, unnoticed forces had been operating – forces that demand scientific re-evaluation and cultural respect.

EVIDENCE FOR SHORTFALLS IN ETHNOMEDICAL COMPETENCE

Back Pressure from the Field and Afar

Granted, it is a logical leap to move from the *observation* that Ranjan's treatment was useful to the *conclusion* that Western treatments may be less appropriate. What follows are further emblematic data – several critical reactions and warnings regarding the application of Western psychosocial relief. Until international agencies and transnational psychosocial aid workers practice self-reflection through ethnomedical critique, they may not take notice of such emblematic protests coming from academia, field observations, press/media, policy makers, organization publications, and uncooperative human resources.

1. A major English-language newspaper in Sri Lanka, *Daily News*, published "Responding to the aftermath of the tsunami: Counseling with caution" on February 11, 2005 with the following criticisms:
   a. It is simplistic to view all those who have survived the tsunami as mere helpless victims who are unable to act on their environment or situation.
   b. Sometimes it is the humanitarian community and general public, not the affected communities, that (erroneously) attach high importance to individual counseling and therapy.
   c. Often camp settings breach principles of involving locals in decision-making processes, where re-making of communities need local ownership and participation.
2. Recognizing the problems of neocolonial interventions by agencies, the Psychosocial Working Group[1] published guidelines for its member organizations:

> A further principle is that agencies do not just "impose" their intervention on a community but that they negotiate with the communities about what type of program people would like to participate in. The success of negotiating the type of intervention which will be implemented depends on how good the communication is between communities and agencies. If communities cannot influence the planning of the intervention it is likely that the interventions will be inappropriate and fail.

[1] Made up of five academic partners (Centre for International Health Studies, Queen Margaret University College, Edinburgh; Columbia University, Program on Forced Migration & Health; Harvard Program on Refugee Trauma, Solomon Asch Center for the Study of Ethnopolitical Conflict and University of Oxford, Refugee Studies Centre) and five humanitarian agencies (Christian Children's Fund; International Rescue Committee, Program for Children Affected by Armed Conflict; Médecins Sans Frontières – Holland; Mercy Corps and Save the Children Federation).

3. In a 2005 World Health Organization [WHO] article titled "What exactly is emergency or disaster 'mental health'?", Derek Summerfield (2005) writes:

> . . ."category fallacy" to assume that, just because similar phenomena can be identified in various settings worldwide, they mean the same thing everywhere. Even the best back-translation methodologies cannot solve the problem, as it is not one of translation between languages but of translation between worlds. We need to remember that the Western mental health discourse introduces core components of Western culture, including a theory of human nature, a definition of personhood, a sense of time and memory, and a secular source of moral authority. None of this is universal.

4. Detecting a lack of awareness and finesse in counseling relief efforts, a Sri Lankan nongovernmental organization, the Psychosocial Support Programme, produced a tri-fold brochure for relief workers with seven provocative questions, including:
   a. Most people have their own coping systems and support of their families, neighbors, and friends. Are you ready to recognize, respect, and learn from these?
   b. Counseling training must help participants to understand and develop their own attitudes and beliefs to be able to provide an effective service. Have you considered this in your training program on counseling?
5. In a 2005 WHO article entitled "Mental and social health during and after acute emergencies: emerging consensus?", officers Mark van Ommeren, Shekhar Saxena, and Benedetto Saraceno write:

> The controversy is compounded by the recent development of a new field – introduced by international organizations working in low-income countries – that calls itself *psychosocial*. The term is used to indicate commitment to non-medical approaches and distance from the field of mental health, which is seen as too controlled by physicians and too closely associated with the ills of an overly biopsychiatric approach. (p. 71)

6. In a 2005 WHO article titled "The best immediate therapy for acute stress is social," Derrick Silove writes:

> The first challenge is changing entrenched perspectives and practices of international agencies and donors, so that they give priority to supporting integrated community-based mental health programmes that focus on social need arising from mental disturbance, rather than special issues or particular diagnoses. (p. 76)

7. Authors M. Carballo, B. Heal, and M. Hernandez (2005) observed improved resilience in tsunami-affected populations utilizing

spiritual grounding and religious leaders and suggested the following:

a. "To date, most models of psychosocial assistance have come from Western countries and are based on Western notions of trauma (Summerfield, 1999). Some of those affected by the Tsunami may react poorly to alien approaches."
b. ". . . external (as well as internal) groups must always pay careful attention to local cultures, religions and traditional ways of coping with incidents such as the Tsunami."

8. Kolitha Wickramage (2006) provides the following critique in "Sri Lanka's post-Tsunami psychosocial playground: lessons for future psychosocial programming and interventions following disasters":
   a. "This paper explores examples of unsolicited, culturally inappropriate and conflict insensitive interventions initiated by both local and international teams to Tsunami-affected populations in Sri Lanka. It also explores the apparently prevalent belief that psychosocial interventions can be delivered as 'relief packages' to those affected, and as part of project-based, rather than process-enabling, interventions."
   b. ". . . task of balancing humanitarian compassion with effective psychosocial programming, especially in resource-poor contexts that seem to readily absorb such interventions."

These eight sources underscore the problems in transcultural and transnational applications of Western mental health models. A literature search yields little on how to choose an appropriate provider or treatment in a diverse setting. Cultural competence would offer solutions on 1) how to discuss Western psychosocial methods, and 2) how a Western-minded provider can better understand the views of locals. Ethnomedical competence would ask if a non-Western provider and his/her methods would be more effective, or whether a Western provider and his/her methods are good enough. Ommeren, Saxena, and Saraceno (2005) make general mention of "collaboration with traditional resources such as faith healers may be an opportunity in terms of care, provision of meaning, and generation of community support."

Ethnomedical competence strives for a balance among culturally embedded beliefs, providers, and methods. An appreciation for this balance in the international literature is sparse. Notable exceptions are the writings of 1) Bemak and Chung (2004) stating ". . . it is recommended that practitioners present an openness to traditional healers and at times even forge partnerships. . ." and 2) Karl Peltzer (1995, 1996) who has himself blended Western interventions with African healing rituals [adapting treatment choices] and has advocated that we "involve local healers in the programme and achieve that they work side-by-side with health workers" [expanding our acceptance of alternative providers].

CULTURAL COMPETENCE AS NECESSARY BUT NOT SUFFICIENT FOR ETHNOMEDICAL COMPETENCE

As a program director of preventive medicine and a lecturer/trainer in cultural competence, I have concluded that cultural competency in its contemporary practice will not lead to best practices, especially in the transnational context. In the United States, the cultural competency canon aims to improve the capacity of individuals and organizations to work effectively across cultures via appropriate behaviors, attitudes, policies, and systems. It does not adequately question the primacy of Western allopathic treatments. The contemporary practice of cultural competency involves a translation of knowledge, attitudes, and behaviors that allow the Western practitioner to deliver Western treatments, to format relationships, and to encourage patients to accept standard Western biomedicine.

Cultural competence in its current form makes the mistake of believing that patients primarily need to understand their Western treatment options – to understand that Other treatments can be secondary, but that they cannot take the place of what is primary. Clearly, this interaction imports the belief that Western treatment is the best. Cultural competency does not emphasize alternative treatments because it works within the hegemony of allopathic medicine. Not discussing alternative treatments and providers with adequate respect reinforces the view that treatments within Western science and scholarship are primary. The pitfalls of such a working hypothesis have been outlined by Hall (2001) as the discrepancies between *culturally sensitive therapies* and *empirically supported therapies*. We must continue to ask: "What if Western treatments are seen to be primary but they miss the mark significantly?" Especially in the case of international psychosocial relief work (a transnational context), there are approaches that are culturally competent but at the same time ethnomedically *in*competent.

In the quest to be ethnomedically competent, it is crucial to remain aware of neocolonialism. Consider a metaphor of "technology transfer" – typically referring to marketing and selling Western innovations overseas such as satellites, MRIs, and manufacturing techniques. Transferring psychotherapy, victimology, trauma recovery to other nations follows similar marketing and selling practices. Here too we have to make contact with people in the recipient society. Recipients need to think with our conceptual systems. The recipients are driven by a belief that they lack things, concepts, and behaviors that the West can supply. The non-West craves our technology because it anticipates good innovations from the West. We produce information that verifies its effectiveness, or we promote it heavily without hard scientific evidence. We are confident that we have something exceptional to offer and not the other way around. Western technology operates under an illusion that it is secular, nonsexist, and

ahistorical (So, 1990; Summerfield, 2005); similarly, Western practices operate under similar illusions – often giving the impression that a "scientific" practice has a universality that can be applied anywhere so long as someone translates those practices into the local idiom. When I trained and treated people in South Asia, I found myself disproportionately utilizing Western concepts of traumatization. This is surprising and ironic because I am an advocate of Eastern health philosophies and use them in my private practice in the United States. Yet in South Asia relief organizations operated with Western eyes – sufficiently and persistently enough to draw negative attention, as shown above – without balancing them with culturally embedded practices. Through the processes of technology transfer and hegemony, the attention experts like myself command is triumphalist – blinding the relief workers and myself to culturally embedded self-concepts and healing practices. The story of Ranjan is an example of a phenomenon that typifies a transnational dynamic. Non-Western societies are encouraged to adopt Western concepts with a corresponding loss of culturally embedded treatments. Ethnomedical critique and competence are intended to counteract this loss and transform our blind spots into strengths.

SUBJECTING VICTIMS – VICTIMIZING SUBJECTS

Ethnomedical critique evaluates treatments and investigates Western ideas that supplant culturally embedded concepts. Let us apply the critique to Western concepts of victimization. The ambiguity of the word "victimization" can semantically be put to work. People become victims when exposed to terrorist attacks, tsunamis, rapists, smart bombs, etc. Psychotherapists can inadvertently victimize clients by activating a hurtful memory without adequate containment. Another way people emerge as victims is when outside experts cast them (or identify them) as subjects of trauma. To identify a victim is to subscribe to a conceptual framework, a recognizable and utilitarian format that exercises power over a subject (Foucault, 1972; Herman, 1992; Rabinow, 1984; Sontag, 2003). International trainings in trauma recovery heavily rely on a conceptual framework that is Western, post-Enlightenment, and consumerist (Kleinman, Das, & Lock, 1997; Summerfield, 2005).

Just as technology such as an iPOD machine demands music be formatted in a limited number of ways, Western-trained experts encourage clients and problems to be formatted in recognizable ways to fit manualized protocols for treatment, assessment, diagnosis, etc. Similarly, we are prone to diagnose a certain constellation of traumatic symptoms and *make victims* out of people. Designating people as victims with PTSD in tsunami-affected areas involves imposing a self-concept that is mediated

by outsiders such as mental health experts or journalists. Indeed, the WHO warned relief organizations not to focus solely on PTSD, "which the agency believes has been wrongly considered to be the biggest mental disorder after a disaster." (Ashraf, 2005).

To be clear, I am using the word *victimize* to mean the *application* of Western self-concepts and practices *to the detriment* of applying culturally embedded practices. Even if a survivor is helped by Western methods, it is frequently possible that a less costly, less foreign method has been ignored. This is not a nefarious, intentional form of oppression; but it is a substantive risk that can be minimized. Geopolitically mediated intellectual dominance is a risk of transcultural work, such as when a Westerner like me operates in a dynamic where his expertise has privilege over the expertise of a culturally embedded practitioner like Ranjan (Spivak, 1990). Transcultural psychotherapy practice is therefore at risk of unconscious identification with the oppressor when it *makes* victims out of people and *treats* them with its trauma protocols. Using eight guidelines presented in the next section, it is possible to minimize neocolonial practices while working transculturally.

ETHNOMEDICAL STRATEGY AND TACTICS

Guidelines to Counteract Neocolonial Transference Dynamics

1. Negotiate mutually agreeable therapy goals and exercise maximal flexibility consistent with those goals (Draguns, 2004).
2. Learn about culturally embedded self-concepts and healing practices.
3. Ascertain how and why culturally embedded treatments are (or are not) being utilized.
4. Determine the advantages and/or feasibility of integrating psychotherapy services with culturally embedded treatments.
5. Develop and implement a plan of integrated services. Expand program evaluation terms and outcome studies so that the measured parameters do not myopically favor Western treatments.
6. Redouble efforts to practice client-centered evaluations and treatments (Castillo, 1997).
7. Be mindful of neocolonialism, the Western institutional and cultural power/privilege to influence audience. Learn to balance cultural power so that all parties collaborate in democratic and symmetrical learning environments. Consider utilizing a consultant with ethnomedical experience to provide perspective and cultural skill sets (Ashraf, 2005; Carballo, 2005).

8. Utilize anthropology and related disciplines to critique subjectification-victimization and cultural competency practices in order to arrive at a more accurate view of affected persons and the appropriate interventions.

In 2002 the WHO was promoting a global plan, *WHO Traditional Medicine Strategy 2002–2005*, to encourage appropriate forms of culturally embedded practices (WHO, 2002). This came about because of mounting concerns voiced by scholars, doctors, and smaller organizations that culturally embedded practices were being supplanted by more expensive, and sometimes harmful, Western treatments. The WHO mandate includes:

a. Ensuring availability and affordability of traditional and alternative medicine.
b. Promoting therapeutically sound use of traditional and alternative medicine by providers and consumers.

Arguably, ethnomedicine encompasses more than what current research on traditional and alternative medicine suggests. Current alternative medicine research is biased toward treatments that involve something one can touch and measure easily – treatments that can be studied in laboratories. This often translates into treatments such as botanical herbal treatments or acupuncture. Treatments that are nonmaterial (such as Western psychotherapy or shamanistic spiritual healing) are marginalized. Treatments that are simultaneously nonmaterial and non-Western are otherwise fated to two layers of marginality, unless investigators fully examine their availability, popularity, and efficacy.

Given that there are a multitude of culturally embedded and alternative practices, of which Ranjan's treatment style is an example, we should ask whether tsunami-related trauma symptoms are best treated with Western psychological interventions. There are some serious epistemological questions before transcultural psychotherapy and international relief work. Furthermore, could there be symptoms unrecognizable to Western eyes that cause substantial suffering for which culturally embedded and alternative practices are the key remedies? There is growing literature and media attention (Ashraf, 2005; Kleinman, 1995) highlighting the harms that can result when Western medical practices are inappropriately superimposed upon non-Western societies. This paper urges that we all ask ourselves: "How do we conduct ourselves as representatives of Western psychotherapy so that culturally embedded and alternative practices are not inappropriately de-emphasized?"

CONCLUSION

It has been the thesis of this chapter that Western psychotherapies can be spread in a way that inappropriately de-emphasizes culturally embedded treatments. If Westerners help to de-emphasize treatments that are potentially more effective, less disruptive, or more affordable, then non-Western nations may be harmed by such impositions. I maintain that best practices in psychological work will include proactive discernment, utilization, and preservation of culturally embedded and alternative practices. However, we would do well to understand also that *we* Westerners have something to lose if we remain unaware of prevailing ethnocentric dynamics. Learning to integrate practices from cultures around the world can benefit Western populations as well – as has been the case with yoga, acupuncture, and mindfulness-based stress reduction. There are permutations of treatments that we cannot imagine because neo-colonialism causes blind spots to mixing Western and non-Western treatments synergistically and appropriately. If intellectual transfers run mostly unilaterally, then we run the risk of hobbling the development of integrative treatment approaches.

Skeptical of ethnomedical critique, one may ask: "Why would educated counselors in non-Western societies adopt Western views to the detriment of their culturally embedded and alternative practices? Even if Western experts perpetrated such 'victimization,' would not they be corrected by their non-Western counterparts and expert-informants? Why should we take on the responsibility to ensure democratic and symmetrical learning?" Given what has been stated, placing the responsibility solely with non-Westerners is not adequate, fair, or good for us. Donors, agencies, and local partners may – out of habit – all be dancing to the tune of Western methods. Expert informants are susceptible to institutional desires and hegemony. The responsibility lies with those who are interested in unearthing what is hidden and valuable.

Western biomedicine operates with a free hand as a form of neo-colonialism, potentially colonizing institutions and people so that culturally embedded knowledge is widely demoted. So, whether we are looking at the widespread use of Xanax (a benzodiazepine) for dysphoria, or cholesterol lowering drugs and bypass surgery for unhealthy lifestyles there is a strong trend in South Asia and other non-Western nations to adopt Western-style health care practices. The pace of acquiring Western technologies and habits far outstrips the cottage industry interest in culturally embedded and alternative practices. This chapter has explored the diverse terrain regarding the potentially detrimental dynamic that automatically privileges Western perspectives and the potentially redeeming ethnomedically competent alternative approach.

In closing, an analogy may help to underscore the stimulus, perspective, and objective for this paper. Global society currently negotiates the level of deforestation and ecosystem degradation that pose serious threats to our biodiversity. Loss of botanical species corresponds to eliminating potential herbal remedies and new drug development ideas. In the same way, the well-intentioned spread of Western psychotherapies and psychiatry corresponds to a loss of culturally embedded techniques, suboptimal treatment of people, and decay of integrative practices. Ethnomedical competence provides a bulwark against the depletion of treatment options. Such competence will stimulate multilateral education and transfer of psychological practices.

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Chapter 4

Assessing Trauma Across Cultures from a Multigenerational Perspective

Yael Danieli[1]

This chapter emphasizes the time dimension in trauma assessment. As will be detailed, an approach that examines preceding generations' trauma exposure yields the most complete assessment of an individual's posttraumatic status. This status is best understood within my multidimensional, multidisciplinary framework. This chapter draws heavily on the International Handbook of Multigenerational Legacies of Trauma (Danieli, 1998) that the interested reader is urged to consult for further details.

Trauma's impact has been transmitted across generations throughout history. It has been alluded to, written about, and examined in both oral and written histories, in all societies, cultures, and religions. Within the field of traumatic stress, intergenerational transmission of trauma is a relatively recent focus, but one with solid clinical, theoretical, and empirical bases.

CONSPIRACY OF SILENCE

It was in the context of studying the phenomenology of hope in the late 1960s that I interviewed survivors of the Nazi Holocaust. To my profound anguish and outrage, all of those interviewed asserted that no one, including mental health professionals, listened to them or believed them when they attempted to share their Holocaust experiences and their continuing suffering. They, and later their children, concluded that people who had not gone through the same experiences could not understand and/or did not care. With bitterness, many thus opted for silence about the Holocaust and

[1] I thank Brian Engdahl for invaluable editorial help in preparing this chapter

its aftermath in their interactions with nonsurvivors. The resulting *conspiracy of silence* between Holocaust survivors and society (Danieli, 1981a, 1982), including mental health and other professionals (Danieli, 1982, 1984), has proven detrimental to the survivors' familial and socio-cultural reintegration by intensifying their already profound sense of isolation, loneliness, and mistrust of society. This has further impeded the possibility of their intrapsychic integration and healing, and made mourning their massive losses impossible (Danieli, 1989). This imposed silence proved particularly painful to those who had survived the war determined to bear witness. Keilson (1992) similarly demonstrated that a poor postwar environment ("third traumatic sequence") could intensify the preceding traumatic events and, conversely, a good environment might mitigate some of the traumatic effects (see also Op den Velde, 1998).

Because the conspiracy of silence most often follows the trauma, it is the most prevalent and effective mechanism for the transmission of trauma on all dimensions. Both intrapsychically and interpersonally protective, silence is profoundly destructive, for it attests to the person's, family's, society's, community's, and nation's inability to integrate the trauma. They can find no words to narrate the trauma story and create a meaningful dialogue around it. This prevalence of a conspiracy of silence stands in sharp contrast to the widespread research finding that social support is the most important factor in coping with traumatic stress.

Nagata (1998) reported that more than twice as many Sansei (children of Japanese-Americans interned by the U.S. government) whose fathers were in camp died before the age of 60 compared to Sansei whose fathers were not interned (see also Eitinger, 1980 about survivors of the Nazi Holocaust and Edelman, Kordon, & Lagos, 1992 about fathers of the disappeared in Argentina). Nagata speculated that there may be a link between their early deaths and their general reluctance to discuss the internment. Pennebaker, Barger, and Tiebout's (1989) research suggests that avoidance of discussing one's traumatic experience may negatively affect physical health, and Sansei in the present study reported that their Nisei fathers were much less likely to bring up the topic of internment than were their mothers.

The conspiracy of silence is also used as a *defense* for trying to prevent total collapse and breakout of intrusive traumatic memories and emotions. Like paper, it is a very thin and flimsy protection that rips easily. The children's conflicting attempts both to know and to defend against such knowledge (Auerhahn & Laub, 1998) is ubiquitous as well. Aarts (1998) concluded that the conspiracy of silence often is at the core of dynamics that may lead to symptomatology in the second generation. Op den Velde (1998) demonstrated that when offspring of Dutch WWII sailors and resistance fighters observed the "family secret," separation and identification problems arose. Bernstein (1998) chronicled the isolation

and emotional distance created when U.S. WWII POWs avoided close emotional relationships with their spouse and children. In studies of Israel, West Germany, and the former GDR, Rosenthal and Volter (1998) found that collective silence had endured, despite the recent emergence of a more open social dialogue about the Holocaust. Their case analyses clearly showed that silence, family secrets, and myths are effective mechanisms that ensure the traumata's continued impact on subsequent generations.

Is silence a part, or an extension, of the trauma (e.g., Kalayjian, Kassabian, & Kupelian, 1998), or is it a qualitatively different "trauma *after* the trauma" (Rappaport, 1968)? Does the posttrauma environment pose a *new* set of events that the victim needs to address in addition to the initial victimization?

Though descriptions of what is now understood as posttraumatic stress have appeared throughout recorded history, the development of the field of traumatic stress, or traumatology, has been episodic, marked by interest and denial, and plagued with errors in diagnostic and treatment practices (Herman, 1992; Mangelsdorf, 1985; Solomon, 1995). Indeed, one of the most prevalent and consistent themes during the twentieth century has been the denial of psychic trauma and its consequences (Lifton, 1979), particularly in the myriad deadly conflicts that find their multigenerational origins in history, the nonresolution of which ensures their perpetuation. One can only marvel at the international dimensions of the conspiracy of silence, as shown by the slowness of the world community to acknowledge and act on the terrible events in the Former Yugoslavia, Rwanda, Burundi, and the Sudan (Danieli, Rodley & Weisaeth, 1996).

TRAUMA AND THE CONTINUITY OF SELF: A MULTIDIMENSIONAL, MULTIDISCIPLINARY INTEGRATIVE (TCMI) FRAMEWORK

Massive trauma causes such diverse and complex destruction that only a multidimensional, multidisciplinary integrative framework (Danieli, 1998) is adequate to describe it. An individual's identity involves a complex interplay of multiple spheres or systems. Among these are the biological and intrapsychic; the interpersonal – familial, social, communal; the ethnic, cultural, ethical, religious, spiritual, natural; the educational/professional/occupational; and the material/economic, legal, environmental, political, national, and international. Each dimension may be in the domain of one or more disciplines, which may overlap and interact, such as biology, psychology, sociology, economics, law, anthropology, religious studies, and philosophy. Each discipline has its own views of human nature and it is those that inform what the professional thinks and does.

These systems dynamically coexist along the time dimension to create a continuous conception of life from past through present to the future. Ideally, the individual should simultaneously have free psychological access to and movement within all these identity dimensions.

TRAUMA EXPOSURE AND "FIXITY"

Exposure to trauma causes a *rupture*, a possible regression, and a state of being "stuck" in this free flow, which I have called *fixity*. The time, duration, extent, and meaning of the trauma for the individual, the survival mechanisms/strategies utilized to adapt to it (for example, see Danieli, 1985), as well as postvictimization traumata, especially the *conspiracy of silence* (Danieli, 1982), will determine the elements and degree of rupture, the disruption, disorganization, and disorientation, and the severity of the fixity. The fixity may render the individual vulnerable, particularly to further trauma/ruptures, throughout the life cycle. It may also render immediate reactions to trauma (e.g., acute stress disorder), *chronic*, and, in the extreme, become life-long (Danieli, 1997) *posttrauma/victimization adaptational styles* (Danieli, 1985), when survival strategies generalize to a way of life and become an integral part of one's personality, repertoire of defense, or character armor.

These effects may also become intergenerational in that they affect families and succeeding generations (Danieli, 1998). In addition, they may affect groups, communities, societies, and nations. In response to some trends in the literature to pathologize, overgeneralize and/or stigmatize survivors' and children of survivors' Holocaust-related phenomena, as well as differences emerging between the clinical and the research literature, I (Danieli, 1981a, 1988b) have emphasized the *heterogeneity* of adaptation among survivors' families. Studies by Klein (1987), Rich (1982) and Sigal and Weinfeld (1989) have empirically validated my descriptions (Danieli, 1981a, 1988b) of at least four differing postwar *adaptational styles* of survivors' families: *Victim* families, *Fighter* families, *Numb* families, and families of "*Those who made it*". This family typology illustrates life-long and intergenerational transmission of Holocaust traumata, the conspiracy of silence, and their effects. Findings by Helmreich (1992), Kahana, Harel, and Kahana (1989), Kaminer and Lavie (1991), and Klein-Parker (1988) confirm *heterogeneity* of *adaptation* and *quality of adjustment* to the Holocaust and post-Holocaust life experiences. This heterogeneity is noted by numerous authors working with other populations.

Integration of the trauma must take place in *all* of life's relevant dimensions or systems and cannot be accomplished by the individual alone. Systems can change and recover independently of other systems. Rupture repair may be needed in all systems of the survivor, in his or her

community and nation, and in their place in the international community (1992). To fulfill the reparative and preventive goals of trauma recovery, perspective and integration through awareness and containment must be established so that one's sense of continuity and belongingness is restored. To be healing and even self-actualizing, the integration of traumatic experiences must be examined from the perspective of the *totality* of the trauma survivor's family and community members.

THE INTERGENERATIONAL CONTEXT

The intergenerational perspective reveals the impact of trauma, its contagion, and repeated patterns within the family. It may help explain certain behavior patterns, symptoms, roles, and values adopted by family members, family sources of vulnerability as well as resilience and strength, and job choices (following the footsteps of a relative, a namesake) through the generations.

Viewed from a family system's perspective, what happened in one generation will affect what happens in the older or younger generation, though the actual behavior may take a variety of forms. Within an intergenerational context, the trauma and its impact may be passed down as the family legacy even to children born *after* the trauma. The family is a carrier of conscious and unconscious values, myths, fantasies, and beliefs that may not be shared by the larger community or culture. Yet, the role of the family as vehicle for intergenerational transmission of core issues of living and of adaptive and maladaptive ways of defining and coping with them may vary among cultures. The awareness of the possibility of pathogenic intergenerational processes and the understanding of the mechanisms of transmission should contribute to our finding effective means for preventing their transmission to succeeding generations (Danieli, 1985, 1993).

While multigenerational consequences of trauma clearly exist, their phenomenology and etiology are complex. There are at least three *intrafamilial* components (a) the parents' trauma, its parameters, and the offspring's own relationship to it; (b) the nature and extent of the conspiracy of silence surrounding the trauma and its aftermath; and (c) their parents' *posttrauma adaptational styles* (Danieli, 1985).

In agreement with most clinicians working with children and grandchildren of survivors of the Nazi Holocaust, Auerhahn and Laub (1998) state that these offspring are "burdened by memories which are not their own," and that the Holocaust is a core existential and relational experience for both generations. Massive trauma shapes the internal representation of reality of several generations, becoming an unconscious organizing principle passed on by parents and internalized by their children, and constituting the matrix within which normal developmental conflict takes place. Holocaust studies

such as these, and their empirical counterparts, inspired much of the succeeding research on multigenerational legacies of other traumata.

Although children of survivors of the Nazi Holocaust do not, as a group, demonstrate psychopathology, they do share a psychological profile (Felsen, 1998; Solomon, 1998), but those who fail to cope suffer deeper and more intense distress than those who are not children of survivors (Solomon, 1998; see also Rosenheck & Fontana, 1998 on Vietnam veterans in the United States; Nader, 1998 on children exposed to a violent event). Yehuda et al. (1998) demonstrate empirically that offspring of Holocaust survivors appear to have a similar neuroendocrine status to that of Holocaust survivors with PTSD, and that they may be more *psychologically* and *biologically* vulnerable to stress and trauma than controls. They also conclude that the "intergenerational syndrome" may have a phenomenology and *neurobiology* similar to that of PTSD. Moreover, she found that low cortisol levels in offspring of Holocaust survivors are associated with their tendency to indicate distress about the trauma of the Holocaust and to have PTSD symptoms in response to Holocaust-related events that they hear about.

Numerous authors, like Felsen (1998), report that when *intrafamilial* communication about the parents' traumatic experiences is hindered, children suffer adverse effects, including problems of identity. Felsen's review, however, reports differences between Israeli and North American samples in this regard, reflecting distinctions across *historical*, *sociocultural*, and *political* dimensions, among others.

The identity dimensions contained in the framework also serve as pathways for intergenerational transmission. Different cultures capitalize on different pathways to acculturate their young. Thus, beyond the familial – from parents to offspring – entire bodies of human endeavor are vehicles of transmission: oral history, literature, and drama, history and politics, religious ritual and writings, cultural traditions, and the study thereof such as anthropology, biology, and genetics. And the various disciplines examine, from their different perspectives, these identity dimensions.

Beyond their psychosocial implications, multigenerational effects of trauma may carry legal (e.g., issues of compensation and restitution) and political (e.g., wars and cycles of violence, ethnic and racial strife) implications.

UTILITY OF THE MULTIDIMENSIONAL INTEGRATIVE (TCMI) FRAMEWORK

The TCMI framework is versatile. It can be used to focus in depth on a single dimension of an issue, or population, or to examine a wider field. Even when one maintains a "narrow" focus, the model provides a

comprehensive contextual matrix to be kept in mind to illuminate possible omissions and interactions. The framework is meant to help decipher, disentangle, and clarify complex issues and guard against simplistic, unidimensional reductionistic impulses, and interdimensional displacements and substitutions that so often occur in the literature. From a program design and assessment perspective, this TCMI framework allows evaluation of whether and how much of each system was ruptured or proved resilient, and may thus inform the choice of optimal interventions.

Buchanan's (1998) framework is similar to the one proposed above. She examined international literature on intergenerational child maltreatment, or the "Cycle of Abuse." Her central thesis is that there are four cycles, rather than one, that operate both within and outside the family: sociopolitical and cultural (extrafamilial), psychological and biological (intrafamilial). To break intergenerational child maltreatment, interventions must be focused on the separate mechanisms that operate within each cycle. Korbin (in Buchanan, 1998) suggests that in coming to internationally accepted definitions of child abuse, there is a need for both an EMIC approach, where the local community makes the definitions, and an ETIC approach, where there is an international consensus on types of behavior toward children that are deemed abusive (see the same classification in Rousseau & Drapeau, 1998).

Rousseau and Drapeau (1998) suggested that culture mediates trauma impact through family variables and through implicit and explicit familial discourse on trauma. The child's developmental stage also interacts with the different modes of familial transmission of trauma.

In Australia (Raphael, Swan, & Martinek, 1998) and North America (Duran, Duran, Yellow Horse Brave heart, & Yellow Horse-Davis, 1998; Gagne, 1998), for example, family structures and cultural identities were systematically assaulted by the forced placement of children into residential schools that were degrading and abusive. These practices led to significantly greater rates of alcoholism, drug abuse, domestic violence, crime, and suicide among the aboriginal and native communities than in the populations at large. These destructive behaviors have, in turn, had traumatogenic intergenerational effects on indigenous peoples. Everything that created security and order in their lives was ruptured. Their "soul wound" (Duran et al.) was inflicted by ongoing multidimensional trauma.

Focusing on the Hibakusha Nisei (children of atomic bomb survivors), Tatara (1998) also asserted that a full understanding of the intergenerational consequences of massive traumatization is possible only through a multidimensional (e.g., physiological, cultural, sociopolitical, and economic) perspective. See also the analysis in Becker and Diaz (1998) for an example of the relationship between the "social process" and intrafamily dynamics; "antifascism as a substitute mourning" in Rosenthal and Volter (1998); and the description in Odejide, Sanda, and Odejida

(1998) of ethnic conflicts that filled the power vacuum created by the end of colonialism and were transformed, at their worst, into fierce political and economic warfare.

The multidimensional integrative (TCMI) framework enables discussion of "vulnerability or resilience" as "vulnerability and resilience." Felsen (1998) concluded that besides vulnerabilities, there are ego strengths, as illustrated by both high achievement motivation and increased empathic capacities (the latter are mentioned by many authors). Draimin, Levine, and McKelvy (1998) also described "a reservoir of spiritual strength" in families with HIV/AIDS. Krystal et al. (1998) further argued that resilience, like vulnerability, is modulated genetically, possibly mediated by effects on affiliative behaviors. Ghadirian (1998) emphasized the contribution of spiritual, religious, and sociocultural beliefs to resilience. Trials and suffering may actually serve a positive function in overcoming adversity and lead to personal growth in victim/survivors and their offspring.

Aspects of the Time Dimension

While sometimes implied in the trauma literature, the crucial dimension of time in understanding the complex process of intergenerational trauma has generally been underemphasized. Focusing on the time dimension may shed light on the impact of trauma on both the survivors' perspective and time orientation and that of the generations before and after them. The time orientation is an individual's temporal organization of experience usually conceived in terms of past, present, and future, often endowed with different weights, degrees of attentiveness, and cognitive or emotional investments. Trauma affects one's relationship to the totality of one's lifeline: birth, death, developmental stages, transitions, and changes.

The importance of time is acknowledged by the inclusion of symptom C.(7) in the DSM IV diagnosis of posttraumatic stress disorder: "sense of a foreshortened future (e.g., does not expect to have a career, marriage, children, or a normal life span)." (See Terr, 1985 for the discussion of time distortion in traumatized children (pp. 61–63)).

Much of the literature corroborates the conceptualization of trauma as *rupture* resulting in *fixity*, reflected in the victim/survivor's experience of being *frozen in time*. Lomranz, Shmotkin, Zechovoy, and Rosenberg (1985) confirm empirically that the time orientation of survivors "reflects their Holocaust experience," and conclude that "time orientation is a concomitant to catastrophic and extremely stressful events" (p. 234). From a multigenerational perspective, Klain (1998) states "If we can say that this [patriarchal] society has not changed, or has changed very little . . . since the Roman and Turkish times, then we must conclude that, in fact, *it has no history*." He also describes mechanisms of transmission that

ensure the maintenance and perpetuation of this static living in the traumatic rupture.

Some authors concur with the conception of *bidirectional transmission* of trauma (Elder, Caspi, & Downey, 1986). Perhaps the most striking examples are found in Draimin et al.'s (1998) analysis of the HIV/AIDS global epidemic that illustrates the distortions of the normal cycle of all generations and ages. "The generation of young adults has been hardest hit, adding extra burdens to the older generation and foreclosing options for the young" (see also Wellisch & Hoffman, 1998), and Raphael, Swan, and Martinek's (1998) description of the "stressed grannies" who must assume their children's parenting role.

Conversely, in the bidirectionality of the concept of time used herein lies a central element for healing: the hope and promise enshrined in future generations. Ornstein (1981) views grandparenting and the creation of postwar "adoptive" extended families as highly adaptive and healing, especially for aging survivors. (see also Bar-on, 1994). Comparatively, McFarlane, Blumbergs, Policansky, and Irwin (1985) have shown in disaster studies that *ongoing* parental PTSD is one of the most significant variables leading to disaster-related morbidity in the child (see also Green, Karol, & Grace, 1994 with regard to crime; Nader, 1998). Authors focusing on indigenous peoples, repressive regimes, and infectious diseases, elaborate on the complexity of *ongoing*, as distinct from *discrete*, trauma, e.g., Raphael et al. (1998) observe that it is difficult to distinguish particular intergenerational transmission when considerable vulnerability must be related to the extensive and pervasive ongoing effects of dislocation, depression, deprivation, and discrimination.

Another important issue is the moment in history that the victim/survivor designates as the beginning of his/her identity and heritage. (Does it reach back to biblical times? after the Holocaust? Does he or she claim the totality of his or her history, or only a portion of it?). The variety of dimensions the individual involves in the recovery process is related to his or her healing and the availability of resources for growth and strength (Danieli, 1981b, 1994a). Hardtmann (1998) observes that when children of Nazis grew up with faceless and "history-less" parents they had problems developing their own identities.

Unresolved trauma results in an absence of closure in the lives of victim/survivors and their children. For example, in the case of the missing-in-action in Vietnam, the grief is timeless; the lack of resolution ensures the passage of trauma to the next generation (Hunter-King, 1998).

Changes are also possible along the time dimension. Most children of survivors remember their families and war history "*only in bits and pieces*," and experience the *healing of the narrative* as most integrative and therapeutic (Danieli, 1993). Rebridging is often experienced as healing the family wound, freeing one to go on with life more fully. The older the offspring,

the more likely they were to describe their families as less adaptive, and their parents as engaging in indirect communication about the Holocaust (Keller, 1988). However, later in their lives, there seem to be reparative processes in these offspring's lives, when they perceive themselves as less depressed and less anxious than they were when younger (Schwartz, Dohrenwend, & Levav, 1994). In the Netherlands, for example, the process of confronting multigenerational trauma has taken over five decades to unfold, stage by stage. First, as Aarts (1998) noted, the barriers of silence needed to be removed for society in general, and politicians in particular, to address the individual and collective needs of victims of WWII. Indeed, it took a social movement in order to arouse interest not only of policy makers but also of most mental health professionals (Herman, 1992).

The time dimension is integral to Keilson's (1992) theory of sequential traumatization, and to Duran et al.'s (1998) definition of trauma: "*Historical trauma response*" or "intergenerational posttraumatic stress disorder" consists of a constellation of features in reaction to the multigenerational, collective, historical, and cumulative psychic wounding or "soul wound" over time, both in their victims' life span and across generations.

RESILIENCE AND TRAUMA ASSESSMENT AMONG GENERATIONS

Baker and Gippenreitner (1998) conclude that whether or not the grandparents actually physically survived Stalin's Purge of the mid-1930s was less important than the strength and values passed on to their grandchildren through the knowledge of what had happened to them. "Disconnected" grandchildren were less clear about who they were or where they were going, as they attempted to function in the Russia of the 1990s. "Connected" grandchildren had a sense of identity firmly rooted in family experience. The grandchildren's *social functioning* correlates positively with *active protest* (see also Kupelian et al., 1998), efforts to research a family member's experience of the Purge, and the perception that the Purge had a positive influence on their lives (For positive outcomes, see also Danieli, 1985; Hunter-King, 1998; Nagata, 1998). Satir (1972), too, writes of the "nurturing" strength of family roots and the importance of connections across generations, concepts reflecting the protective functions of the family. (See also Winnicott's "*holding environment*," cited by Becker and Diaz, 1998 and Rutter's concept of *permitting circumstances* that parents need in order to parent, cited by Buchanan, 1998.)

In this context, resilience is related to continuity, transmission without cut-off, and preserving the connections with the past, without letting them become so rigid as to become *perversions of freedom* (Danieli, 1991; Klain, 1998). However, once the threatening period is over, and survival

strategies and defenses have out-lived their usefulness, they may nevertheless persist, and become *adaptational styles* of the family and the culture (Danieli, 1985; Spicer, 1971).

Felsen (1998) offers the example of the Eastern European Jewry's *culturally* valued emphasis on the family. This provided the survivors with the defenses and coping mechanisms that allowed them to make the leap of hope necessary to establish new families after the Holocaust. But this adaptation also took its toll on survivors' offspring, who exhibited increased difficulties around separation-individuation. Such negative consequences must be taken into account with the potentially highly adaptive role of the family in the context of severe traumatization and loss.

The findings clearly point to the importance of cultural roots and practices in creating stability, and the deleterious and even tragic effects on future generation when the culture is weakened or destroyed. Cross (1998), too, chronicles the positive effects of culture and family strength in creating coping strategies. He explains that by resisting negative elements of the culture that enslaved them, but incorporating protective, positive, and functional ones, most notably the Christian religion, former slaves were able "to exit slavery with far more psychological strengths and resources than psychological defects and dysfunctionalities."

MECHANISMS OF THE TRANSMISSION OF TRAUMA

The mechanisms of transmission emerging from the literature range from the molecular genetic to the political, that is, from the basic biological to the complex psychological–psychodynamic constructs at the individual level, from the intrafamilial to the extrafamilial – the socioethnocultural, to the political. The authors' description and explanation of the transmission processes and contents are often determined by the dimension(s) they choose to focus on, their theoretical orientations and disciplines. Yet considering the richness and variety, the mechanisms depicted are surprisingly consistent, and few in number. Moreover, various modes of trauma transmission are not usually exclusive; rather, for most individuals they reflect some overlap and a cumulative effect. While sometimes it seems artificial to place divisions among interrelated mechanisms, researchers must isolate them in order to target appropriate interventions.

Suomi and Levine (1998) provide clear-cut evidence from prospective longitudinal experiments demonstrating that nonhuman primates are capable of transmitting long-term psychobiological effects of trauma across generations via at least three different mechanisms: observational, maternal, and prenatal. In each case the long-term effects include physiological as well as behavioral features or propensities, and in two of the three cases, the mechanisms of transmission have been documented in natural social groups

of primates living in the wild, as well as in studies conducted in laboratory settings. None of these mechanisms require language capabilities on either the initiating or receiving generation for the transmission to take place.

Aarts (1998), Becker and Diaz (1998), and Hardtmann (1998), draw on psychoanalytic object relation theories, processes, and mechanisms of transmission that deepen the insight into the pathogenesis in the second generation cite *denial, splitting*, *identification*, *projection*, and *projective identification*. One such example is the interaction between parent and child that can become a repetition of an aggressor–victim dyad from the traumatic past, after first becoming an intrapsychic conflict and subsequently, through projective identification, seeking an outlet in object relations. These mechanisms are both similar to the process of the original victimization and maintain the victimization process. On every level we psychologically or literally expel troubling matters – as individuals, families, communities, societies, nations, and the international community. A whole society can behave as if it had PTSD. These mechanisms of defense have personal as well as societal dimensions. From this perspective, the most malignant component of the transmission is the raw, unintegrated effect that has never been processed in the parents' generation and, consequently, becomes internalized in the children in another place and time.

For Ancharoff, Munroe, and Fisher (1998), intergenerational transmission refers to *thoughts, feelings, behaviors,* and *disrupted schemata or traumatic beliefs* of the traumatized parents that are generated from the survivors' experiences. The survivors transmit them to their children through *silence* and *underdisclosure*, (age-inappropriate) *overdisclosure*, *identification* – observation, modeling, and emulating (e.g., survivor's propensity for hypervigilance), and isomorphic *re-enactment*. In the latter mechanism, the survivor's trauma experience is created in the offspring, perhaps unconsciously, but forcefully, transmitting the parent's worldview.

Participants in this process are secondarily traumatized (Figley, 1983). Their affective experience is of projective identification that may generate certain countertransference reactions in psychotherapists (Danieli, 1984, 1994c). Kestenberg (1989) coins the phrase "transposition" to describe the tendency of Holocaust survivor's offspring to transpose the present into the past and to live in their fantasy during the Holocaust.

Nagata (1998) views *family relationships* as accountable to the standards of loyalty and justice upheld by previous generations, and, as such, families transmit rules, dispense "credits" for fulfilling obligations and "debits" for unfulfilled obligations. They also transmit ethnic values, family myths, loyalties, secrets, and expectations. The uncompleted actions of past generations may impinge on relationships within the new generation. According to Kupelian et al. (1998), the Armenians perpetuated a distinct ethnic identity by adapting their family structure to centuries of persecution. Functionally, presence of the *persecutory oppositional pressure*

(Spicer, 1971) became integral to multigenerational family structure and identity. *Informal* structures of transmission include *family* and *community* (e.g., food, stories, songs, friends, and language). *Formal* means include re-establishing institutional structures. The church has been central to the preservation of cultural identity, particularly against forced assimilation.

Historical trauma is rendered an *ongoing* process by *acculturation stress* and the after-effects of *racism*, *oppression*, and *genocide*. Duran et al. (1998) also point to "a less murderous form of genocide in the Native community, sometimes labeled *cultural genocide*," which refers to "actions that are threatening to the integrity and continuing viability of peoples and social groups," including the prohibition of religious freedom (Legters, 1988, p. 769).

Current classifications of mechanisms of transmission include heritability models (Kendler, 1988; Krystal et al., 1998; Schwartz et al., 1994) and the biopsychosocial (Engel, 1977, 1996). Novac (1994) and Novac and Broderick (1998) propose that the transmission of trauma includes three major biopsychosocial components: information, acquired traits, and intrafamilial traumatization (biological dysregulation), which are concomitant and potentially constant new sources of traumatization.

Examining the influence of remote historical events on recent interethnic conflicts in the former Yugoslavia, Klain (1998) describes the multigenerational transmission of "inherited" emotions in the former Yugoslavia from psychoanalytic and group analytic points of view. Processes and mechanisms of transmission such as *paranoid projections fed by stereotypes, group superego,* and *group memory* lead to transgenerational remembrance of injury, murder, and destruction that are laid at the door of the "enemy people" or nation as a whole. He differentiates between vehicles of transmission, termed *mediators of "inherited" emotions*, and *what* they transmit. The mediators of *"inherited" emotions* are the *patriarchal family*, the *superego*, *folklore*, *church/religion*, and *myths*. These powerful mechanisms transmit *deep hate and rage*, *revenge*, *guilt*, *shame,* and *authority*. They also operate on larger groups that may encompass the neighborhood, the town or the state, conceived as a widened family of a patriarchal type, in which all authority lies in the hands of its leader. This endangers democracy for the present and future generations. Certain cultures thus actively encourage the conspiracy of silence.

Simons and Johnson (1998) examine competing explanations for the intergenerational transmission of domestic violence in three generations: role modeling, family relationships, and antisocial orientation perspectives. In contrast to past research findings that children who witness violence between their parents or who are subjected to severe physical discipline often grow up to be violent toward their spouse and offspring, consistent with criminological theories, their findings show that the relationship between childhood exposure to domestic violence and the perpetration of such behavior as an adult is mediated by the extent to

which the person displays an antisocial orientation acquired in childhood as a result of ineffective parenting.

THE IMPORTANCE OF CULTURE AS TRANSMITTER, BUFFER, AND HEALER

Culture is integral to understanding the predicament of survivors' families, particularly where cultural identity plays a role in their victimization. The very notion of intergenerational transmission is implied in the concept of culture (Marsella, Friedman, Gerrity, & Scurfield, 1996, p. 117), and "bears directly upon the puzzle of how society is possible" (Elder et al., 1986, p. 295). In a multidimensional approach, healing in some cases requires restoring the *cultural context* and culturally appropriate therapies.

Kupelian et al. (1998) review the crucial role of culture – family, community, language, church – in maintaining Armenian identity in the diaspora. Kinzie, Boehnlein, and Sack's (1998) study of the effects of massive trauma on Cambodian parents and children and Rousseau and Drapeau's (1998) examination of the impact of culture on the transmission of trauma among Southeast Asian and Latin American children point to the traumatic effects of the destruction of culture.

Culture influences how the impact of trauma is mediated, and cultural continuity can play a protective role while facilitating the grieving process. Trauma-related *accelerated de-acculturation* is noted as a major after-effect of internment (loss of Japanese language and culture along with continued uncertainty about their status) (Nagata, 1998) and emphasized in Kinzie et al. (1998). The cumulative, unresolved *historical trauma* of the intentional, brutal, and largely effective efforts to destroy indigenous cultures as part of colonization, is "enduring and unquantifiable" (Raphael et al., 1998), and perpetuated by the continuing destruction of their culture and disruption of any effort to pass it down to future generations (Duran et al., 1998; Gagne, 1998). Its final irony is that to survive, people often must assimilate into the very culture that has destroyed their own (Duran et al.; see also Kleber, 1995; Robin, Chester, & Goldman, 1996).

Odejide et al.'s (1998) analysis of the Nigerian civil war points to ethnic clashes based on differences in cultures as one of the major reasons for war. As in the cases of succeeding generations of Cambodians and Japanese, a major consequence of intergenerational transmission is shown to be the breaking down of social values. Their recounting of fiction to tell this story is unique as a technique rich for anecdotal information and comparisons. Hunter-King (1998) finds that "typical" military wives who have firmly adopted the "military culture" are more likely to rear children who can adjust to their father's MIA status.

Given the strong role of the destruction of cultural foundations in intergenerational transmission of trauma, one cannot overemphasize the importance of incorporating elements of traditional culture into the *healing* process through the development and usage of culturally appropriate therapies. Duran et al. (1998) insist on the necessity for cultural revitalization that would include "indigenous therapies" to replace the hegemonic approach of "postcolonial therapies" based on European concepts of healing. However, they also recognize the need to combine the modern (i.e., psychotherapy) with traditional ceremonies. Raphael et al. (1998) agree and list several approaches that build on aboriginal holistic views of mental health.

Some authors mention the need for therapy that is less centered on the individual and family, as in the west, and more oriented to groups, societies, communities, and nations. Societies, cultures, and religions differ in their emphasis on the individual versus the social/collective.

The concept of culturally sensitive therapies leading to the restoration of traditional skills and values when combined with a program of national reconciliation, offers hope to the remnants of indigenous people, as well as to former warring parties. In bringing people together who were on opposite sides during civil wars, the emphasis is often on children and on utilizing group treatment modalities. A central challenge is to transform the destructive use of culture into a healing one.

Illuminating as they are, all these studies demonstrate the need for future research on the relationship between culture and traumatization on succeeding generations.

SOME RECOMMENDATIONS FOR THE FUTURE

As yet, empirical research in the field of intergenerational trauma is in its infancy but its social and public health significance is ever growing. Given a life-time PTSD rate of 7.8% in the US general population (Kessler, Sonnega, Bromet, Hughes, & Nelson, 1995), even if only a minority is or will be involved in parenting, the number of children upon whom intergenerational effects will have an impact is enormous. In groups and societies where the rates of trauma exposure are much higher, an even greater proportion of the population is affected, with consequent intergenerational implications.

1. Researchers should attempt not only to understand the legacies of unique experiences but also to clarify the impact of differing cultural and situational factors on traumatic response. Some analyses of intergenerational patterns reveal significant between-group differences, while others do not, and the combination of survey and in-depth interviews was particularly useful in uncovering such a range. Prospective investigations of the intergenerational

psychobiological consequences of stress in human populations are also sorely needed, but as Suomi and Levine (1998) acknowledge, such studies are more feasible and practical in animals than in humans. Of course, longitudinal observational human studies will be informative (see Elder et al., 1986).

2. We need to compare similar populations, particularly where there is only rudimentary information to draw inferences from. Multidimensional cross-cultural comparisons that identify and assess sources of resilience are needed. Systematic comparative studies of individual and societal traumata, as well as families in which one or both parents have been traumatized should be carried out. Researchers should strive for agreement on definitions, rather than using ad hoc terms that can undermine the discipline.
3. In planning multicultural comparisons, investigators should consider the relative centrality of the family, and differing emphases on the individual versus the collective/social in different cultures.

Clinical Considerations

The recognition of trauma's long-term impact on one's personality and adaptation and the *intergenerational* transmission of victimization-related pathology still await explicit inclusion in the diagnostic nomenclature. Until they are included, the behavior of some survivors, and some children of survivors, may be misdiagnosed, its etiology misunderstood, and its treatment, at best, incomplete. While many of the clinical features fit the syndrome of PTSD, many offspring of survivors of trauma, however, struggle with problems of a psychosomatic and/or characterological nature still not included in the construct of PTSD (Note posttrauma adaptational style above; see, for example, discussion in Danieli, Engdahl, & Schlenger, 2003).

Moreover, the trauma and the continuity of self: A multidimensional multidisciplinary integrative (TCMI) Framework is needed to understand and treat trauma along all dimensions and across cultures. Thus, to meet the complex needs of survivors and their families, any program must be comprehensive, integrative, and linked to formal and informal networks of all relevant services and resources in the local and global community.

Clinicians working with indigenous people must develop competence in the local culture in order to correct the persisting cultural hegemony of Euro-American therapeutic models that follow a postcolonial paradigm.

1. Take a full intergenerational history of trauma and PTSD evidence as a routine part of history-taking and diagnostic evaluations. This is particularly true for "children" who meet criteria for PTSD, and those who often fail to present family background. As the history is

being taken, the principle of integration should inform the choice of therapeutic modalities or interventions. The central therapeutic goal is to integrate rupture, discontinuity, and disorientation.

2. Construct a multigenerational family tree. Although this may trigger an acute sense of pain and loss, it serves to recreate a sense of continuity and coherence damaged by the traumatic experiences. One invaluable yield of exploring the family tree is that it opens communication within families and between generations and makes it possible to work through toxic family secrets.
3. Break the silence about traumatic experiences within the family. This is generally helpful in (family) therapy, but it is particularly crucial for aging survivors and their offspring (Danieli, 1981a, 1994b). Whether family therapy is feasible or not, and regardless of the therapeutic modality used, individuals and families should be viewed within the context of their multigenerational family tree, with its unique dynamics, history, and culture (Danieli, 1993).

All the findings have far-reaching implications for the *prevention* of social and political upheaval.

Issues and Populations Warranting Further Exploration

Studies on the multigenerational legacies of natural disasters should be extended to focus on children born *after* the trauma.

The role of gender in the transmission of traumatic history should further be explored cross-culturally. Baker and Gippenreitner (1998) also highlight the special role of women as *messengers* of family values, traditions, and memories.

An increasing number of populations face the daunting circumstances of conflicts and difficult living conditions, and ongoing chronic traumatic stress that spawn multigenerational consequences. It would be valuable to study the sources of their resilience and vitality important not only for them but also for the communities of which they are part, as well as internationally. It is therefore both a clinical and a social policy task to incorporate the TCMI framework in designing longitudinal intervention, postvention, and prevention programs. Future research should systematically explore the interaction between various dimensions included in the framework.

ON JUSTICE

In a recently published interview, Judge Richard Goldstone (1995), who at the time was Chief Prosecutor for the War Crimes Tribunals for the Former Yugoslavia and Rwanda, stated: "I have no doubt that you cannot

get peace without justice. . . . If there is not justice, there is no hope of reconciliation or forgiveness because these people do not know who to forgive [and they] end up taking the law into their own hands, and that is the beginning of the next cycle of violence. . . . I don't think that justice depends on peace, but I think peace depends on justice" (p. 376).

Multigenerational findings uniformly suggest that the process of redress and the attainment of justice are critical to the healing for individual victims, as well as their families, societies, and nations. Klain (1998) underscores its importance for succeeding generations, "to break the chain of intergenerational transmission of hatred, rage, revenge, and guilt."

Justice is understood here both in terms of the administration of a formal and fair judicial process and the implementation of judgments of courts, and in terms of the complete reparation to victims by governments and by society as a whole. This process must include the investigation of crime, identification and bringing to trial of those responsible, the trial itself, punishment of those convicted, and appropriate restitution.

In connection with a study done in 1992 for the United Nations Commission on Human Rights examining the "Right to restitution, compensation, and rehabilitation for victims of gross violations of human rights and fundamental freedoms" (Danieli, 1992; see also Stamatopoulou, 1996), I suggested a number of essential elements. These include re-establishing the victim's value, power, and dignity; rehabilitation, restoration, and compensation; and recognition and apology, followed by commemoration, memorials, and continuing education. Finally, the provision and maintenance of justice must be (re)incorporated into the legal structure, with mechanisms for monitoring, conflict resolution, and preventive intervention.

In many cases, the achievement of all the elements of justice proved elusive. But all are key factors in the intergenerational transmission of trauma.

Victims and their offspring who have been wronged by a government or society, for example, find it considerably more difficult to begin the healing process if the responsible individuals cannot be identified and punished for their crimes (Cross, 1998; Duran et al., 1998; Gagne, 1998; Raphael et al., 1998).

The attempted genocide of the Armenians stands as one of the most grievous instances of injustice to this day, one in which none of the necessary steps for resolution of the trauma have been taken by the perpetrators, the Turks (Kupelian et al., 1998). Not only does the current generation of Turks refuse to acknowledge, apologize, and compensate for the genocide, its ongoing campaign of denial, delegitimization, and disinformation affects the Armenians as a psychological continuation of persecution.

Impunity, by definition, is the opposite of justice (Roht-Arriaza, 1995). Why, then, would it be embraced? One reason – in parts of Latin America and South Africa – is that it was required by military dictatorships or the racial minority government for relinquishing power or negotiating a peace

settlement (Shriver, 1995). A second reason for accepting impunity is the belief that "forgive and forget" is the route to follow in order to heal societies torn apart by conflict. However, the critical question remains: What does it do for a society if individual and group claim to justice are set aside in the name of what is purported to be the greater good?

The creation of "truth commissions" seems to be an integral tool of justice. In many cases, however, such commissions have not identified those responsible and have been accompanied by amnesty laws or pardons that enshrine impunity (see the Guatemalan Commission on Clarification of the Past). In South Africa's Truth and Reconciliation Commission, pardons were granted for any actions taken during the *Apartheid* years if they were for political reasons and there is full disclosure. Simpson (1998) scathingly criticizes it, calling this "flight into reconciliation" an imposed conspiracy of silence that fails to deal with the multigenerational effects of trauma, and states that this process is a poor substitute for justice for individuals or groups of victims. He tells of a South African mother who, seeking punishment for her son's killers of a year ago, was told not to rake up the past! For the victims, according to Edelman, Kordon, and Lagos (1998), impunity has become "a new traumatic factor" so detrimental that it renders closure impossible. For their societies, moreover, impunity may contribute to a loss of respect for law and government, and to a subsequent increase in crime.

International justice has acknowledged this. One significant trend countering such amnesties and pardons is found in the creation by the United Nations Security Council of several ad hoc international criminal tribunals and of the permanent International Criminal Court.

Emboldened by the world's indifference to the Armenian genocide, Hitler proceeded with the systematic attempt to annihilate the Jewish people. Much preventable pain is likely to occur in the future if atrocities are not stopped, and justice not done in the present. The struggle for victims and the generations that follow them is to defy the dominance of evil and find a way to restore a sense of justice and compassion to the world. Victims/survivors of trauma feel a need to bear witness, to speak the truth, and to urge the world to ensure that such injustices never happen again. But some cannot say "never again" because it has happened again – in Cambodia, Rwanda, Bosnia, Sudan, and elsewhere.

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Chapter 5

Refugee Assessment Practices and Cultural Competency Training

Richard H. Dana

INTRODUCTION

Over 20 million displaced persons have relocated in Asia (49%), Europe (21%), and the Americas (10%) (UNHCR, 2003). Victimized by torture, trauma, imprisonment, and human rights violations, these unwilling immigrants are burdened by extraordinary psychological, emotional, physical, and acculturative sources of distress, resulting in an international dilemma. Resettlement in host countries may necessitate mental health services, healing of core adaptation systems, and succor for housing, employment, language, and coping skills necessary for survival and psychological well-being in unfamiliar cultures.

Although psychopathology is not an inevitable aftermath of trauma, refugee distress is frequently translated into psychopathology for conformity with Western health/mental health care resources. Follow-up studies generally suggest progress toward adaptation in host societies over time for acculturated and settled ethnic minorities. However, services for recent immigrants are generally poorly informed by research knowledge of their originating cultures. Service providers are frequently unaware of refugee and ethnic minority service needs and uninformed by cultural competency training. Moreover, in the United States, an ethnic minority "critical mass" of approximately 30% in the general population and among mental health professionals has provided an impetus to move from advocacy toward implementation of more equitable services for some populations.

This chapter appears in the theoretical–conceptual section because assessment per se is implemented within host societies in concert with established mental health/social care policies and systems designed for their own majority populations. A focus on refugees or settled ethnic

minorities invokes unique, complex, and poorly understood issues concerning the important role of culture in mental health and social care services. Comprehensive assessment is required for refugees because mental health and acculturation issues coexist and must be addressed simultaneously by a number of disparate areas within each host society with different instruments, methods, and modalities. Comprehensive assessment also implies that assessment objectives and interventions must be considered simultaneously because they are coextensive, interpenetrating, and essential service delivery components. This chapter begins by examining macro issues reflected in the climate of "welcome" for refugees, immigrants, and resident ethnic minority populations by political actions, scientific perspectives, health/mental health policies, and societal attitudes.

"WELCOME"

General Issues

The extent and ability of host countries to meet refugee needs varies with their adherence to World Health Organization (WHO, 2000) standards for population health, health disparities, system responsiveness to individuals, socioeconomic status, and cost-effectiveness. These WHO rankings for major host countries are relatively high and in stark contrast with refugee countries of origin, although the potential level of available support in host countries varies with economic stability, distribution of wealth, and willingness to meet the needs of specific population elements. The magnitude of cultural differences between originating and host societies is relevant for immediate and long-term refugee responsiveness to mental health care, social care, and acculturation demands. Although host countries agree on a status determination process for asylum seekers, they differ in acceptance rates and official/unofficial "welcome" for refugees and other immigrants. This "welcome" process has special relevance for societal willingness/reluctance to employ specific assessment and intervention resources.

A complex interaction of variables composing societal "welcome" facilitates or inhibits simultaneous coordination of resources to reduce refugee trauma effects and meet acculturation demands. Existing political relationships with refugee countries of origin affect how societies employ resources for some or all of their citizens and other residents. In the Netherlands, for example, although there are roughly equivalent numbers of immigrants and refugees from Surinam, Morocco, and Turkey, the Surinamese integrate more readily into Dutch society (Watters, 2002).

"Welcome" considerations thus include historical relationships and trade associations, established migration routes, memories of colonialism, wars, and relative openness of borders. Socialistic, capitalistic, and authoritarian societies have different rules, priorities, expectations, and social policies for immigrants and resident citizens. Majority population attitudes toward refugees in general and those from specific countries are affected by the percentages of refugees in the population and by competition for mental health resources and available jobs. In contrast with the United States, many European countries place greater social value on children and families, and prioritize their resources accordingly. Social policies vary with socialistic or capitalistic ground rules and individualistic–collectivistic social attitude differences (Triandis, 1995). Similarity–dissimilarity between refugee and host societies in worldview, religion, health/illness beliefs, and values provides a basis for social attitudes and majority population comfort with immigrant refugees and permanent ethnic/minority residents.

Scientific "Welcome"

Currently, there are separate and parallel versions of what constitutes a legitimate science for mental health and human well-being. In the United States, Kimble's standard science (1984) provided selection criteria for students in scientist-professional psychology training that contrasts with a contemporary human science training agenda. Standard science favors value-neutrality, objectivity, nomothesis, and power differentials as opposed to human values, intuition, idiography, and equalization of power. Standard science prefers narrow definitions of evidence from validated techniques rather than simply empirically supported and effective, research-informed information employed by a local clinical scientist on the basis of "previous experience and clinical intuition" (Stricker, 2006, p. 6). Polkinghorne (2004) distinguished between technically based standard science and judgment-based practice prioritizing professional judgment for positive outcomes of goal directed human science activities. Both Stricker and Polkinghorne argue for a human science liberated from narrowly defined methods predicated on the subject–object dichotomy in physical science that is incomplete for understanding human problems.

Standard science research conditions represented by laboratory control maximize treatment outcomes rather than research conducted under typical clinical conditions with representative patients and practitioners. Standard science values human constants/traits identified by general laws of human behavior and Western service providers maximize similarities among human beings and minimize their differences by seeking nomothetic answers to idiographic questions (Levine, Sandeen, & Murphy, 1992).

Etic and *emic* were terms employed originally by cross-cultural psychologists. *Etics* focus on universal/culture-general loci of investigation

for assessment instruments and interventions while *emics* are culture-specific/language-specific alternatives for understanding individuals in their life contexts. Etic instruments premised on five factor personality dimensions are touted as universal (McCrae & Allik, 2002) but criticized for limited fidelity and omission of local emics (Triandis & Suh, 2002). A psychocultural scoring system for the Thematic Apperception Test (TAT) assumes the universality of 10 basic human needs expressed differentially in a number of cultures (Ephraim, 2000) by emic equivalents. Although there are cross-cultural interpretation limitations for Rorschach, TAT, MMPI-2 due to their Euro-American origins, these instruments can yield culturally sensitive information on strengths and human adaptation (for practice examples, see in chapters 9–12, Dana, 2005a). For children and adolescents, the Tell-Me-A-Story Test (TEMAS; Costantino, Dana, & Malgady, 2007) was designed and explicitly constructed as a universal instrument with culture-specific or emic-normative data for applications with multicultural populations. Resolution of the etic–emic false dichotomy is now feasible in assessment research within a human science.

A human science has been described and advocated throughout my professional lifetime (Dana, 1966, 1982, 1987, 2005b, 2006a). Contemporary harbingers of this new science include the primacy of human judgment in professional practice, ethnic minority research adaptations of assessment instruments, and counseling/psychotherapy methods, as well as a positive psychology embracing human potential, strength, and resilience. Only a human science can provide comprehensive assessment of human differences (individual and cultural) that requires culture-specific assessment as well as healing and training to legitimize positive psychology and advocate social responsibility for nurturing human potential.

European "Welcome"

A mapping exercise using a 30-item survey examined definitions, boundaries, and service delivery contexts for European mental health and social care (Watters, 2002). This survey, completed by service providers and organizations in 16 countries, included *monitoring/research knowledge, specialist services, professional training, user involvement, access to talking treatments, and racism/xenophobia issues*.

These results in Table 1 suggest a paucity of consistent policies and only limited monitoring of services. Research findings providing cultural knowledge of ethnic minorities are available in only a few countries, primarily in urban settings and national centers of excellence. These centers exert little influence on professional practitioners routinely responsible for client welfare. Specific services for resident ethnic minorities are available in four countries. Although most countries recognize training deficiencies, only the Netherlands provides opportunities for anthropologists

Table 1. Comparisons of Ethnic Minority Mental Health Practices in Europe and the United States

Practices	Europe	United States
Monitoring/research	No research on migrant groups in 12 countries. Research in the Netherlands, Spain, Sweden, and United Kingdom (UK) where some monitoring of access to mental health services also occurs	Advocacy for culturally competent research methodology with notable empirical knowledge of specific ethnic/racial groups and some understanding of assessment bias and intervention limitations. Research applications in professional training are meager within and across mental health professions
Specific services	No specialist services in 12 countries. Unevenly spread urban services in the Netherlands, Sweden, Switzerland, and UK for minority ethnic groups but not for refugees. Seven countries have single centers of excellence in NGOs/academic departments	History of culturally competent services in culture-specific mental health settings but not in public sector managed care nationally. Cultural sophistication differs greatly between states. National policy differentially prioritized and implemented by each state
Professional training	Thirteen countries express concern with quantity/quality of training; 5 countries report no training; 9 had very little. The Netherlands has more widespread training for services to resident ethnic minorities but not for refugees	Health policy prioritizes cost-effective medical services and subordinates mental health care by preferring symptom-focused pharmacological or psychological interventions requiring less professional time. Professional training commitment meager for comprehensive assessment and long-term treatment options
Counseling/psychotherapy	Eleven countries report availability in theory but not in practice. Services exclusively for majority population in national language. Special service facilities for refugees in Belgium and UK	Talk therapies available in private sector but increasingly restricted to manualized cognitive-behavioral approaches in public sector without adequate, research-supported tailoring for ethnic/racial populations
Service user involvement	Two countries report consultation mechanisms; 5 cite rare examples. User satisfaction with services not reported. Minority coordinators only in the Netherlands	Research history of client-therapist matching for gender, race, ethnicity, and language. Advocacy for racial/ethnic minority community input for

Continued

Table 1. (*cont.*)

Practices	Europe	United States
		culturally competent research or practice oversight has not been implemented in mental health professional training
Racism/xenophobia in services	Nine countries report no research; 7 find racism in services; 5 see no major problem. But general uncertainty across countries, similar to presence in each society	History of continuing racism, increasing political power, and competition for mental health resources among ethnic minority groups

Note. Columns 1 and 2 are adapted from Watters (2002). Copyright 2002, Taylor & Francis Ltd.

to consult in mental health settings. No cultural competency training is available for other professionals and ethnic minority mental health providers are few. Ethnic minority clients are rarely queried for satisfaction with services. In Europe, bicultural–bilingual service providers may be a complex and imperfect option because they are acculturated within host societies and may subsidize service-led systems by fitting refugee experiences into "predefined biomedical categories" (Watters, 2001, p. 1712). Insufficient attention to translation of these experiences into personal, idiosyncratic, culture-specific idioms of distress inherent in the trauma story may artificially tailor refugee trauma experiences toward resolution exclusively by service-led, host culture systems. European systems are thus incomplete without genuinely culture-specific assessment and intervention ingredients that respect refugee cultural circumstance and cultural identity. Table 1 compares European survey findings with inferences from ethnic minority mental health practices in the United States.

The omission of *assessment* as a topical category in the European survey is puzzling. Assessment bias has been examined comprehensively in Europe (e.g., Van de Vijver, 2000) while translation and adaptation of psychological tests for cross-cultural assessment is a mission of the International Test Commission (e.g., Hambleton, Merenda, & Spielberger, 2005). Major assessment instruments preferred by practitioners are similar in Spain, Portugal, and Latin America to those employed in the United States (Muniz, Prieto, Almeida, & Bartram, 1999). Europeans, however, may employ a broader range of instruments with all of their assessment populations (Dana, 2006a) and their conceptions of comprehensive psychological science of assessment retain many originally European components now largely omitted in the United States.

United States "Welcome"

Early immigration to the United States from Europe was primarily for political and economic reasons. Later, Asian, Latin American, and African refugees, asylum seekers, and workers fled persecution, genocide, and poverty. A melting pot philosophy of nation building resulted in gradual acceptance of successive immigrant groups over time as a byproduct of acculturation including fluency in English, employment, and assistance from earlier resident immigrant communities. Racism accompanied slavery for involuntary African immigrants, followed by civil war, and an unremitting struggle for civil rights. A history of unequal, substandard health/mental health services for these visible racial minorities (Dana, 2000a) continues to the present with limited access to mental health services and disparities in quality care (Snowden & Yamada, 2005).

Over time, however, the multicultural minority population in the United States has increased dramatically to become the majority population in California and Texas. The ethnic minority population in the United States is now approximately 31% (U.S. Census Bureau, 2004), 27% of graduate students in psychology have minority origins (Norcross, Kohout, & Wichierski, 2005). A "critical mass" of approximately 30% ethnic minorities in Counseling Psychology provides advocacy for implementing cultural competency training. Caucasians will be a minority in a multicultural society by 2050 with a diminishing middle-class, residential group segregation, and intense economic competition between groups. A critical mass of ethnic/racial minorities is approaching in major European cities and may eventually be present in European countries as a consequence of differential birthrates despite increasing restrictions on immigration.

Contrasting Perspectives in Europe and the United States

In the United States (Table 1), *monitoring/research* has provided an expanding edifice of multicultural research knowledge, particularly with regard to culture-specific interventions for ethnic/racial minorities (e.g., Dana, 1998; Miranda et al., 2005). This research increasingly employs culturally competent research methodology (CNPAAEMI, 2000), although the centrality of culture in all phases of mental health research remains incompletely disseminated and practiced (Sue & Sue, 2003).

Beginning during the 1980s, *specific services* for multicultural populations were available historically in culture-specific mental health settings. Many of these effective settings did not survive policy consolidating health and mental health care. Within the last 10 years, several states with large urban, minority populations have responded to national initiatives for culturally competent services, including the Surgeon Generals' Report (U.S. Department of Health and Human Services, 2001). In California,

a legislated mandate for cultural competency increased the numbers of bicultural–bilingual staff, implemented compulsory in-service training, expanded the range of treatment options, and required routine monitoring and evaluation of service outcomes (see Dana, 2006a). Matching clients and service providers has been generally accepted as providing limited benefit.

Professional training for cultural competency, central to Counseling Psychology, has been minimized in other professional psychology programs and in other health/mental health professions. A review of these training needs and practices in all mental health professions noted selective attention to cultural competency issues and an urgent need for a pan-professional training model (Costantino et al., 2007, Chap. 2). Joint training programs for Western therapists and indigenous healers have been available in Puerto Rico and the Navajo nation (Dana, 1998).

Counseling and psychotherapy in the United States is increasingly focused on manualized, short-term applications, particularly cognitive-behavioral approaches. These approaches are of questionable benefit for multicultural populations unless cultural identity and acculturation status are addressed by assessment procedures and cultural issues are embedded in all phases of treatment (Tanaka-Matsumi, Higginbotham, & Chang, 2002; Vera, Vila, & Alegria, 2003). Professional acceptance of these treatments has become increasingly contingent on applicability standards documented by empirical research.

Ethnic minority *service user involvement* has increased dramatically as clients and professional providers/consultants as well as nonprofessional community advocates. Nonprofessional indigenous healers have generally functioned independently in the community (Dana, 1998, 2000b) while ethnic minority professionals have served as consultants to agency management and service providers in communities with small and diverse minority populations (e.g., Dana & Matheson, 1992). Nonprofessional community individuals participate in qualitative research and as peer reviewers/evaluators of mainstream services/service providers for multicultural populations.

Racism/xenophobia is a worldwide phenomenon, exacerbated at present by confrontation and internecine religious warfare. Despite a critical percentage of ethnic/racial minorities in the United States, mental health systems address their needs poorly and contribute to continuing ethnocentrism, racism, and oppression (Carter, 2005).

ASSESSMENT PRACTICE IN THE UNITED STATES

Comprehensive assessment practice has been questioned by claims that the Rorschach and other projective methods are harmful to clients and lack scientific credibility (e.g., Wood, Nezworski, Lilienfeld, & Garb,

2003), allegations refuted by the Society for Personality Assessment (SPA, 2005). Managed care policy provides incursions on comprehensive assessment by severe restrictions on compensated time and increasing use of brief diagnostic measures and symptom checklists (Camara, Nathan, & Puente, 2000). These diagnostic instruments lead to symptom alleviation with pharmacological and cognitive-behavioral interventions in lieu of long-term, diverse treatment modalities consistent with full spectrum assessment objectives. Assessment training has diminished in quality (Clemence & Handler, 2001) and comprehensive assessment training limitations are recommended (American Psychological Association, 1999; Sanchez & Turner, 2003).

A re-examination of assessment training (Dana, 2006c) provides expert evaluations of competency with the Rorschach, TAT, and MMPI-2 and adaptations of these instruments for resident ethnic/racial minority populations. In contrast with the magnitude of published interest in culturally competent *counseling/psychotherapy* techniques described earlier, biased research has diminished the usefulness of refugee assessment literature (e.g., Keyes, 2000). Few opportunities for multicultural assessment training are available to professional psychologists in the United States (Dana, 2002). In Europe, multicultural assessment training has not been reported in academic or clinical settings, although major universities in Italy and Israel are now planning such programs. Only one instrument has been explicitly designed and normed for multicultural populations (e.g., TEMAS; Costantino et al., 2007), but professional psychologists ordinarily do not receive TEMAS training and additional new culturally sensitive instruments are sorely needed. An international handbook of cultural competency training resources has been designed to stimulate awareness of the need for training resources (Dana & Allen, in preparation). Given these cross-cultural assessment issues, it is not surprising that inadequate cultural knowledge adversely affects refugee and resident multicultural populations.

MULTICULTURAL ASSESSMENT OBJECTIVES AND INSTRUMENT EXAMPLES

This section identifies assessment objectives and available instruments to introduce larger service delivery issues linking assessment and intervention. First, assessment objectives of psychopathology, holistic health, and acculturation require a variety of specific instruments in each assessment domain. Second, employment of domain-specific instruments requires parallel development of relevant intervention and healing resources. Third, deficiencies in comprehensive knowledge of refugee populations necessitate improved and supplemental assessment research methodologies

(e.g., Allen & Dana, 2004). Fourth, in addition to these issues, assessment of refugees and immigrants requires explicit multicultural training resources (e.g., Dana, 2005a) and opportunities for supervised practice with these (Allen, 2007).

Assessment objectives, identified in Table 2, suggest ingredients for understanding human beings and providing healing for emotional distress and problems in living within a human science approach. A comprehensive assessment science can resolve contemporary disputes concerning the nature and content of this science and provides equitable assessment for multicultural populations. Nonetheless, refugee assessment is primarily accomplished with narrow gauge instruments (Keyes, 2000), scientifically adequate for the mainstream White majority population but biased for ethnic minorities.

This professional quandary rests on the question of whether individual and cultural differences should be endorsed and measured by comprehensive assessment objectives and instruments. For example, instrument-driven paradigms (i.e., empirical, interpersonal, multivariate, personological, psychodynamic), compared for one Native American (Wiggins, 2003), illustrate remarkable differences in culturally relevant findings across paradigms. Among refugees, for example, preoccupation with assessment of psychopathology exclusively can be contrasted by an overarching necessity for a comprehensive perspective coordinating attention to trauma alleviation and healing within a context of simultaneous assistance with acculturation demands.

Table 2. Assessment Objectives, Domains, and Healing/Adaptation Outcomes

Objectives	Domains	Healing/Adaptation Outcomes
Psychopathology	Clinical diagnosis	Medical model symptom reduction
Holistic health	Core adaptation	Restore psychosocial meaning systems
	Posttraumatic growth	Stimulate direct coping with trauma
	Strength	Problem-solving skills/competencies
	Resilience	Protective factors
	Well-Being/Wellness	Physical, mental, spiritual balance
	Salutogenesis	Generalized resistance resources
Acculturation	Cultural identity	Description of acculturation status
	Ethnic identity	Development of identity components
	Racial identity	Retain/develop/understand
	Acculturative stress	Functionality in social roles
	Coping styles/skills	Employ old cultural and new host styles
	Social support	Increase comfort within host systems

Table 2 juxtaposes these comprehensive domain-specific assessment objectives (i.e., psychopathology, holistic health, acculturation) with healing/adaptation outcomes of mental health services and social care. These assessment options for refugees dovetail with healing/adaptation resources (Fairbank, Friedman, de Jong, Green, & Solomon, 2003). However, there has been insufficient attention to date with the range of resources to facilitate growth, strengths, and resiliency mediated by cultural values, beliefs, and early ethno-cultural socialization (e.g., Aroche & Coello, 2004; Dana, 1998; Marsella, 2005; Moodley & West, 2005; Pedersen, Draguns, Lonner, & Trimble, 2002).

A rough conceptual superstructure provided by Positive Psychology (Seligman & Csikszentmihalyi, 2000) embraces a broad range of cognitive, emotional, interpersonal, and religious/philosophical construct domains embodied in potential assessment measures (Lopez & Snyder, 2003). Professional consensus on terminology including well-being, wellness, and salutogenesis is lacking; the term *holistic health* used in Table 2 represents a common denominator. Consensus on holistic health domains is also lacking, although Tedeschi and Kilmer (2005) recognize measurable constructs (e.g., strengths, resilience, growth) while Lopez and Snyder suggest an extended range. Some of these domains and selected instruments lack cross-cultural correlates and construct validity. However, subjective well-being (Diener, Oishi, & Lucas, 2003), strengths (Moon, 2003), and resilience (e.g., McCubbin, Thompson, Thompson, & Futrell, 1998) have documented culture-specific correlates and components. The prevailing pathogenic-disease paradigm requires supplementation by a positive psychology advocating holistic health. Table 2 is followed by descriptive content of these assessment objectives and their domains and includes examples of specific instruments.

Psychopathology

Traumatic stress disrupts available community and social supports in refugee countries of origin. Postmigration healing, accomplished by service-led systems in host countries, is predicated on Western health policies, health/illness beliefs, a biomedical model, and Cartesian dualism. Trauma assessment includes identification of psychopathology symptoms and disorders mediated by psychiatric diagnosis leading primarily to medicalized interventions including posttraumatic stress disorder (PTSD) and other diagnoses more prevalent among refugees than other residents. These service-led systems typically minimize culture-bound syndromes/idioms, and traditional healing resources due to limited understanding of the role of culture in human distress.

Green (2003) delineated common traumatic refugee emotional, cognitive, biological, and Western-identified psychosocial stress disorders

and symptoms. Emotional distress causes biological and chemical body and brain alterations affecting general physical health (Friedman, Charney, & Deutsch, 1995). For example, PTSD, an anxiety disorder, may be accompanied by depression, somatization, anger attacks, behavioral changes, or substance abuse associated with functional impairment and disability. PTSD occurs in refugees at several times the frequency rates in host country populations.

Although related to trauma exposure, PTSD develops with differential frequency across refugee cultures of origin due to vulnerability factors (e.g., gender, psychiatric history) and protective factors (e.g., psychological preparation, religious faith, and commitment to a political cause) (Silove, 1999). PTSD diagnostic assessment thus results in treatments only infrequently incorporating indigenous and folk remedies available in refugee home countries (e.g., physical treatments for pain reduction, rituals and incantations, counseling advice/information, and medication with herbs/potions) (Hiegel, 1994).

Holistic Health

Core Adaptation. Trauma reactions and symptoms profoundly affect human adaptation systems of safety/security, attachment/bonds/relationships, identity/role, existential meaning, and justice (Silove, 1999), and several of these systems are also responsive to acculturative stress. As a consequence, trauma assessment is also concerned with nonpathological outcomes of trauma distress evidenced by disruptive effects upon core systems (Silove, 2004). An eco-social perspective abstracts and organizes the psychosocial meaning and adaptation consequences of traumatic events not ordinarily emphasized in host country health/mental health policies.

Western societies generally do not employ assessment instruments delineating the impact of trauma on core human systems. Nonetheless, assessing human functioning systems is of equivalent importance with the pathogenic implications of PTSD diagnosis for treatment in Western societies. In comparison with other descriptive categorizations including *cultural bereavement* (Eisenbruch, 1991), *traumatic grief* (Horowitz et al., 1997), or "*enduring personality change after catastrophic experience*" (Malt, Schnyder, & Weisaeth, 1996), a PTSD label may be incomplete to suggest an adequate range of healing resources. Silove (1999) recognized the difficulty in "devising accurate measures of constructs such as identity, existential meaning, and religious commitment" (p. 205).

Salutogenesis. An array of generalized resistance resources (GRR) includes commitment, coping strategies, cultural stability, ego identity, knowledge, magic, religion, social supports, and a preventive mental health orientation (Antonovsky, 1987). GRR repeatedly provide life experiences characterized by consistency, under–overload balance, and decision-making participation

(Antonosky, 1984). Antonovsky's brief, psychometrically adequate measure, Sense of Coherence (SOC), identifies a global GRR orientation relevant to the functional integrity of core human adaptation systems. SOC quantifies a pervasive, enduring, dynamic feeling of confidence that stimuli available from structured, predictable, explicable internal and external personal environments provide sufficient available resources to meet meaningful life demands and challenges. SOC components of *comprehensibility, manageability,* and *meaningfulness* provide a dispositional orientation, a relative psychological functioning constant serving to index the quality of overt behaviors under stressful conditions. SOC has been used with Chinese Americans (Ying, Lee, & Tsai, 2000) and Southeast Asian refugees (Ying, Akutsu, Zhang, & Huang, 1997).

Posttramatic Growth. Posttraumatic growth refers to the human capacity to "respond well to adversity (by) . . . positive changes in individuals that occur as a result of attempts to cope in the aftermath of traumatic life events" (Tedeschi & Kilmer, 2005, p. 233). These authors describe the Posttraumatic Growth Inventory (PTGI) and the Stress-Related Growth Scale (SRGS). PTGI accesses newly experienced perdurability discovered in new life possibilities of greater appreciation, personal strength, spiritual development, and improved relationships in a context of increasing vulnerability. Mortality issues, existential questions, and personal philosophic issues contribute to a shift in values and perspectives toward attention to everyday details in daily living. SRGS is considered as a therapeutic assessment providing immediate contents for discussion while PTGI serves as a guide later in psychotherapy.

Well-Being. Lent (2004) described psychological and social well-being as a "highly defined, delimited topic of empirical and theoretical inquiry" (p. 483). Contrasting views of human nature/good society represented by a *hedonic* or Western focus on feeling and a *eudaemonic* thinking–doing self-actualization focus were recognized. Subjective well-being may be measured by the Satisfaction with Life Scale and the Positive and Negative Affect Schedule (Diener, Lucas, & Oishi, 2002). These measures differ from a eudaemonic measure with rationally derived scales for self-acceptance, environmental mastery, positive relations with others, purpose in life, personal growth, and autonomy (Lent, 2004). Although authors have been aware of cultural differences as well as similarities, Christopher (1999) criticized Western cultural roots and a predominantly individualistic perspective.

Acculturation

A variety of information concerning immigrants as groups and individuals described by an early checklist (Dana, 1993, Table 7-1) called attention to potentially relevant acculturation issues. Silove's (1999) conceptual

framework embodied trauma effects on functioning and psychological adaptation/acculturation resettlement outcomes. Allen, Vaage, and Hauff (2006) focus on refugee acculturation as a dynamic multidimensional construct necessitating process and outcome measurement not routinely examined for refugees. These authors cited methodological flaws due to conceptual confusion or use of measures confounded with psychopathology and recommended construct validation of acculturation measures, longitudinal designs, and qualitative research understanding of causal networks.

Cultural/Ethnic/Racial Identity. Acculturation status is predicated on preferences for maintaining an original culture or affiliating/participating with a host culture. Individual strategies provide measurable attitudes identified as *separation* (i.e., maintenance of original culture), *integration* (e.g., biculturality), *marginalization* (i.e., disinterest in either culture), and *assimilation* (i.e., acculturation) (Berry, 2003).

These strategies have been measured by a small number of culture-general and many culture-specific acculturation status measures (Dana, 2005a; Van de Vijver & Phalet, 2004; Zane & Mak, 2003). The culture-general measures address both the development of ethnic identity and the relative immersion within and individual or host culture. The Multigroup Ethnic Identity Measure (Phinney, 1992) informs on the search for identity and the affiliation, belonging, and commitment components. The Stephenson Multicultural Acculturation Scale (2000) examines the relative immersion in original and host cultures. Assessment distinctions between culture and ethnic identity are relevant to the selection and application of interventions for refugees. In the United States, racial identity development and evaluation, as distinct from cultural identity, has strengthened internalized competences and provided a variety of measures of these protective factors for transgenerational consequences of slavery (Burlew, Bellow, & Lovett, 2000).

Acculturative Stress. Traumatic stress among refugees is typically accompanied by acculturative stress effects of anxiety, depression, dysphoria, and uncertainty, leading to adverse effects on self-esteem, identity, psychosocial relationships, and cross-cultural competencies (Berry, 1976). A multicultural model of stress (Slavin, Rainer, McCreary, & Gowda, 1991) suggests the culture-specific nature of stressful life events that stem from societal reactions to these groups associated with racism and/or economic disadvantage. Measurement has a long history (e.g., Berry, Kim, Minde, & Mok, 1987), but there are no standard instruments or routine assessment of acculturative stress among refugees. Acculturative stress reduction employing social supports and culturally relevant coping styles can increase comfort during acculturation, reduce reliance on formal mental health services, and lead toward quality of life in host societies.

Coping Styles/Skills. While numerous measures have been developed in Western societies, coping styles are generally believed to be culture-specific, consistent with worldviews, and implemented by societal emphasis on collectivism/interdependence or individualism/independence. Moore and Constantine (2005) developed the Collectivistic Coping Styles Measure (CCSM) for screening African, Asian, and Latin American international college students in the United States. Two subscales, Seeking Social Support and Forbearance, were related to family/friends and their deliberate avoidance. Rooted in fatalism and harmony, forbearance requires adaptation and control by underscoring acceptance of situations, recreation, and physical activity. While higher social support scores were related to psychological help-seeking attitudes, high Forbearance scores suggest minimization of psychopathology.

Hypothesized universal pan-cultural axioms are orchestrated and prioritized differentially in various societies. These axioms include social cynicism, social flexibility, fate control, religiosity, and reward for application and "promote important social goals, help people defend their self-esteem, express values, and help people understand the world" (Kurman & Ronen-Eilon, 2004, p. 192). In Hong Kong, for example, these axioms predict coping and conflict resolution styles as well as vocational interests (Bond, Leung, Chemonges-Nielson, Au, & Tong, 2004). Refugee assessment has overlooked these axioms and their associated culture-specific styles and interests.

Social Support. Intimate support is most critical but attachments to larger groups are effective for instrumental tasks (Hobfoil et al., 1991). Social support may be assessed by informal and formal techniques (Armstrong, 2006). Ecological or social network maps and connectedness diagrams are informal assessments of culture-specific family and extra-familial interactions and other kinds of appropriate helpfulness. Formal assessment using the Inventory of Socially Supportive Behaviors and Quality of Relationships Inventory identified by Armstrong (2006), and other measures reported by Moore and Constantine (2005), may miss these cultural and population-specific nuances.

TRAINING FOR REFUGEE ASSESSMENT

Comprehensive assessment objectives require an adequate instrument repertoire buttressed by in-service cultural competency training that can contribute unified assessment–intervention services as well as oversight from mental health systems and settled ethnic minority communities. These refugee assessment resources must be comprehensive in scope to address psychological and social needs for treatment and acculturation simultaneously. The broad range of assessment objectives and instrument

examples suggest the immense scope of adequate understanding needed for responsible care of human beings epitomized by traumatized refugee populations. Assessment plans must always be tailored to expectations, understandings, and survival skills nourished by the particular ethnic socialization experiences in refugee countries of origin.

In-service cultural competency training provides exposure to research knowledge of ethnic minority populations, including bias in assessment instruments and interventions. Training also increases awareness of attitudes toward these minorities and informs on social skills needed for credible service delivery. Settled refugee communities must provide input as professional service providers as well as oversight by knowledgeable community persons. As professional service providers within Western mental health systems, these individuals must maintain awareness of their own acculturation outcomes. Western providers can benefit from joint training experiences with indigenous healers to encourage mutual understanding, facilitate communication, and provide awareness of indigenous resources for healing. Although positive psychological assessment domains have been identified and described, this information per se has not reduced pathology bias in assessment nor become identified with a cohesive social–political agenda to restore the role of comprehensive assessment as a primary ingredient in quality mental health care.

These training ingredients should be conceptualized for major refugee cultures and dovetailed with recommendations for employment of societal mental health and social care resources in each host society. In the United States, the ethnic minority professional communities have been largely responsible for a burgeoning knowledge basis for practice with these resident communities. The assessment–treatment relationship has meaning and components specific to host countries and their service delivery systems are characterized as service-led for mental health care or user-led for social care (Watters, 2001). Both systems interact and reinforce each other and should be considered of equivalent importance and potential benefit.

Culturally competent public sector mental health services, predicated on use of the Multicultural Assessment Intervention Process (MAIP) model, embed cultural issues in services/service delivery with continuous monitoring and research documentation of outcomes (Dana, 2006d). Empirically established assessment–intervention relationships provide a rationale and credible research support for using a variety of brief instruments for more comprehensive assessment in systems of care. This model, mandated in California for in-service cultural competency training, uses the California Brief Multicultural Competence Training Program (Dana, Gamst, & Der-Karabetian, 2006).

PERORATION

This chapter suggests that adequate, scientifically responsible, and humane assessment of refugees must be comprehensive in nature and not simply limited to an examination of psychopathology. Comprehensive assessment, however, provides a broad range of healing/adaptation possibilities for the psychopathology, holistic health, and acculturation issues presented by refugees. A human science that embraces assessment and intervention as necessary, interactive, complementary ingredients is vital for refugees and for all human beings. Nonetheless, there are still profound differences within and between mental health professions and host societies in how this science is conceptualized and implemented.

The United Nations has assumed leadership in mobilizing international mental health resources to repair damage from disease, discrimination, domestic abuse, poverty, torture, violence, and war and restore human dignity, hope, and self-esteem (Annan, 2003), although refugee needs have been differentially prioritized and addressed within host countries. This chapter examined some parameters for an international model including the centrality of cultural issues in refugee welfare coupled with a vision of an international human science embracing research, training, and practice applications. The fact that specialized services for traumatized refugee populations are infrequent, nonmainstream, and frequently medicalized raise unrequited political and economic issues fostering colonialism and/or racism (e.g., Comas-Diaz, Lykes, & Alarcon, 1998).

National perspectives for designing comprehensive assessment–-intervention service delivery configurations within host countries were reviewed; hence the focus on the complex, idiosyncratic nature of national "welcome". These macro issues affect assessment practices, acculturation status of individuals, and treatment outcomes. Service-led, Western biomedical mental health care and user-led, social care rarely occur simultaneously as an acknowledged outcome of comprehensive assessment, although there may be exemplary settings.

There is no consensus within or between host countries on the necessity for culture-specific, research-informed assessment practices. Continuing ignorance of the magnitude of cultural differences in early socialization experiences and worldviews limit refugee utilization and benefit from available mental health services impeding the development of new services. National policy decisions and more or less consensual understandings within constituent professional communities continue to structure the nature and objectives of assessment practices. As a result, cultural competence training has been sporadic, encapsulated within each mental health profession, and politicized by national policy initiatives. Refugee assessment–intervention practices can be implemented by

integumenting culture within societal systems of care as suggested by MAIP model applications in California. Cross-national, refugee assessment applications remain hazardous despite illustrative and informative research findings. Culturally competent research and simultaneous development of training resources within relevant professional areas in host societies are of overarching importance for refugees and asylum seekers.

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Chapter 6

Wrestling with the Ghosts from the Past in Exile: Assessing Trauma in Asylum Seekers

Boris Drožđek and John P. Wilson

INTRODUCTION

Being an asylum seeker in these times of increasing fear from international terrorism, mass migrations, ongoing political violence, social and economic inequity in the world and a global search for identity of large groups of people means having a very tough existence and suffering from a breakdown in different aspects of life, including psychological well-being.

Some asylum seekers have been submitted to war, torture and political violence. Afterwards, they were forced to migrate carrying a heavy and painful burden of scars due to posttraumatic damage. They search for asylum in another country, another 'safe heaven', but get confronted with rejection from the host society, suspicion, racism and an ongoing fear of threatening repatriation. Once being a victim in the country of origin, an asylum seeker is subsequently submitted to processes that lead to secondary traumatization and victimization in a host country.

The spectrum of posttraumatic and postmigratory psychological states an asylum seeker is presenting with is a complex one. It goes beyond the definition of the posttraumatic stress disorder (PTSD), as defined in the DSM classification (APA, 1994), and includes a broad range of aberrations, including damaged core beliefs (Janoff-Bulman, 1985), dissociative states, personality changes, developmental arrest and changes in the self and identity (Wilson, 2006). The posttraumatic states are often combined with a range of co-morbid conditions, like affective disorders, psychotic disorders, personality changes and substances abuse.

When seeking help and entering psychological or psychiatric treatment, asylum seekers are usually assisted by professionals having a different

cultural background from their own. Since culture shapes help-seeking behaviour, explanation and conceptualization of disease and expectations from treatment, assessment of psychological problems in asylum seekers is often a difficult task, even for experienced clinicians not being used to performing in an intercultural setting.

This chapter focuses on assessment of posttraumatic states in asylum seekers in particular and in intercultural trauma treatment in general. Issues of historical context asylum seekers and their helpers are caught in, treatment environment, therapist's attitude and cultural sensitivity in intercultural trauma assessment will be presented. Also, the role of interpreters and the role of therapist in advocating for asylum seekers in host society will be discussed. Several case presentations will illustrate the clinical practice.

TRAUMA DOES NOT HAPPEN IN A VACUUM, NEITHER DOES THE ASSESSMENT

Traumatized asylum seekers seek refuge in another country after being persecuted, submitted to war, torture, terrorism or political violence. They have suffered from many losses – home, properties, possessions, homeland, occupation, customs and social roles within and outside the family. In psychosocial ways, some have lost their sense of personal identity and they experience a loss of continuity and self-sameness.

In resettling, they have been submitted to secondary stressors which include threats and dangers due to illegal travel, compulsory prostitution, threat of discovery and being abandoned.

On arrival in another country, they submit a request for asylum. Until this request is granted they have minimal legal rights and are unable to participate in the host society. In some European countries, asylum-seeking procedures can last more than 10 years. In the others, asylum seekers have only 48 h to present evidence of being endangered in the country of origin. In some countries, asylum seekers are imprisoned upon arrival because of not having (valid) travel documents, and they await a residence permit in prisons and closed refugee camps.

Asylum seekers are confronted with a new set of stressors due to poor living conditions in refugee camps, racism, issues of language barriers, changed family relationships and different cultural traditions in the host society. They are often ambivalent regarding their exile situation. On one hand, they feel a relief at being alive and having an opportunity to start a 'new life' in another country. On the other hand, there exist sadness due to losses and trauma experienced, and anxiety caused by not knowing how to rebuild a new existence in an unknown surrounding. After several years, even when asylum seekers obtain refugee status, these sources of stress

remain. On top of this, it is often the case that the horrors of political upheaval and war continue in their countries of origin, with family members and friends still residing there. This results in a prolonged 'uncertainty at distance' and endangers their psychological well-being, too.

Because of the above mentioned, the process of seeking asylum incurs a high risk of re-traumatization. The long-lasting threat of forced repatriation together with other psychosocial stressors can cause an exacerbation of PTSD symptoms and depression, and results in a high prevalence of psychiatric disorders among asylum seekers (Laban, Gernaat, Komproe, Schreuders, & de Jong, 2004; Silove, McIntosh, & Becker, 1993).

The strategies designed to actively discourage asylum seekers (Baker, 1992) to flee and seek shelter in another country, and the creation of the context of demonization of this population in host societies, by describing them as 'queue jumpers', 'liars' and 'profiteers', can reflect itself on the attitude and work of medical professionals engaged in the primary care of asylum seekers within reception centres or within a community. Counter-transference reactions present on a societal level are mirrored on institutional levels within health services, as well as on individual levels of health practitioners. One might presume that asylum seekers fake psychiatric problems and that they are looking for some benefits and secondary gains from referral to health services (for example, a diagnosis of PTSD can influence the procedure of seeking asylum and protect them against repatriation). Further, Western clinicians can be influenced by stereotyped opinions, stating that non-Westerners do not want to discuss the past, and that they somatize rather than psychologize their distress, even though there is a substantial body of evidence supporting the view that somatizing is the rule rather than the exception around the globe (Üstün & Sartorius, 1995).

Often there is a communication problem, too, since many health workers do not feel comfortable with using interpreters. On top of this, in many Western countries primary care workers are the gatekeepers of medical insurance companies, and they are expected to be very critical when considering referrals to specialized health services due to economic reasons.

Because of the above-mentioned reasons, primary care workers often hesitate to refer an asylum seeker with posttraumatic problems to specialized treatment services. Our study (Drožđek, Noor, Lutt, & Foy, 2003) showed that asylum seekers with PTSD were referred for treatment only after 2 years of stay in the host country, while being diagnosed with, and having suffered from posttraumatic symptoms much longer. This finding is just partly a result of client's reluctance towards seeking help with psychological problems.

To conclude with, primary care workers mostly do not approach asylum seekers with posttraumatic psychological problems in an active way.

Because of this, traumatized victims are often referred to specialized services only upon developing a major psychological crisis, and when their psychological defence mechanisms are already seriously weakened. They are seldom referred for PTSD symptoms only, but because of seriously invalidating co-morbid conditions, like suicidal and aggressive behaviour, psychotic decompensation, dissociative episodes and automutilation.

Once a traumatized asylum seeker is referred to a specialized treatment service, the question can be raised whether he/she needs psychological help or any other type of aid and intervention. Reviewing the trauma literature, Steel (2001) identified two diverging views of the cultural relevance of PTSD; one that focussed on the importance of the PTSD concept, and argued that psychological traumatization and its aftermath are the most important factors standing in the way of health and impeding reconstruction of life after trauma, and an opposing view that identifies trauma and PTSD as concepts imposed by Western traumatologists on postwar non-Western victims populations as a new form of cultural colonialism. In the latter view, the focus on individual pathology is dangerous, because of its potential to hide the political and social reality of repression and political violence (Summerfield, 1997). This may lead to a medicalization of social and political problems.

OBSTACLES IN COMMUNICATION BETWEEN A HEALTH PROFESSIONAL AND AN ASYLUM SEEKER

When focussing on the interaction between a health professional and an asylum seeker in the context of assessment of psychological problems, several obstacles can be noticed (Rousseau, Crépeau, Foxen, & Houle, 2002).

A health professional may lack understanding and awareness of asylum seeker's, and his/her own cultural, social and political context. He/she may be burdened with prejudice, stereotypes and cynicism. This results in a lack of empathy and curiosity necessary in working with patients in general, and with patients with a cultural background and communication patterns different from those of a health professional in particular. Also, clinician may experience problems with distinction of the universal reactions on trauma beyond culture from the expressions of distress that are culture-bound ('idioms of distress'). Some professionals may also massively avoid trauma stories, out of fear for vicarious traumatization, and deliberately do not ask questions focussing on victim's past. Also, a health professional may already suffer from secondary trauma and may try to protect himself/herself by limiting or avoiding contact with asylum seekers, knowing that some of them might want to disclose their painful past. Finally, a health professional's breaking of rules of

politeness and conduct can be another reason why communication with an asylum seeker can fail.

The ways asylum seekers present and express their problems to a health professional might also form obstacles in communication. Factors influencing the expression are twofold – biological damages as a consequence of trauma and culture-related issues.

Traumatized asylum seekers, just like trauma victims in general, can suffer from dissociative states, concentration problems and memory blocks and deficits, ranging from incomplete recall to psychogenic amnesia. These phenomena have a strong impact on the presentation and communication of a victim. Also, victims may have an altered perception of time and time sequence (Terr, 1983), as well as a distorted spatial perception (Pynoos & Nader, 1989) in relation to his/her trauma story. This leads to a formation of a narrative that can raise suspicion in a health professional in terms of its authenticity, and make him reserved in contact.

Culture-related issues include victim's explanatory models of trauma and reparation (Kleinman, 1978), 'idioms of distress' that victims use in order to manifest their psychological problems, cultural relativity of concepts of shame, guilt, lie and truth, as well as cultural relativity of notions and concepts, including labelling and self-definition issues. These issues will be discussed further on in this chapter.

Last but not least, the interaction between a health professional and an asylum seeker often includes a third party. This is the interpreter whose role in a matrix of communication is important, and will be discussed later on, too.

HOW TO CREATE SAFETY AS A PREREQUISITE FOR ASSESSMENT

In creation of a safe context for assessment of trauma in intercultural setting, the issues of treatment environment, therapist's attitude and cultural sensitivity are of utmost importance.

As Aroche and Coello (2004) point out, the environment where assessment takes place is important, both because it is likely to provide the very first impression about the therapist and the agency he or she represents, and because it provides important clues about the quality of the personal or agency commitment to the client. The authors plead in their intercultural work with asylum seekers and refugees for an environment that appears flexible and fairly informal, that places the comfort and needs of the client in a high priority, and that portrays, through its décor and ambience, a readiness to be inspired by other cultural influences.

Culture influences help seeking behaviour and access to counselling, that is, talking with a stranger as a way of solving problems. Culture not

only defines pain and suffering, but also what is seen as private and public pain (Helman, 1994), what should be shared with others and what must be kept as a secret. For many clients coming from cultures where disclosing personal problems to a professional stranger is not a common way of healing, the first contact with an agency or a therapist can be a fearful experience. For many of them the first contact with a therapist is the closest encounter that they have ever had with a 'representative' from the culture of the host country. Therefore it is important that the therapist, in the first encounter, provides client in a proactive way with all needed information on agency's work, makes an initial assessment of problems and shares it with the client, and compares his/her explanatory models of problems with those of the client. Also, therapist should explain the expected outcomes and risks of the assessment and treatment processes in a transparent way, and try, in case of traumatized clients, to alleviate the stigma of being a psychiatric patient. At this stage, it is also important to check the validity of the assumptions made at the time of referral about language and cultural issues impacting the choice of therapist, interpreter and any other relevant variables (Aroche & Coello, 2004).

Both, therapist and client, need to feel safe within their relationship in order to create a 'safe sanctuary' wherein assessment of trauma and its treatment are possible. Therapist can radiate safety only when he/she understands the therapeutic procedure, is aware of own mental processes, has a capacity for containment and is able to keep optimal distance. Moreover, therapist must have the ability to deal with the basic emotional movements, like love, rage and not-knowing or doubt, that are present in the encounter with a traumatized asylum seeker (Van der Veer & van Waning, 2004).

Drožđek and Wilson (2004) defined five important factors that are of critical significance in establishing a therapeutic alliance. "First, a mutually respectful relationship between therapist and client is needed. Second, the creation of trust and safety is essential and promoted by transparency, calmness and predictability of action. Reasons for assessment, and the way assessment will take place should be presented to the client at the very beginning. Third, assessment guidelines have to be respected and 'secret agendas' are not permitted. Fourth, therapists exhibit tolerance and have the capacity to 'decode messages' from their clients. These messages are sometimes 'hidden' due to different cultural backgrounds. Fifth, a culturally sensitive attitude must be adopted by therapists."

Cultural sensitivity is one of the important foundations of the intercultural trauma treatment. It is not about a specific assessment or treatment technique, but about the attitude of the therapist. This attitude can be summarized as the one wherein the therapist combines his knowledge of healing with authentic curiosity about his/her own and the patient's

cultural background. Therapist is aware of own identity, and at the same time sensible and open for explanatory models of illness, disease and healing that patient brings with into treatment. Explanatory models are influenced by culture. Culture determines understanding and conceptualizing of suffering, as well as making of a hierarchy of values and needs that underlie decision making, and influence expectations from support and treatment. Last but not least, culture shapes the therapist–patient relationship. Hereby it is important to mention that both, cultural backgrounds of the patient and the one of the therapist, shape the encounter and are responsible for the opening of the portal towards mutual understanding and healing. Therapist leads and structures the encounter, but lets the patient be his guide whenever it comes to culture-related issues that he/she cannot place into the own world view. All other aspects of therapist's cultural competence, like language skills or specific knowledge of patient's culture are welcome, but not crucial in an adequate and responsible intercultural encounter.

Some practical tips help therapists to establish a better contact, and set a client at ease. Being familiar with culturally appropriate greetings and styles of interaction can be of great help. For example, signs of respect that client shows towards therapist can vary from culture to culture – from putting a hand on the chest after shaking hands in the Middle East or North Africa, kissing hands in Afghanistan, to kissing a shoulder in Iran. Never entering a session room before the therapist is also a sign of respect clients may show. These customs convey some understanding between client and therapist that goes beyond words.

At the beginning of the interview, while making the goals of the assessment explicit, therapist can say: "*Please, let me know when I ask you questions about issues that you have trouble talking about because it is too painful and it upsets you. If you give me a sign, I will immediately stop asking you questions about this. The most important thing is that you feel safe and comfortable during this interview. On the other hand, I try, in a limited period of time, to get the best possible idea of who you are, and what you have been through, in order to be able to help you. So, I hope that we can find a compromise between my curiosity and your ability to disclose*." Using this introduction, therapist shares control over the course of the interview with a client, and lowers client's anxiety.

Shifting of the focus in the course of interview, by alternating questions about the most painful traumatic memories and the others, about less emotionally loaded issues and sources of resilience, lowers the high level of tension in the client, too.

Finally, clinician has to bear in mind that it is easier for some clients to talk about the most difficult topics in a language other than the native one. Sharing emotionally disturbing memories in another language seems to create more distance between the content of the memory and the

accompanying emotions. It protects the client from emotional overload in the course of assessment and treatment.

EXPLANATORY MODELS AND CULTURAL RELATIVITY OF NOTIONS AND CONCEPTS

The origin of problems traumatized asylum seekers are suffering from can be located differently according to their cultural background. Although a traumatized individual suffers from symptoms of PTSD as described in international classifications of psychiatric diseases, and has been submitted to man-made violence in a context of war, torture and political oppression, the origins of problems may be found within his/her own mind and/or body, but also in the family, community or in a spiritual world of ancestors and mythological accounts that explain the social and moral order (Kirmayer, 2001; Kirmayer, Groleau, Guzder, Blake, & Jarvis, 2003). According to this, when planning assessment and treatment interventions, a mental health professional together with a client has to rank the priority areas of change. In some cases, where the 'mental engineering' of individual problems is the highest ranked one, the professional is offered a space to work on the integration of fragmented traumatic experiences. This task is the closest one to the 'classically' defined professional role of the Western (psycho) therapist. In other cases, where the 'social engineering' (Van Dijk, 2006) and the reparation of the damaged social tissue deserve the most attention, practical aid must be offered in combination with symptom control, aiming at stabilization of the client as a necessary precondition for further healing. Reparation of the social tissue empowers social coherence, and mobilizes social support, enabling trauma victim to re-enter his/her social group. In the latter case, the professional has to expand and redefine boundaries of his professional role.

The way asylum seeker experiences what has happened to him/her, and why, influences the manner in which problems during assessment will or will not be disclosed.

A female client from Azerbaijan told about her traumatic experiences, but was surprised when the therapist made a link between her current suffering from PTSD symptoms and her rape in the context of ethnic cleansing. "It does not have to do anything with the politics, it is a punishment of God, because I have had a secret relationship with a man before I got married" she told.

A male client from Congo was surprised that he was referred to a 'doctor'. "I am not going to answer any of your questions" he said," I am not sick. I am just a bad man and a bad son of my father. I must suffer". When the therapist continued to ask questions about client's conviction of being a worthless person, the client disclosed that he feels so because after his escape from the prison where he

was tortured, his father who helped him to flee from the country, was killed by the authorities. "The spirits are punishing me, and are going to retaliate".

Explanatory models influence also the making of priorities of what damage has to be repaired first, and whether a medical intervention is needed, or one expects reparation on a social level.

A client from South East Asia found difficult to answer questions during the assessment. "You can not help me with my problems. What bothers me is that my house altar and our graveyard got destroyed when our village was burned down. The spirits of the ancestors are angry because of this and they are chasing me. I have not taken appropriate care of the ancestors' graves. This is why I can not sleep and I keep dreaming of my house burning, over and over again. I need help in constructing a new house altar; this is what I am looking for, this is what will bring peace to my mind."

Across cultures individuals can have different definitions and labelling of what they have being through. This can cause misunderstandings or underestimation of traumatic experiences during assessment. Shame, guilt or cultural relativity of concepts of lie and truth can impede collecting a trauma story in the assessment phase.

A woman from Tschechnya told during assessment about her escape from the country, and the war that was going on. She lived in a secluded village, and disclosed that she was not submitted to violence. When therapist asked questions about rape, knowing that it was used as a weapon of ethnic cleansing in that country, client told that she was not submitted to anything like this. However, in the same interview she disclosed suffering from many PTSD symptoms. Many months later, the woman shared that she was forced to a sexual intercourse with a neighbour, one night when he came home drunk from the frontline. She has not told the story before, because she was ashamed of it, and nobody should know about this incident. "If I do not talk about it, it did not happen" told the client. Otherwise her father and brothers should retaliate and kill the perpetrator or someone in his family. She should be killed, too, or leave the village forever. What happened to her was shameful for all her family, and that is why she had left the country. Another reason for not disclosing the rape earlier is that she did not consider the incident a rape, since she knew the perpetrator. "Rape is when you are forced to have an intercourse with a stranger" she told.

It is important to mention that a way of solving problems by discussing them thoroughly, and the attitude according to which 'all can be said within treatment', are the phenomena rooted in the Anglo-Saxon culture of the Western world. In many other cultures problems are solved by searching for ways to find a new balance without even naming the roots of a problem. In assessment of trauma stories it is therefore very important not to insist on complete transparency at all costs. Clinician must have the capacity to tolerate the existence of 'secrets' and taboos in therapeutic contact. What is considered as shameful in one culture cannot be generalized across cultures. One has to be aware of his/her own cultural

bias when assessing and treating trauma victims with other cultural backgrounds.

While asking questions about traumatic events experienced in the past, the therapist named rape as one of the possibilities. The client, a young Afghan woman, did not reply, but it was obvious that she felt uncomfortable and anxious. She looked down, cringed and started touching her breasts. The therapist was aware of the message that the client was communicating without words. He continued the assessment interview, and started formulating his questions like: "Lots of women who have experienced awful things, have problems talking about it, . . . Although they try to forget, they are still chased and terrorised by dreams and memories of those events, . . . But experience learns that talking about it might be helpful, ... We can also continue talking about it without naming it, ... We can call it – the most painful thing that you have ever been through, or the reason why you suffer from these lower stomach pains, etc." The client accepted the last suggestion, and the assessment continued when client and therapist agreed upon the term that should be used to describe her traumatic experience.

As seen in this example, therapist should actively lead the assessment interview and be creative in inventing entrances towards the core of the trauma story. He/she should not hesitate to ask questions in a respectful way, being aware of the effects the questions can have on a trauma victim. Throughout the assessment phase therapist should patiently try to remove the multiple layers of defences protecting the core of the trauma story in order to get a good life-history, and understand client's feelings and behaviour. It is very important for the therapist to be aware of the presence of visual cues indicating emotions or re-enactment of postures, expressions or gestures linked to traumatic events.

Assessment of trauma in intercultural encounters takes time. Very often trauma treatment starts before therapist has obtained a complete history of traumatic events the client has been subjected to. Along the way, additional information emerge completing the 'case concept', but in some cases 'secrets' remain present throughout the treatment, or reveal at its very end.

In the assessment phase, a torture survivor from Iran described in detail the torture methods that he has endured at different times during his imprisonment. He told about continuing underground political activities upon release from the prison, and about his hiding up to the moment that he had left the country. Interestingly, he did not say a word about how he succeeded to flee. Later on, in the course of treatment, at the moment that he has been rejected asylum for the second time because of his incomplete story, he disclosed that his political party had helped him to leave Iran. The party transferred him first to a Middle Eastern country, where he continued to work in a party's military training camp. Later on, when the party decided to transfer him to Europe, he was told never to disclose about his stay in the training camp. Eventually, the client told the story to the therapist, but did not want his lawyer or asylum authorities to be informed. While 10 years ago, when he enrolled the procedure of seeking asylum, he would

be granted asylum as a member of the forbidden political group, at the moment of disclosure, and after the US military interventions in the Middle East, his party came on the international list of terrorist groups. In the new political context, revealing of the party membership to asylum authorities is dangerous. The client risks being labelled as a war criminal, additionally interrogated and expelled from the host country.

Clinician, driven by powerlessness and/or therapeutic enthusiasm and zeal to complete client's 'case concept' as soon as possible, should not put the client under pressure while interviewing. There is a risk for creation of false memories, when insisting on a completion of a trauma story in a short period of time, while repeatedly using suggestible questions focussed on client's traumatic past (Loftus & Ketcham, 1996; Roediger & McDermott, 1995).

A male client from Sri Lanka told the therapist about his wife who has changed profoundly after a short imprisonment. They were caught together by the police, but in the prison they were separated. He never told her about his torture experiences, and she did not tell anything to him either. Yet, she became another person, restless and frightened, the man disclosed. He thinks that she had been raped in the prison, but does not dare to disclose this. According to their cultural norms he would have to abandon her upon rape. He did not want to do this, and asked the therapist to meet his wife, talk to her, figure out what has happened, and whether she can be helped. The therapist agreed to do this.

The wife presented with a full blown PTSD, and during assessment started to dissociate whenever the therapist asked about what happened to her in the prison. The therapist knew that he should not ask suggestible questions based on suspicions of the husband, but to take time and wait for spontaneous revelation of the wife's trauma story.

ACCURACY OF THE TRAUMA STORY: IS IT IMPORTANT AND HOW TO CHECK IT?

Accuracy of the trauma story that a victim is presenting during the assessment phase and later on in the course of treatment is important, but not crucial for the treatment success.

Clinician must know that a complete trauma story is not per definition an accurate one, as well as that an incomplete story is not per se a story that he/she must suspect for accuracy. These issues are important, both in clinical treatment and in advocacy activities a clinician should perform while helping victims of political and war violence.

Reporting about traumatic events shows some variation as a function of the life epoch in which events occurred, whether they were directly or indirectly experienced, and the type of trauma involved (Krinsley, Gallagher, Weathers, Kutter, & Kaloupek, 2003). Witnessed accidents and

serious illnesses that occurred in the childhood are retrospectively more consistently reported than directly experienced childhood traumatic accidents. On the other hand, direct traumatic accidents that occurred in the adulthood are reported more consistently than the witnessed ones or the serious illnesses. The studies of traumatized asylum seekers (Herlihy, Ferstman, & Turner, 2004; Herlihy, Scragg, & Turner, 2002) show that the number of discrepancies in reports of traumatic autobiographical memories increases with the length of time between interviews. More discrepancies occur in details peripheral to the account than in details that are central to the account.

In order to determine accuracy of a trauma history and recognize malingering, clinician must listen to client's story, but, equally important, to pay attention to different non-verbal cues indicating emotions or re-enactment of trauma that client is presenting with. Also, clinician can ask questions about how client experiences symptoms related to PTSD. While being able to describe symptoms of re-experiencing trauma, avoidance and hyperarousal pretty accurate, it is much more difficult for a client who is faking psychological disturbances to provide subtle descriptions of peritraumatic dissociation, or dissociative states. Questions about the course of the disorder can be helpful too in determining accuracy. In many cases a full blown PTSD does not start right away upon the traumatic experience, but later on when client felt safe enough to admit emotions. Also, having knowledge about the history and political situation in the country where asylum seeker comes from allows clinician to check information he gets from a client, but it is also possible to lean on collateral information obtained by knowledgeable colleagues, literature, internet, interpreters and culture-brokers.

At the end of a session, the interpreter told the clinician that he found peculiar how the client named the political party that he was claiming to be a member of. When talking about this party he was using a term that authorities in his country use for the party, which is different from the one party members and sympathizers use.

Sometimes, a verification of accuracy of a trauma story takes place only later on, in the course of treatment. The following example presents a client who is fabricating the historical truth about his past, while presenting with posttraumatic complaints.

A female client from Rwanda enrolled for treatment because of PTSD symptoms following her experiences during genocide. In one session, much later on, she confessed the true story because of trusting her therapist and feeling ashamed about lying. Years ago, before the war in Rwanda started, she came to Europe to marry her husband. In this relationship she was for a long time submitted to substantial violence, and this was where her PTSD originated from. She fled from her husband who confiscated her passport and all other documents, and threatened her with death in case of leaving him. Upon leaving, out of the fear and without any

documents, she fled to another European country and applied for asylum. A compatriot provided her with details on Rwandan genocide that she was originally presenting as her own life story, both to the therapist and asylum authorities.

A group treatment setting can be also useful in verifying accuracy of trauma stories. In some asylum seekers' groups, the members are reluctant to one another, and very alert out of fear for betrayal. Sometimes they comment on one another in individual meetings with the therapist, and provide him/her with their interpretations of the other group members' past. Clinician must be very cautious in interpreting this collateral information since clients can be driven by all sorts of motives while commenting on one another and their perception can be strongly influenced by their actual psychological state and their past. Although some of the information obtained this way can be accurate, they can also be impacted by the trauma-specific transference roles (victim, perpetrator, or judge) that exist in the matrix of a trauma treatment encounter (Lindy & Wilson, 1994).

In the course of a group treatment of Iranian male torture survivors, a group member approached the therapist in private after a session, and told him that he suspects another member of lying. "He is not the one he claims to be. Maybe he is a spy!" he told the therapist anxiously. Earlier that day, in an informal conversation the two clients have had about their experiences in a particular prison, the suspected member could not recall what material the sinks in the prison were made of. "You should remove him from the group or I am going to leave. I am not safe here!" warned the client.

ADVOCACY – SOME ETHICAL DILEMMAS

In working with asylum seekers, clinician can be asked to present his/her expert opinion about a client's mental health to a lawyer or immigration authorities. By doing this, he/she can influence client's future and the procedure of seeking asylum, as well as the victim's psychological well-being. This should be an integral part of the treatment of victims of war and political violence.

Clinician must be able to make a distinction between the historical truth and the emotional truth of traumatic events that took place in client's past. What counts in treatment of posttraumatic states is not that much what has 'really' happened in a victim's past, but how a victim has experienced it. Therefore, clinician should focus on his advocacy and treatment activities on the emotional truth of the experienced events. At the same time, clinician must be aware of his/her own professional role, and avoid, while advocating, the challenge to sit on the chair of a political activist or a decision maker in the procedure of seeking asylum. However, in advocating, clinician can be confronted with difficult moral and ethical dilemmas, when client's trauma story changes over time.

The therapist wrote several reports about the client advocating in his procedure of seeking asylum. Immigration authorities rejected the client's claim, and provided evidence that he was fabricating parts of his story. Later on, the client admitted this to his therapist, too. However, he was not repatriated because his lawyer started a new asylum procedure on the basis of his suffering from psychological problems (PTSD) and his ongoing treatment. The treatment continued, but the therapist became reluctant towards the client.

It is important to know that asylum seekers sometimes fabricate their trauma stories in order to be accepted as refugees, and create opportunities to continue their lives in a host country. But often, not a whole story is fabricated. Some events can be added to a true story to make it more momentous, and, one hopes to raise the chance of obtaining asylum. Some asylum seekers buy or get fabricated stories from their traffickers, fellow asylum seekers, or recognized refugees. In terms of therapist's counter-transference, it is important to realize that in this context, fabricating stories is a survival strategy. The refugee hearing often becomes a test of the claimants' ability to construct an appropriate image of the 'convention of refugee', and to satisfy the expectations of the decision makers (Barsky, 1994).

Some clients present themselves upon assessment only with a story of being a victim of violence, while later on in treatment they disclose having been perpetrators, too. Such a combination is not uncommon in victims of war. In these cases, therapist is confronted with a moral and ethical dilemma when, having already an informed consent from a client, he/she doubts whether to report about client being a perpetrator to immigration authorities or the International Tribunal for War Crimes.

During assessment, a soldier told about torture he endured being a prisoner of war. Later on, in the course of treatment, when he became severely depressed and suicidal, he disclosed that upon release from prison, he was recruited in a special, secret commando unit of his army designed to enforce ethnic cleansing. He killed many civilians, and was threatened with murder of his family in case he left the unit. He gave therapist an informed consent to report about him to immigration authorities. When therapist confronted the client with the fact that he might be prosecuted for war crimes on the basis of information revealed in treatment, he told that the therapist must decide what to do. He said that he cannot live any more with this secret, and that he does not care about being punished.

USING INTERPRETERS IN ASSESSMENT OF TRAUMA

The use of interpreters in assessing and treating PTSD has been studied throughout the years and several models of collaboration have been developed and described in literature (Bot & Waddensjo, 2004).

It is very important to use professional interpreters whenever it is possible. Sometimes, in emergency situations, lay interpreters can be used, too (family members usually). This practice should be avoided because it exerts a strong censorship on what may be disclosed by client. Many trauma victims do not want to burden family members with own painful problems, and disclosing a taboo may seriously damage client's relationship with a family.

According to the 'classic' model, interpreter has a duty to provide accurate, complete, and literal translation of communication between client and therapist, and act as a 'translation machine'. Of course, this is barely possible, since literal translations across languages do not always make sense. Words and phrases with similar denotation often have different sets of connotations across languages (Kirmayer et al., 2003). Also, the presence of the interpreter changes the dyadic therapist–client relationship into a triadic one, involving a set of different fantasies and feelings.

Another model views the interpreter as an agent 'in between' therapist and a client, and as an active intermediary. Interpreter's duty is not only to provide translation, but to clarify what has been said, too. In this case interpreter must have more experience in clinical work.

Kirmayer et al. (2003) broaden competencies of the interpreter, and view the interpreter as a culture-broker who works to provide both the client and the clinician with the cultural context needed to understand each other's meaning. Hereby are the knowledge of cultural background, perspectives, and social positions of both parties in dialogue of crucial importance. The interpreter must have a good insight into the assessment process, and its goals.

SOME TECHNICAL ISSUES IN ASSESSMENT OF TRAUMA

In assessing trauma it is important to be attentive to possible culture-bound idiomatic and non-verbal expressions relevant to the presenting problem. It is also vital to ensure that the procedures used allow exploration of ethno-cultural issues that can impact the presenting problem or significant areas of the client's life and identity. The assessment process should also allow space to explore the impact of critical settlement, cultural transition and ethno-cultural issues at various levels of the system (Aroche & Coello, 2004).

Several issues are of great importance when planning the assessment procedure. First of all, one must bear in mind that Western psychodiagnostic categories, as defined in DSM-IV (APA, 1994) or ICD-10 (WHO, 1992), are often not appropriate in non-Western cultures. Therefore, other

tools like the cultural formulation of diagnosis (CFD) (Mezzich, Kleinman, Fabrega, & Parron, 1996) can be very useful. CFD helps clinician to understand the identity of patient, his/her explanation of illness, the influence of psychosocial environment on patient's problems and the level of patient's functioning in daily life. It also helps getting insight into dynamics of the patient–clinician relationship. Another useful instrument that can be used is the Explanatory Model Interview (Kleinman, 1978) that provides questions for eliciting patient's explanatory models for disease, illness and healing. Using culturally sensitive instruments prevents clinician being trapped into, what Kleinman (1977) calls, a 'category fallacy'. That is, one first defines the Western category, then starts looking for that category in a non-Western culture, and subsequently finds what was defined earlier, leading to that what had to be proven. However, if one would carefully listen to people's narratives, the reported complaints might not match the Western category.

The other important issue is the one of the language and verbal expression of emotions in different cultures. We know that vocabulary for different emotions is not the same all over the world. It is sometimes very different from the one used, for example, in English language, the language of diagnostic instruments and classifications. Therefore, one has to carefully make an inventory of the expressions of distress in other cultures (the 'idioms of distress') before it can be concluded that the way people perceive their problems is the same as in the DSM/ICD categories.

The third important issue is the need for standardization of diagnostic instruments across cultures. Instruments have to be tested for their content, semantic, conceptual and technical validity. How to properly adapt instruments has been described elsewhere (de Jong & van Ommeren, 2002; van Ommeren et al., 1999). In clinical settings, there is often a need to use self-report questionnaires. Many have been used in cross-cultural settings with the population of asylum seekers. The Harvard Trauma Questionnaire (Mollica et al., 1992), the Hopkins Symptom Checklist (Mouantounoua & Brown, 1995), and the SIP (Hovens, Bramsen, & van der Ploeg, 2002) are instruments that has been used widely and whose facility has been demonstrated. Also measures such as the PCL and the IES-R (Asukai et al., 2002) have equally been utilized in many different cultural settings with disaster and refugee populations.

The fourth important issue is the use of interpreters during assessment and treatment. They should be trained in the refinement of the assessment process, as this can sensitize them to the nuances of language necessary for understanding the world of emotional suffering and fear (McFarlane, 2004).

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Part II

Assessment Methods

Chapter 7

Assessment of PTSD and Psychiatric Comorbidity in Contemporary Chinese Societies

Catherine So-kum Tang

A majority of trauma research has been conducted in Western nations on patients from a similar background, and its findings are typically published in English, with only 6% in languages other than English (Bedard, Greif, & Buckley, 2004). Thus, clinicians and researchers do not yet know whether people from non-Western societies have similar reactions or symptom patterns to specific trauma. This chapter aims to fill this knowledge gap by reviewing available literature on the assessment of posttraumatic stress reactions and related psychiatric disturbances in contemporary Chinese societies of Hong Kong, mainland China, and Taiwan. Core concepts of traditional Chinese health beliefs are first presented to provide an understanding of the underlying cultural influences on illness perception, symptom presentation, and coping orientation. Both international and indigenous classification systems of mental disorders along with commonly used diagnostic and assessment instruments for posttraumatic stress disorder (PTSD) and psychiatric comorbidity are reviewed. Research findings that were published in either Chinese or English in academic journals are then summarized to document the amount of knowledge on morphological and functional changes in brain structures following trauma as well as on the prevalence, comorbidity, and predictors of PTSD in Chinese survivors. Challenges and future directions for trauma research in Chinese societies are also discussed.

TRADITIONAL CHINESE HEALTH BELIEFS AND COPING ORIENTATIONS

According to traditional Chinese medicine (TCM), illness is a result of the imbalance of oppositional yet complementary forces of *Yin* and *Yang* as well as the lack of mutual regulation of the *Wu-Hsing* system (five basic elements of water, fire, wood, metal, and earth) within the individual and in the environment. The imbalance may operate internally with excess of seven kinds of emotions (happiness, anger, worry, desire, sadness, fear, and fright) and/or originate externally from excesses of wind, coldness, hotness, dampness, dryness, and fire in the environment. The *Yin–Yang* imbalance or uncoordinated *Wu-Hsing* system will cause the stagnation of *Qi,* which is the vital energy circulating via meridian tracts to provide nourishment and vitality for the body. The manifested symptoms of illness are organized and recognized according to the meridian system of the body. For example, extreme fear and worry will lead to the *Yin* force being stronger than the *Yang* force within the individual. This *Yang–Yin* imbalance will block or slow down the circulation of *Qi* to vital organs, especially to the lung and kidney. If this imbalance is not restored in time, these two organs will be adversely affected and their functions will be impaired. Other factors such as seasonal changes and air pollution may also bring about the imbalance and illness.

The above traditional health beliefs often influence illness perception and symptom manifestations of Chinese (Lin, 1982). According to TCM, there is no clear distinction between physical and mental disorders, as psychological factors are also implicated in physical illnesses. Unlike Western tradition that emphasizes the therapeutic value of emotional catharsis, physical/mental health is maintained by avoiding excessive expression of emotions and by fitting one's emotional states to one's natural and social milieu. Maintaining harmony in familial and other social relationships is deemed to have greater health benefit than striving for self-fulfillment or self-actualization. Internal organs are viewed as centers for combined physiological and psychological functions. Vital organs such as the heart, kidney, and lung are typically used for colloquial expression of feeling states. Thus, Chinese patients may present with symptoms of the alleged physiological function of the "related" bodily organ rather than emotional states associated with the mental health condition. For example, an individual suffering from major depression may present somatic symptoms such as headache, back pain, or stomach pain rather than depressive and sad feelings. Therefore, without an understanding of traditional Chinese health concepts, Chinese patients may appear as if they lack psychological awareness, are unwilling to express their emotions, deny mental health problems, or have a tendency toward somatization.

Traditional Chinese cultural beliefs with their roots in Taoism, Confucianism, and Buddhism will also affect coping behaviors of Chinese. According to core teachings of the above three major forces in Chinese culture, life events are determined by external forces beyond human control as well as by human self-determination and effort. Therefore, when one encounters adverse life situations, "one should do all that is humanly possible and then leave the rest to heaven" – a cultural belief that is still endorsed by many Chinese. Lee (1995) has termed this cultural coping orientation as "fatalistic voluntarism," which is reflected in traditional beliefs and practices in *yuan, fenshui*, and *ren*. The concept of *yuan* assumes that interpersonal or person–object relationships are predetermined by external, invisible forces, such as fate or a former life. *Fenshui* (winds and waters) is a complex set of beliefs about people's place in nature and the universe, which is subject to change and can be manipulated by human action. The concept of *ren* consists of two related meanings of patience and forbearance – one should wait and not have a hasty reaction when encountering life difficulties. These cultural beliefs serve to protect people's mental health by providing them ready answers about life vicissitudes, by helping them to avoid guilty feelings and interpersonal hostility resulting from misfortunes that they do not have control, and by giving them hope for a better future so that they will continue working toward desired goals and developing their own social support network. Despite rapid economic and social changes in contemporary Chinese societies, Lee (1995) has noted that many Chinese still endorse traditional cultural concepts like *yuan, fenshui, and ren* as a means of coping with life adversity and sustaining achievement motivation, albeit with greater emphasis on the positive and activistic orientation than the fatalistic orientation.

CLASSIFICATION SYSTEMS OF MENTAL DISORDERS AND PTSD

In premodern China contexts, mental disorders were usually labeled as *dian, kuang, xian, feng*, etc., which included disturbing emotions, uncontrolled behaviors, and unrestrained conducts. There was no separate classification scheme, diagnostic system, nor treatment for physical and mental disorders. Western classification and diagnostic nosology of mental disorders was first introduced to Chinese societies in the early 1950s, and has been translated into Chinese for clinical and research applications, with little attention to reliability and validity of diagnostic categories. While the DSM and ICD systems have been widely used throughout contemporary Chinese societies, mainland China has devised its own diagnostic system, the Chinese Classification of Mental Disorders

(CCMD). The first edition of CCMD appeared in 1979, and has since undergone steady revisions in 1981 (CCMD-1), 1984, 1989 (CCMD-2), 1995 (CCMD-2-R), and 2001 (CCMD-3). Comparative studies of various diagnostic systems showed that the CCMD-2-R was closely compatible to international diagnostic systems such as ICD-9, ICD-10, DSM-III, DSM-III-R, and DSM-IV (Shu, Wang, & Ang, 1997; Zheng, Lin, Zhao, Zhang, & Young, 1994). The latest version, CCMD-3 (Chinese Psychiatric Society, 2001), is written in both Chinese and English. It has been substantially influenced by the ICD-10 and DSM-IV schemata, and is grounded in both symptomatology and etiology. Many mainland Chinese clinicians view the CCMD-3 as having special advantages, such as the inclusion of locally salient mental disorders that are absent in international systems (e.g., cultural-bound syndromes and *quigong*-induced mental disorder) and the exclusion of irrelevant Western diagnostic categories (e.g., avoidant and borderline personality disorders) (Chen, 2002; Lee, 2001). There is not yet any comparative study evaluating the compatibility of the CCMD-3 with major international classification systems.

PTSD as a diagnostic category was first suggested in the DSM-III in 1980. In Chinese societies, PTSD as a legitimate disorder for clinical and research purposes was only evident in the middle 1990s. The term "PTSD" or its Chinese translation became widely known to mental health professionals and the general public after devastating earthquakes in North China and Taiwan in the late 1990s. Both DSM and ICD systems have been used to define PTSD throughout Chinese societies. In mainland China, PTSD was classified under psychogenic mental disorders in the CCMD-2-R in 1995 with two subcategories of acute stress reaction (acute psychogenic reaction) and delayed stress reaction (delayed psychogenic reaction). In the CCMD-3, PTSD was categorized under stress-related disorders and the defining symptom criteria are slightly different from those specified in the DSM-IV (Appendix 1). The CCMD-3 symptom criteria for PTSD require at least one re-experiencing symptom, at least one hyperarousal symptom, and at least two avoidant symptoms.

More recently, there is an attempt to integrate Western psychiatric diagnosis of PTSD with that of TCM. Sinclair-Lian et al. (2006) has proposed a TCM diagnostic pattern framework for individuals who meet the criteria for DSM-IV PTSD. This new diagnostic structure for PTSD includes physical and psychological symptoms related to deficiencies of the heart, liver, and kidney. The core pattern differentiations for PTSD are heart disturbances caused by heat, fire, or a constitutional deficiency, and include DSM-IV re-experiencing and increased arousal symptoms. The stagnation of the Liver's *Qi* is reflected in PTSD symptoms of irritability and outbursts of anger, feeling detached, restricted range of affect, depression, somatic pain, and digestive disorders. Kidney deficiency will manifest in symptoms of fear and shock. Secondary patterns are

outcomes of long-term deficiencies of these three vital organs on the stomach and spleen, and include digestive problems, exhaustion, and metabolic dysfunction. As the TCM diagnostic structure for PTSD is relatively new, it has only been adopted in a small number of patients in the United States. There is not yet any report on its interrater reliability or comparability with other diagnostic systems. However, Sinclair-Lian et al. (2006) has used this new diagnostic system to guide their clinical trials in comparing TCM and CBT treatment for PTSD.

ASSESSMENT OF PTSD AND PSYCHIATRIC COMORBIDITY

Both screening and diagnostic assessment tools have been used to evaluate PTSD and psychiatric comorbidity in Chinese societies. Screening instruments are for identifying individuals at increased risk of developing PTSD and/or related mental problems, who are in need of further investigation. Comprehensive diagnostic interviews are gold standards to establish the presence of PTSD and psychiatric disorders, whereas self-rating scales are mainly for symptom assessment and treatment monitoring. A majority of these assessment tools are imported from Western nations in a different language and are then translated to Chinese for use. Very often, only basic psychometric properties of these translated instruments are determined and reported. Few attempts have been made to address issues related to verifying equivalence of alternate or translated instruments (Mallinckrodt & Wang, 2004; Weiss, 2007 in this volume). Thus, cross-cultural validity of various Chinese versions of diagnostic and assessment tools of PTSD remains unclear, thereby making their results not directly comparable across studies in different nations. Throughout this chapter, Chinese versions of various assessment instruments are represented by adding the letter "C" to the original instruments. For example, CBDI represents the Chinese version of the Beck Depression Inventory (BDI) (Beck, Ward, & Mendelson 1961).

Assessment of Trauma and Life Event

The first step in the assessment of PTSD is to ascertain the presence of a traumatic event. While some trauma such as earthquake and flooding may be self-evident, others as in intimate partner abuse or sexual assault may not be readily apparent. Trauma questionnaires can alert clinicians to the likely occurrence of past-trauma, including the type of trauma, whether it was a single or recurrent event, the age at the time of trauma, and the most distressing trauma. They are used in research to establish the DSM-IV or CCMD-3 criteria A (the trauma criterion) of

PTSD. Trauma questionnaires can be self-administered or formed by the framework for conducting a trauma history. A number of PTSD diagnostic interviews and self-rated instruments as described in subsequent sections also include modules to address trauma history. For example, the clinician-administered PTSD scale (CAPS) (Weathers, Keane, & Davidson, 2001) also include a trauma history panel at the beginning of the interview.

A locally developed 47-item Stressful Life Events Scale (SLERS) was available in mainland China (Zheng & Lin, 1994). This scale is divided into eight categories, with each item rated from one as "slightly stressful" to five as "extremely stressful." Death of spouse was rated by Chinese as the most stressful life events, followed by death of a close family member, and then divorce. A score over 74 suggests that the individual experiences excessive stress and may be at risk of psychological dysfunction. Among 4,054 Chinese participants sampled from 24 sites across mainland China, prevalence rates during the surveyed year were 6% for death of spouse or close family members, 5% for natural disaster, 4% for physical assault, and 2% for road traffic accidents.

Diagnostic Interviews for Psychiatric Disorders and PTSD

Comprehensive diagnostic interviews developed in Western nations are often translated into Chinese to make psychiatric diagnosis according to DSM and ICD criteria for clinical and research purposes in Hong Kong, mainland China, and Taiwan. These include Chinese versions of the Diagnostic Interview Schedule (DIS) (Davidson, Hughes, Blazer, & George, 1991), the International Diagnostic Interview (IDI) (World Health Organization [WHO], 1997), the Structured Clinical Interview for DSM-IV axis I diagnosis (SCID-I) (First, Spitzer, Miriam, & Williams, 2002), and the Mini-International Neuropsychiatric Interview (MINI) (Sheehan, Lecrubier, Sheehan, Amorim, Janavas, 1998). There is also a Chinese version of the Children's Interview for Psychiatric Syndromes (ChIPS) (Rooney, Fristad, Weller, & Weller, 1999) in assessing 20 common psychiatric disorders in children and adolescents based on DSM-IV criteria. A number of interviews have also been developed specifically for the evaluation of PTSD. The most widely used is the CAPS (Weathers et al., 2001), which has several versions based on the time period covered (lifetime versus surveyed year, etc.) and on the diagnostic classification system applied (DSM-III-R, DSM-IV). Chinese translations of the CAPS are also available in Hong Kong and mainland China.

There is a paucity of studies that investigated whether Chinese versions of Western diagnostic interviews are reliable diagnostic instruments for Chinese. In Hong Kong, So, Kam, Leung, Pang, and Lam (2003) used a multistage, multisite design to assess the reliability of the SCID-I

when used with Chinese psychiatric outpatients. Results were then compared to clinician diagnosis using the test–retest method. Kappa values for anxiety disorders, adjustment disorders, and no diagnosis of these disorders were 0.81, 0.64, and 0.57, respectively. This demonstrates good to very good agreement between clinician diagnosis and diagnosis devised from the SCID-C. However, kappa values were not calculated for disorders with relatively low prevalence such as PTSD. For the Chinese translation of ChIPS, Chen, Shen, Tan, Chou, and Lu (2002) also found satisfactory interrater reliability in assessing PTSD symptoms among Chinese children and adolescents. These researchers asked psychiatrists to rate case vignettes on video recordings using a Chinese version of the ChIPS. The interrater diagnostic reliability of the PTSD module was good, with an overall kappa value of 1.0.

Screening and Assessment Instruments for PTSD Symptoms

Chinese Self-Rating Scale of PTSD (SRPTSD-C)

Chen, Gao, and Li (2005) in mainland China devised a 20-item Chinese self-rating scale of PTSD (SRPTSD-C) based on DSM-IV criteria of PTSD and the distress event questionnaire (DEQ) (Kubany, Leisen, Kaplan, & Kelly, 2000). This scale includes five items on reexperiencing symptoms, seven items on avoidant symptoms, five items on hyperarousal symptoms, and remaining on self-blame, anger, and feeling of loss. Each item is rated from 0 as "not at all," 1 as "slight," 2 as "mild," 3 as "moderate," and 4 as "severe." A score at or above 2 is classified as the presence of the indicated symptom. Defining criteria for PTSD were similar to DSM-IV. This scale was first tested in mainland China with 284 college students, 87 survivors of fire, and 70 firemen who had exposed to the same fire disaster. The Cronbach alpha coefficient values of the scale ranged from 0.88 to 0.94 and test–retest reliabilities were between 0.83 and 0.88. Correlations between this scale and anxiety, depression, and phobia of the Chinese version of the SCL-90 (Derogatis, Lipman, & Covi 1973) were more than 0.73, and coherence between this scale and the CSCID conducted by psychiatrists was more than 90%. Prevalence rates for fire survivors, reporting at least one symptom of the three categories, were 71.7, 51.7, and 65%, respectively. This scale also showed satisfactory discriminant and predictive validity. Chen, Li, Lu, et al. (2005) found that trauma survivors scored higher than firefighters on this scale at 40 days after exposure to a fire disaster but did not differ at 6 months later. Compared to college students, these two groups had higher scores on this scale throughout the postdisaster assessment period.

Chinese Davidson Trauma Scale

Chen, Lin, Tang, Shen, and Lu (2001) in Taiwan translated the 17-item self-rating Davidson Trauma Scale (DTS) (Davidson et al., 1997) to screen individuals with possible diagnosis of PTSD. Items of the original DTS reflect DSM-IV PTSD symptoms, with individuals indicating both frequency and severity of each item on a 5-point (0–4) scale for a total possible score of 136. The Chinese Davidson Trauma Scale (DTS-C) was translated from the DTS through a two-stage translation by psychiatrists who are proficient in both English and Chinese. The DTS-C was then administered to 210 survivors of the Chi-Chi earthquake in Taiwan and showed good internal consistency (Cronbach = 0.97) and test–retest reliability (r = 0.88). Concurrent validity was obtained against psychiatrists' clinical diagnostic interviews, with a diagnostic accuracy of 0.85 (DTS-C ≥ 44). The sensitivity and specificity of the suggested cut-off score for the DTS-C were 0.09 and 0.81, respectively. Among survivors who were diagnosed with PTSD, factor structures of the scale resembled the DSM-IV grouping of PTSD symptoms, namely numbness, intrusive experiencing, avoidance, and hyperarousal.

A 4-item self-rating diagnostic screening tool for PTSD, the SPAN which is named for its principal four items of startle, physiological arousal, anger, and numbness, was also developed from the original DTS by Davidson et al. (1997). A Chinese translation of the SPAN (SPAN-C) is available in Taiwan (Chen et al., 2002). The SPAN-C was validated with 210 earthquake survivors and showed good internal consistency (alpha value = 0.90). Concurrent validity was obtained against psychiatrists' clinical diagnostic interviews, with a diagnostic accuracy of 0.80 at a SPAN-C cut-off score of 5.

Chinese Impact of Event Scale (CIES, CIES-R)

Both the 15-item Impact of Event Scale (IES) (Horowitz, Wilner, & Alvarez, 1979) and the 22-item revised version (IES-R) (Weiss & Marmar, 1997) have been translated in Chinese societies. However, only psychometric characteristics of Chinese versions of the impact of event scale – revised (CIES-R) have been reported. In Hong Kong, Wu and Chan (2003) administered the CIES-R to 116 patients within 1 week after a visit to the Accident and Emergency Department of a hospital. A total of 60 patients were reassessed within the second month after the visit. Simple Likert scoring method (0–1–2–3–4) was adopted. The reliability of the CIES-R as a measure of psychological distress was supported by positive correlations between various subscale scores of the CIES-R and the Chinese version of the General Health Questionnaire-20 (GHQ-20) (Goldberg, 1978). However, the independence of the three subscales as suggested in

the original IES-R was not supported, but a single factor that accounted for 45% of the variability in the item set was observed.

Wu and Chan (2004) further replicated their validation study with 572 traffic accident survivors. This time, two relatively independent factors of hyperarousal and avoidance were identified from the CIES-R. Nevertheless, the investigators calculated the three subscale scores according to the original IES-R, which showed moderate relationships with the Chinese version of the GHQ-20 (r = 0.51–0.68). A subsample of 127 survivors were also administered a symptom checklist for DSM-III-R PTSD, which yielded moderate to strong correlations with the CIES-R (r = 0.54–0.79). At 1 month after the initial assessment, 4.3% of the surveyed 46 patients were found to have PTSD according to the CAPS and the cut-off point of a mean score of 2.0 for each subscale of the CIES-R. The remaining patients did not meet the criteria for PTSD diagnosis in the CAPS and did not pass the cut-off point for all CIES-R subscales. Thus, the CIES-R was found to have 100% sensitivity and specificity for screening PTSD.

A separate Chinese version of the IES-R was available in mainland China (Huang et al., 2006). This CIES-R was validated against 439 female offenders who had experienced at least one traumatic life event. Results showed that the Cronbach's coefficient of the scale was 0.96, test–retest reliability coefficient was 0.86, and mean interitem correlation coefficients ranged from 0.42 to 0.60. Using the same symptom cluster of the original IES-R, correlations among the three subscale scores for intrusion, avoidance, and hyperarousal ranged from 0.75 to 0.89. Participants were also interviewed by psychiatrists using the CAPS, and 50 were classified as experiencing PTSD, 36 as partial PTSD (PTSS), and the remaining as the non-PTSD group. The mean total CIES-R scores were 54.7 for the PTSD group, 42.6 for the PTSS group, and 21.7 for the non-PTSD group. The investigators suggested that a total score of 34/35 in the CIES-R seemed an appropriate cutoff point, which demonstrated high levels of sensitivity (0.86), specificity (0.86), and efficiency (0.85) in the broadly defined PTSD-positive (PTSD + PTSS) groups.

Disaster-Related Psychological Screening Test

A short screening instrument for PTSD and psychiatric comorbidity is also available in Taiwan. Chou et al. (2002) described the development of the 10-item Disaster-Related Psychological Screening Test (DRPST). Based on 17 items on PTSD and nine items on MDE in the DSM-V, a 7-item scale and a 3-item analogue were selected for PTSD and MDE screening with 461 earthquake survivors at 21 months after the earthquake. Participants were also evaluated by psychiatrists using the CMINI. Score of 3 or more on the PTSD scale was used to define positive cases, and this resulted in the most appropriate sensitivity (97.8%) and specificity (96.6%), a positive

predictive value of 76.3%, and a negative predictive value of 99.8%. A score of 2 or more on the MDE scale was used to define positive cases of MDE, giving a sensitivity of 92.1%, specificity of 98.3%, positive predictive value of 83.3%, and negative predictive value of 99.3%.

Assessment Instruments for Psychiatric Comorbidity

General Psychiatric Screening

The General Health Questionnaire (GHQ) (Goldberg, 1978) with 12-, 28-, 30-, and 60-item versions have been translated into Chinese and are widely used in research and in screening for individuals who might benefit from further psychiatric consultation throughout Hong Kong, mainland China, and Taiwan. In general, these Chinese versions showed satisfactory reliability and validity as well as relative robustness of symptom dimensions in dysphoric functioning, health concern, anxious coping, sleep problems, and suicidal ideas. In Hong Kong, both English and Chinese versions of GHQ (CGHQ) yielded similar psychometric characteristics and estimated prevalence of psychiatry morbidity (Chan, 1985). The translated versions were also found to correlate more strongly with scales that accessed acute symptoms than with scales that measured chronic problems (Shek, 1989). Recently, the CGHQ-12 was administered to 1,400 rural residents from 48 villages in China, who also found the translated scale culturally acceptable (Lee, Yip, Chen, Meng, & Kleinman, 2006). The CGHQ-12 was then validated against the CIDI. A cut-off score of 1/2 to define "caseness" was recommended for rural populations, with the sensitivity and specificity being 80.6% and 79.3%, respectively.

In order to take into consideration of traditional Chinese health beliefs and symptom presentation, researchers in Taiwan added culturally relevant items to the GHQ to form the Chinese Health Questionnaire (CHQ) with 12-, 30-, and 60-item versions (Cheng & Williams, 1986) and validated against the Chinese Clinical Interview Schedule (CCIS) (Goldberg, Cooper, Eastwood, Kedward, & Shepherd, 1970) and the CGHQ. Sensitivity of the scale was improved by the addition of culturally relevant items (Cheng, 1985). Among different versions, the CHQ-12 is the most popular. It includes six items from the CGHQ-30 with five items on "anxiety" and "depression," and the other on "sleep disturbance." The remaining six items of the CHQ-12 were new culturally relevant items grouped into "somatic symptoms and concerns" and "interpersonal difficulties." The CHQ-12 was further validated against 386 patients admitted to a medical center in Taiwan, and the CCIS was used to derive a criterion measure of minor psychiatric morbidity (Chong & Wilkinson, 1989). The sensitivity of the CHQ-12 was 78%, specificity was 77%, and the estimated minor psychiatric morbidity was 37%. In contrast, physicians diagnosed only 11% of

these patients as having psychiatric disorders, and their sensitivity was 29%. Using the scoring method of 0–0–1–1, a cutoff score at or above 4 was suggested to define "caseness" of psychiatric morbidity in Chinese.

Depression and Anxiety Scales

Self-rating scales on depression and anxiety with their Chinese versions are commonly used throughout Chinese societies. These include the BDI (Beck et al., 1961), the Beck Anxiety Inventory (BAI) (Beck, Epstein, Brown, & Steer, 1988), the Zung Self-Rating Depression Scale (SDS) (Zung, 1965), and the Zung Self-Rating Anxiety Scale (SAS) (Zung, 1971). Psychometric properties of these translated self-rating scales were typically not reported when they were used to assess the presence of comorbid psychiatric disturbances following trauma.

Chan (1991) administered both English and Chinese versions of the BDI to 331 bilingual undergraduates in Hong Kong to evaluate version equivalence. The Chinese version of the BDI (CBDI) was found to have relatively high internal consistency as a scale (0.85) and similar facets of depression as its English original. Factor 1 was loaded saliently by cognitive and affective items, and Factor 2 was characterized by salient loadings on fatigue and insomnia. Both versions also correlated equally highly and significantly with each other and with other self-report measures of depression and the CSDS. In assessing depression in a small sample of Chinese psychiatric patients with mixed diagnoses, the CBDI also yielded good sensitivity, reasonably acceptable specificity, low misclassification rate, and relatively good predictive power with a cutoff score of 18/19 (Chan, 1991).

Zheng and Lin (1991) found that CBDI generally showed satisfactory internal reliability (alpha = 0.84) and concurrent validity (r = 0.57) when administered to individuals in mainland China. However, items that assessed sense of punishment, sense of hate, self accusations, crying spells, irritability, and somatic preoccupation were poorly correlated with the intensity of depression as measured by the total score of the Chinese version of the Hamilton Depression Rating Scale (HDS) (Hamilton, 1960). They concluded that even though CBDI was semantically translated into Chinese language, it could not be effectively applied in clinics and research settings in mainland China. Zheng and Lin (1994) thus developed the Chinese Depression Inventory (CDI), and reliability and validity were found to be much better than the Chinese versions of the CBDI.

Zheng et al. (1988) also assessed the reliability and validity of the 17-item Chinese version of the HDS (Hamilton, 1960). They found that the interrater reliability of the translated version (CHDS) was excellent, the item total-score correlations were good, and the internal reliability was satisfactory. The concurrent validity was satisfactory as its total score correlated strongly with the Global Assessment Scale of the CBDI.

Symptom Checklists for Psychiatric Morbidity

The Symptom Checklist-90 (SCL-90) (Derogatis et al., 1973) in revised or shorter 53-item version is also a widely used self-rating questionnaire in mainland China and Taiwan. This checklist has nine subscales to assess symptoms related to somatization, depression, phobic anxiety, obsessive–compulsive, anxiety, paranoid ideation, interpersonal sensitivity, hostility, and psychoticism. Chinese versions of the SCL-90 (CSCL-90) were available in assessing neurotic symptomatology of patients in mainland China and Taiwan, with satisfying reliability and validity (Tsai, Wen, Lin, Soong, & Chen, 1978). Chinese versions of the Cornell Medical Index (CMI) (Weaver, Ko, Alexander, Pao, & Ting, 1980) have also been used to assess various mental health disorders, but their use has declined in recent years.

NEURO-IMMUNO-BIOLOGY OF PTSD AND HUMAN NEUROIMAGING RESEARCH

Current literature has implicated a neuro-immuno-biological basis in the pathogenesis of PTSD. Individuals diagnosed with PTSD often present with the strengthening of the negative feedback suppression of the hypothalamus–pituitary–adrenal axis, continuous low cortisol reaction, and imaging changes of the hippocampus, nucleus amygdalae, and Broca's area, which are different from common stress response and other mental disorders (Lanius et al., 2001). Rauch, Shin, and Phelps (2006) further propose that PTSD is characterized by exaggerated amygdala responses, deficient frontal cortical function to suppress attention/response to trauma-related stimuli, and deficient hippocampal function in appreciation of safe contexts and explicit learning/memory. The recent development in structural and neurochemical imaging approaches enables the direct testing of the above hypotheses regarding neural substrates of PTSD. In mainland China, there is also an accumulation of research that investigates associations between brain structures/functions and PTSD symptoms, ranging from laboratory animal studies to applications of neuroimaging approaches to trauma patients in clinical settings. Findings are generally consistent with the prevailing literature.

Animal Studies

A sizable number of animal studies have been conducted in mainland China to investigate the pathogenesis of PTSD-like behaviors in rats and dogs, and almost all results were published in Chinese. In particular, Wang and his colleagues have established an animal model of PTSD (Wang, Wang, & Zhu, 2003), with which rats were randomly selected to

the hippocampus subthreshold electrical stimulation group, hippocampus electrical stimulation group, and normal control group. They have conducted a series of studies on rats and dogs and their results were largely similar to those reported in other nations (Lanius et al., 2001). In particular, they noted that important pathobiological changes of chronic PTSD-like behaviors in rats consisted of increasing levels of intracellular free-calcium and expression of Ca^{2+}/CaM in the hippocampus, as well as dysfunction of the Na^{+}–K^{+}pump and Ca^{2+}–ATPase in the hippocampal mitochondria.

Animal studies have also been conducted to examine morphological and functional changes in brain structures following trauma and adversity. Xiao et al. (2004) noted that explosion injury resulted in a strong stress reaction and a series of pathological changes in the adrenal cortex and thyroid of rats. They identified three stages in the posttraumatic pathological process in animals: the excessive stress stage as characterized by damages of granules of adrenal cortex cells and thyroid follicle cells as well as excess release of thyroxin; the functional failure stage as characterized by weakened function, degenerative and atrophic cells, and collapsed follicles; and the repair stage as characterized by improved morphology and function of affected brain structures.

Neuroimmunological Studies with Psychiatric Patients

Current literature suggests that human activation of serum cytokine levels may be restrained in patients with acute stress disorder or PTSD (Mcewen et al., 1997). Yang et al. (2001) compared serum cytokine levels of GM-CSF, TNF-α, and IL-2 among 48 Chinese psychiatric inpatients with acute stress disorder, 21 Chinese psychiatric patients who were diagnosed with CCMD-2-R PTSD and scored above 40 on the CIES, and 31 normal control. All three levels were significantly lower in patients with stress disorders than in the normal control, and the TNF-α level was even lower in acute stress patients than in PTSD patients.

Persistent changes of pituitary–adrenal and corticotrophic-releasing factor in the neurosystem of PTSD patients have been found in Western nations (Newport, Heim, Bonsall, Miller, & Nemeroff, 2004). Similar findings were also obtained from Chinese psychiatric patients. Li, Wu, Zhang, Li, and Chao (2005) in mainland China studied pituitary–adrenal functions in 30 depressive psychiatric inpatients (CHAMD > 18) and 30 incarcinated offenders who were diagnosed with CCMD-3 PTSD, using the low-dose dexamethasone suppression tests (DST). Cortisol and ACTH level in the blood plasma were then determined in normal and in low-dose DST conditions. Their results showed that in the low-dose DST condition, the PTSD group exhibited greater cortisol and corticotrophin suppression than the depression group.

Tan and Shi (2005) investigated changes of regional blood flow (RCBF) in 30 psychiatric patients diagnosed with CCMD-2-R PTSD under akinetic condition, light music, and recall of relevant traumatic events to stimulate traumatic memory. They were assessed with single photon emission computed tomography (SPECT) in two consecutive days. Results showed that after the simulation of recall of traumatic information, the RCBF was increased in nucleus amygadalae, island formation, middle temporal lobe, and double visual cortex. Similar brain regions have also been shown to associate with retrograde amnesia and memory consolidation among Western samples (Sequire & Alvarex, 1995).

Gan et al. did a series of studies on psychophysiology and electrophysiology of the brain on 60 veterans, who were attending inpatient or outpatient psychiatric services and diagnosed with CCMD-3 PTSD. In one study (Gan, Gao, Yang, Zhang, & Yang, 2005), compared to event-related potentials P_{300} in various latencies and amplitudes of 56 normal controls, the PTSD group showed shortened latency and increased amplitudes as well as higher scores on the CSCL-90 and CIES. Moreover, as PTSD symptoms remitted in these veterans, waveform of cognitive-evoked potentials (CEP) became more steady, latencies and amplitudes of visual-evoked potentials (VEP) and auditory-evoked potentials (AEP) were shortened and lowered, and scores on the CSCL-90 and CIES also decreased (Gan, Gao, Yang, Wu, et al., 2005). These findings are consistent with current literature on the electrophysiology of PTSD (Felmingham, et al., 2002), and affirm that various event-related evoked potentials can serve as important physiological indexes in assisting the diagnosis of PTSD.

Human Neuroimaging Studies

In recent years, neuroimaging and mapping have become increasingly important approaches in exploring the relationship between brain structures/functions and human behavior in Chinese societies. These approaches have also been adopted in studying brain morphology of individuals with PTSD symptoms as well as in evaluating the effectiveness of various treatment programs for PTSD. Preliminary findings of exploratory studies using human neuroimaging techniques have been reported in local as well as in international academic journals.

Chen, Xia, Li (2006) used the Voxel-based morphometry (VBM) to investigate possible changes of brain structures among PTSD patients. VBM is an objective whole-brain technique for characterizing regional cerebral volume and tissue concentration differences in structural magnetic resonance images (MRI). In Chen et al.'s study, the PTSD group, including 12 patients identified by the SCID-I PTSD module and SRPTSD-C (scored ≥ 43), were compared with a control group of 12 gender- and

age-matched non-PTSD individuals. Both groups had been exposed to the same fire disaster and were assessed 6 months later with MRI and self-reported measures. MRI and an entire brain volume of 248 contiguous slices were obtained for each participant. Gray and white matter density of participants were then compared by using a VBM approach in SPM2 (Statistical Parametric Mapping) software. Compared to the control group, PTSD patients had less gray-matter density in the left hippocampus, left anterior cinguage cortex (Brodmann's area 32), and bilateral insulars (Brodmann's area 13). Intensities in gray matter of other brain regions and the white matter in most brain regions did not show significant difference between PTSD and control patients. With the same methodology and groups of participants, Li et al. (2006) also found from magnetic spectroscopy (MRS) that the ratio of *N*-acetyl aspirate and creatine (NAA/Cr) in the left hippocampus was significantly lower in patients with PTSD than in the control group. These findings suggest structural abnormalities in the brain as well as a loss of hippocampal neurons in the event of a disaster. However, these two studies included a relatively small sample of patients with recent-onset of PTSD, and their cross-sectional designs could not establish a causal relationship between structural abnormalities and PTSD symptoms. Nevertheless, their findings are generally consistent with PTSD neuroimaging research to date (Rauch et al., 2006). Another brain image study conducted in mainland China also shows that the recall of childhood traumatic experiences can still influence unbalance blood flow in different brain regions. Shi, Tan, and Chen (2005) studied 20 sexual dysfunction patients with childhood sexual trauma who were in psychotherapy treatment for 2 years and reported PTSD symptoms. These patients were assessed with single photo emission computerized tomography (SPECT) under an akenetic condition, then recall of childhood traumatic event, and 5 min after EMDR treatment. Analyses of SPECT reviewed that the blood flow from the right temporal lob, insular region, and occipital lobe was higher than their respective left regions during the recall of childhood trauma.

PREVALENCE, COMORBIDITY, AND PREDICTORS OF PTSD

Research in developed nations has shown that traumatic life events that result in widespread injuries, loss of life, massive property damages, major financial problems for individuals, and/or communities are often associated with high rates of severe and persistent mental health sequela (Kessler, Sonnega, Bromet, Hughes, & Nelson, 1995; Norris et al., 2002). Recent meta-analytic reviews have documented that predictors for PTSD and psychiatric comorbidities following trauma include characteristics of

victims and survivors, characteristics of the traumatic events, posttrauma social support, and peritraumatic cognitive appraisal and emotional responses (Brewin, Andrews, & Valentine, 2000; Ozer, Best, Lipsey, & Weiss, 2003). The bulk of the information about the prevalence, comorbidity, and predictors of PTSD in Chinese societies is mainly generated from studies on mental health effects of natural disasters such as earthquake and flooding. Relatively little is known about the traumatic impact of human-made disasters and other life adversities. In the following sections, related studies that were published in either Chinese or English in local, regional, and international academic journals from 1980 to 2006 were summarized.

Natural Disaster – Earthquake in Taiwan

Taiwan and mainland China are situated on the "Circum-Pacific Seismic Belt," which has created several devastating earthquakes over past decades. Available studies on natural disaster in Taiwan were on the Chi-Chi earthquake that struck central areas of Taiwan in 1999. This earthquake measuring 7.3 on the Richter scale caused about 2,300 deaths, damaged or destroyed several million homes and buildings, and resulted in the evacuation or resettlement of many people.

Adult Community Survivors

At about 2 months after the Chi-Chi earthquake, Kuo et al. (2003) interviewed 120 adult survivors from two severely damaged towns. Based on the CMINI, the two most prevalent disorders were PTSD (37%) and MDE (16%). In another region near the epicenter, Yang, et al. (2003) screened 663 adult survivors with the CHQ-12 and a DSM-IV PTSD symptom checklist at 3 months after the earthquake. About 11.3% of the surveyed survivors met the PTSD criteria and another 32% also experienced partial PTSD (PTSS) as indicated by the presence of at least one symptom in each of the three symptom clusters of DSM-IV PTSD. The most frequently reported PTSD symptoms were reexperiencing the earthquake through intrusive recollection (42.1%), flashbacks (34.3%), and increased arousal symptoms such as sleeping difficulty (31.1%) and impaired memory (43.9%). The most frequently reported psychiatric symptoms were excessive worrying, nervousness, insomnia, and depressive moods. In both studies, variables associated with PTSD and psychiatric morbidity included female gender, old age, and psychosocial stressors such as financial loss and property damage. Among those reporting PTSD symptoms after the earthquake, only 18–25% used mental health services at primary care clinics. Kuo et al. (2003) argued that this low rate of help seeking in the recent-onset of PTSD might have

been related to survivors' depressive symptoms and social withdrawal or might reflect an environment in which survivors were overwhelmed by having to attend to other demands.

Similar to findings of earthquake research in other nations (Norris et al., 2002), rates of PTSD and psychiatric comorbidity among Chinese earthquake survivors decline gradually as the postearthquake period lengthens. At 10 months after the Chi-Chi earthquake, Lai, Chang, Connor, Lee, and Davidson (2004) used the DTS-C, CMINI, and CHQ-12 to assess 252 adult survivors randomly selected from two severely damaged rural communities near the epicenter. Prevalence rates for PTSD were 10.3% for full PTSD and 19% for PTSS. Approximately 60% of the sample exhibited at least one intrusive symptom and 38% exhibited CHQ-12 caseness (scored ≥ 4). Wu, et al. (2006) conducted a separate population study survey with over 700 adult residents in another village near the epicenter. The CMINIs were conducted with these residents at 21 months and 36 months after the earthquake. Results showed that prevalence rates declined from 5 to 3% for PTSD and from 8.3 to 6.4% for MDE.

Elderly and Children Survivors

Lin, Huang, Huwang, Hwang, and Tsai (2002) assessed 268 elderly survivors aged 65 and older in affected areas within the first few weeks and 12 months after the earthquake, using the 28-item Taiwanese-adapted brief version of the World Health Organization's qualify of life questionnaire (WhOQOL-BREF). They found that elderly survivors tended to report lower quality of life in physical capacity, psychological well-being, and environment at 12 months after the earthquake than during the immediate aftermath of the earthquake, regardless of the level of damage to their residences during the earthquake. However, elderly survivors whose residences completely collapsed during the earthquake reported a higher quality of life in social relationships while others reported the opposite. Lin et al. (2002) argued that the improvement in quality of life in the former group may be due to increased support and care they received from families, relatives, and the community after the earthquake. However, contrary findings were noted by Watanabe, Okumura, Chiu, and Wakai (2004) who found elderly survivors showed pervasive mental health disturbances in the postearthquake period. Compared to similar-age elderly people from nearby permanent homes, displaced elderly survivors who had been evacuated and were living in temporary housing showed higher scores on the CSDS at 6 and 12 months following the earthquake. Lack of social participation and social support from the extended family and neighbors were related to higher depressive scores. These findings suggest that social support plays a

particularly important role in postdisaster adjustment among the elderly population.

High rates of PTSD were also noted among adolescent survivors of the Chi-Chi earthquake. Hsu, Chong, Yang, and Yen (2002) interviewed 323 junior high school students aged 12–14 who remained in the worst-affected region near the epicenter at 6 weeks after the earthquake. About 21.7% of these students demonstrated PTSD based on the ChIPS, with girls having a slightly higher rate than boys (24.3% vs. 17.0%). Compared to the non-PTSD group, the PTSD group showed higher scores on various psychiatric symptom subscales of the CSCL-90-R, namely obsessive–compulsion, anxiety, depression, hostility, somatization, psychoticism, paranoid ideation, and interpersonal sensitivity. Being physically injured and experiencing the death of a close family member with whom they had lived were the two major risk factors for adolescent survivors.

Rescue Workers

Disaster workers are also at high risk for developing PTSD and psychiatric comorbidity (Norris et al., 2002), and are sometimes referred to as "indirect victims." Chang et al. (2003) found that 21.4% of male firefighters who were involved in the Chi-Chi earthquake rescue work showed posttraumatic morbidity (CIES ≥ 26) and 16.7% reported generally psychiatry morbidity (CHQ ≥ 4). Predictors for PTSD symptoms were longer job experience, distancing, escape-avoidance, and lack of positive appraisal.

In the face of extreme natural disaster, military and marine soldiers as well as volunteers from the community also assist in the rescue work. Yet, very few studies have examined the mental health burden of the rescue work on these nonprofessional rescuers. Guo et al. (2004) found that at 1 month after the Chi-Chi earthquake, nonprofessional rescuers (soldiers) had significant higher scores than professional rescuers (firefighters) on the DTS-C and SPAN-C. The prevalence rates of PTSD (DTS-C ≥ 44) for these two groups were, respectively, 31.8 and 19.8%. Guo et al. (2004) proposed several plausible explanations: (1) professional rescuers often have to undergo pre-employment psychological screening designed to select individuals likely to be resilient to repeated exposures to stressors, (2) self-selection can also be a factor as individuals who cannot cope with stressors may tend to be dismissed from their jobs at an early stage of their professional careers, (3) professional rescuers such as firefighters are specially trained for rescue operations and handling acute stress situations, and (4) professional rescuers who had greater exposure to large-scale accidents and disasters may benefit from their previous experiences in handling crisis situation. Results of the above two studies suggest that disaster rescue work is associated with a high level of stress for both trained and nontrained rescuers, and especially for the latter group. Thus, individuals recruited to the rescue

team should be carefully screened as well as provided with adequate training in rescue work and in handling own traumatic reactions.

Medical and Psychiatric Patients

Extreme natural disaster may trigger acute medical conditions in certain individuals, especially patients whose health conditions have already been compromised by stress-related factors. Tsai, Lung, and Wang (2004) found from hospital records that the number of admissions for acute myocardial infarction increased 3.6 times for the first 3 days after earthquake, and 1.5 times at 6 weeks after the earthquake, compared with the same period in previous years. This pattern was also noted in Japan, with the number of hospitalization due to acute cardiac problems in the affected Kobe region increased significantly after the Hanshin-Awaji earthquake (Suzuki, et al., 1997). According to Muller, Abela, Nestro, and Tofliers (1994), neurohormonal, hemodynamic, and coagulation changes associated with emotional or physical stress can cause rupture of a vulnerable atherosclerotic plague, platelet activation, and coronary vasoconstriction. It may be that at-risk individuals in areas affected by an early morning earthquake such as the Chi-Chi earthquake, the sudden increase of physical activities after getting up in haste, in addition to the extreme emotional stress associated with the earthquake, can trigger acute myocardial infarction.

Chen, Yeh, et al. (2001) also found that PTSD symptoms were prevalent among those who sought psychiatric service in the first month following the devastating earthquake. Over 60% of these psychiatric outpatients reported reexperiencing and hyperarousal symptoms on the 17-item checklist for DSM-IV PTSD. The rate of probable psychiatric morbidity (CHQ-12 $\geq$ 3) was 90%. The most common psychiatric symptoms reported were insomnia, palpitations, nervousness, and dizziness with headache. About 11% of these patients also reported having suicidal ideation. Associative factors of PTSD and psychiatric morbidity were being female, serious destruction of property, extent of injuries, and personality characteristics of nervousness and obsessiveness as measured by a locally developed personality inventory.

Natural Disaster – Earthquake in Mainland China

Tangshan Earthquake in 1979

This devastating earthquake with a seismic disturbance of 7.8 on the Richter scale occurred on July 28, 1979 in mainland China. The occurrence and the extent of the damage of this earthquake were only known to the public years later. Now we learned that during the earthquake, the

entire Tangshan city was reduced to ruins within minutes. The death toll was 242,000 including 7,218 households, 164,000 people were severely injured or disabled, total area damaged comprised 30,000 km^2, and the earthquake could be felt in 14 provinces and communities, covering almost one third of mainland China.

A number of studies on the long-term mental health impact of this earthquake have been conducted. The first report was a 10 year postearthquake study. Results showed that survivors who were severely injured and became paraplegic by this earthquake were less intelligent, less expedient, less tender-minded, and more socially impaired when compared to the nonparaplegic survivors (Zhang & Zhang, 1991). At 22 years after the earthquake, 9% of paraplegics were diagnosed with CCMD-2-R PTSD, as compared to 3% of the nonparaplegic survivors. The paraplegic group also had poorer mental health than the nonparaplegic control as reflected by CSCL-90, CSAS, CSAD, and CCMI (Zhang et al., 2002). Similar findings were also noted between adult orphans from the earthquake (aged below 14 during the earthquake) and adult survivors with parents. Almost 20 years following the earthquake, rates of CCMD-2-R PTSD were 28% for the orphan group and 2% for the control group. The orphan group also scored higher on the CSAS, CSAD, CSCL-90, but lower on social support (Zhang et al., 2000).

Yun Nan Earthquakes in 1988

An earthquake measured at 7.6 on the Richter scale occurred in 1988 in the Yun Nan province of south–west China, which shares borders with Vietnam, Burma, and Laos. Houses were on fire, the main highway was blocked by landslides, and communications with the outside was completely cut off. About 13 min later, another earthquake measuring 7.2 on the Richter scale again. These two epicenters were only 90 km apart. Overall, 748 people were killed, 3,664 were injured, and 17,657 houses collapsed. Total damage was estimated to be US $276 million in 1988.

Cao, McFarlene, and Klimidis (2002) examined 1,294 survivors at 5 months after the earthquake with Chinese translations of the Life Event Inventory, CGHQ-28, and PTSD section of the CDIS (DSM-III-R). Three groups were examined according to their distance from the epicenter of the earthquake. Their responses were compared with 908 people from a general population living 520 km away from the epicenters. CGHQ-28 "caseness" (scored ≥ 4) was 50.7% for the entire sample, and 60.4, 48.2, and 44% in the three disaster groups, from closest to those more distant from the epicenter. These rates were significantly higher than the nonexposed groups. The PTSD prevalence among GHQ "cases" was 23, 13, and 16%, and projected estimates for PTSD in combined disaster group were 8.9 and 13.5%, 6.2%, and 7.1 and 8.9% for the three disaster groups. Cao et al. (2002) suggested

that different rates of morbidity could be attributed to the relative impact of the earthquake as represented by epicenter proximity and as measured by the rate of property damage and loss.

Heibei Earthquake in 1998

This earthquake occurred in 1998, measuring 6.2 on the Richter scale around the Heibei province of North China. The affected area was about 2,000 km, caused 49 deaths and more than 10,000 injuries, and left 44,000 people homeless at a temperature of below –20ºC.

Wang et al. (2000) assessed two groups of survivors with different levels of severity of exposure to this earthquake at 3 and 9 months after the earthquake. The overall rates of onset of earthquake-related DSM-IV PTSD were 18.8% within 3 months and 24.2% within 9 months. PTSD survivors reported greater psychological distress as measured by the CSCL-90 and poorer quality of life as measured by the Chinese version of the WHOQOL. The village with a higher level of initial exposure to the earthquake and a higher level of postearthquake support had a lower frequency of PTSD than the village with a lower level of initial exposure and less postearthquake support, with the rate of onset of DSM-IV PTSD within 9 months being 19.8 and 30.3%, respectively. The researchers also examined the effect of using different versions of DSM systems and found that in both villages, the rate of onset of disaster-related PTSD within 9 months was 24.2% by using DSM-IV criteria and 41.4% by using DSM-III-R criteria. They argued that the introduction of DSM-IV of a criteria requiring clinical significant distress or impairment in functioning for a diagnosis of PTSD was a major contributor to the lower rate of DSM-IV PTSD. Similar discrepancy was also observed in Western samples, with the number of adults diagnosed with PTSD using the DSM-III-R being 13-fold greater than those using the more conservative symptom thresholds of the DSM-IV (Schwarz and Kowalski, 1991).

Zhao et al. (2001) also examined 205 school-aged 14–18 adolescent survivors with the PTSD module of the CIDI and CSCL-90 at 17 months after the earthquake. The overall PTSD rate is 9.4%, with girls having a higher rate than boys (15.5% vs. 4.7%). The most frequently reported symptom was restricted range of affect (10.4%), and the best predictors of PTSD symptoms were female gender, depressive mood, fear of loss of life, and severity of injury.

Health Epidemic – Severe Acute Respiratory Syndrome

The global outbreak of an unusual and contagious pneumonia named severe acute respiratory syndrome (SARS) in the early months of 2003 caused considerable panic due to its rapidity of transmission and high

mortality rate. Regions most affected were mainland China, Hong Kong, and Taiwan, accounting for 90% of the 8,096 infected cases and 88% of the 774 deaths from this new infectious disease. About 20% of infected cases were health care workers, who were at particularly high risks because of the lack of forewarning that they might be seeing or contacting someone with SARS. The outbreak also prompted public fear worldwide, as symptomless infected individuals can transmit the disease to other individuals either through airborne droplets, close contact, or air travel.

Mainland China

Yan, Dun, Li, Kwan, and Lau (2004) investigated the mental status and prevalence of PTSD among 286 patients in Beijing at 3 months after recovery from SARS. Incidence rates were 16.4% for depressive state as measured by the CSDS, 10% for anxious state measured by the CSAS, and 9.8% for DSM-IV PTSD as measured by the CIDI PTSD module. Significant predictive factors of PTSD were older age, being married, low education, and knowing someone having SARS and died from SARS. Zhang et al. (2006) also examined 114 SARS patients, 89 hospital staff, and 93 public exposed to SARS at 3 months in the Shanxi province in mainland China, one of the worst affected regions in mainland China. Using total CIES-R scored at or above 19, prevalence rates of PTSD were 55, 25.8, and 31.18%, respectively. While high self-esteem was found to be a protective factor against PTSD for SARS patients and hospital staff, negative coping emerged as a risk factor of PTSD for SARS patients and the general public.

Taiwan

Chong, Wang, and Hsieh (2004) in Taiwan assessed 1,257 health care workers with the CHQ-12 and CIES during the initial shock and reaction phase when the situation was chaotic and the number of patients infected with SARS was escalating, as well as at 1 month later during the repair or reorientation phase when no new infection occurred and the situation was brought under control. The average CIES score was 34.8, with significantly higher scores in men, in those with work experiences of less than 2 years, during the repair phase, among those exposed to SARS, and in those not living with their family. The estimated prevalence of psychiatric morbidity (CHQ $\geq$ 3) was 75.3%, being higher in the repair phase than in the initial phase (80.6% vs. 71.3%).

Hong Kong

Wu, Chan, and Ma (2005) in Hong Kong assessed 131 survivors of SARS at 1 month and 3 months after discharge from the hospital with the CIES-R.

At 1 month after discharge, 12% met the cutoff score (mean score ≥ 2) for intrusion, 9% for avoidance, and 15% for hyperarousal. The overall PTSD rates were 4% at 1 month and 5% at 3 months postdischarge, calculating when all three subscales scored above the cutoff points. Best predictors included low level of blood oxygen saturation during hospitalization for intrusion and avoidance symptoms, as well as a high level of perceived threat for hyperarousal symptoms. The number of persons with whom one could talk was the most important predictor for depressive symptoms.

Cheng, Wong, Tsang, and Wong (2004) in Hong Kong assessed 180 SARS survivors with the CBAI, CBDI, and CIES-R at 1 month after recovery from SARS. About 35% of respondents reported "moderate to severe" or "severe" range of anxiety and/or depressive symptoms. Those working as health care workers or having family member killed by SARS were more prone to develop subsequent high levels of distress. Negative appraisals at the acute phase and 1-month recovery significantly accounted for substantial portion of variances for anxiety and depressive symptoms. Ho, Kwong-Lo, Mak, and Wong (2005) also found that infected health care workers when assessed 3 months after recovery from SARS still reported PTSD symptoms as measured by the CIES-R, with the mean subscale scores ranging from 1.24 to 1.57, which was higher than the range of 0.7–0.8 among a group of accident and emergency victims (Wu & Chan, 2003). Among PTSD symptoms, health care workers were most troubled by intrusive distressing thoughts and images associated with SARS.

Other Studies

A number of studies on traumatic responses to trauma and life adversities have also been conducted in mainland China, and their results were mainly published in Chinese in local academic journals. These studies are descriptive in nature, documenting prevalence and associated factors of PTSD and psychiatric comorbidity. The methodological vigor also varied greatly among these studies.

Adult Survivors of Disaster

Besides earthquakes, natural disasters such as river flooding and typhoon storms are common occurrences in mainland China and Taiwan. A severe flood that struck the Hunan province in China in 1998 had left hundreds of thousands of residents homeless. Much of the infrastructure and many agricultural products were damaged. Liu et al. (2006) used multistage sampling to select and interview 33,340 participants (including adults and children) from flood areas about several months to 1 year after the flooding. For the entire sample, about 8.6% met the DSM-IV criteria for PTSD. Prevalence rates for endorsing at least 1 item from Criteria B, C, and D

were 22.4, 13.3, and 26.5%, respectively. Risk factors of high rates of PTSD symptoms were female, older age, flood type, and flood severity.

Mining and other related disasters also occur every now and then in mainland China due to the country's heavy demand on raw materials of oil, coal, and iron for industrial use. Xu, Dong, and Hu (2005) assessed 28 survivors of a severe mining explosion at 3–5 months after the event with the CIES, CSCL-90, CCMI, EPQ, CSAS, and CSAD. Thirty people without traumatic experiences were used as control. About 78.9% of survivors would be diagnosed as having PTSD, with the CIES scores being 35.68 as compared to 11.67 for the control group. Best predictors were scope of exposure, dissatisfaction with postevent problem solving abilities, and self-blame. In another mining explosion, Cheung, Cheung, Ma, Yang, & Zhao (2004) found that survivors and their family members had higher levels of PTSD, anxiety, and depressive symptoms than those without exposure to the explosion. In general, PTSD symptoms improved significantly within 6 months. Similar results were also noted among those suffering from natural gas intoxication after natural gas well spurting incident. Li et al. (2004) reported that 64% of these survivors scored above 50 on the SRPTSD-C and 21% scored over 60, with fear, inattention, memory decline, and repeatedly thinking of the accident as the most commonly reported symptoms.

Chen, Li, Lu, et al. (2005) assessed 87 survivors of a fire disaster at 40th day, with PTSD symptoms based on the SRPTSD-C and CSID-I. Prevalence of DSM-IV PTSD was 21.8%, being higher among women and those with prior trauma exposure. However, even among the non-PTSD survivors, 71% also reported reexperiencing symptoms, 51% numbness symptoms, and 65% hyperarousal symptoms. Sun et al. (2005) also assessed 82 inpatients with burn injuries on the tenth day after admission to a burn hospital. About 23% met the DSM-IV criteria of PTSD as assessed by the SRPTSD-C. Survivors' scores on the CSCL-90 were also higher than norms on somatization, anxiety, and paranoid ideation. Correlates of PTSD symptoms included total body surface area being burnt, introversion, psychosis, perceived low social support, and prior trauma exposure.

Children and Adolescent Survivors

Liu et al. (2003) assessed behavioral problems with children aged 7–15 in flood-affected areas in the Hunan province during 1998–1999. Prevalence of parent-reported and teacher-reported behavioral problems was 9.7 and 11.0%, respectively. Boys were more likely to be diagnosed with antisocial behaviors, while girls were more likely to have neurotic behaviors. Risk factors included gender, being criticized by teachers in charge of their class, feeling burdened when studying, relatives being wounded due to

the flood, being separated from their family during the flood, being besieged by flood to wait for rescue, and symptoms of PTSD.

Zhao and Chen (2001) explored the effect of traumatic asphyxia when groups of students fell down from high stairs and fell on top of each other for about 10 min. In this incident, 44 high school students were hurt including 14 mildly asphyxiated and 28 slightly asphyxiated, one comatose with lung failure, and five with external injuries to the lung. These students were assessed at 1, 6, 10, 16, and 34 weeks with symptom checklist for CCMD-2-R disorders and CSCL-90. All 44 adolescents reported some psychiatric symptoms on the CSCL-90, 19 met the full PTSD criteria at the first week, 10 were diagnosed with PTSD at the sixth week, and 8 of them returned to normal by the 34th week.

Zhao, Zou, and Cao (2006) assessed 58 college students who were witnesses to their peer committing suicide by jumping. At 3 and 5 weeks after the event, prevalence rates were 6.9% for ASD and 10.3% as measured by the PTSD module of the CSCI. The typical sequence of symptoms was dissociate symptoms, increased arousal, reexperiencing of the event, and avoidance. Students reported dissociative symptoms at 3 weeks tended to have higher PTSD symptom severity scores at 5 weeks.

Road Traffic Accidents

Liu et al. (2002) assessed 81 patients in orthopedic wards at 3 months after road traffic accidents with the CIDI PTSD module and psychiatrist diagnosis based on the CCMD-2-R. The prevalence rates were 41% for acute stress reactions and 38% for PTSD. Those who were diagnosed with PTSD also scored higher on the CSCL-90. Similar rates of PTSD were also reported by Han and Liu (2003) with SRPTSD-C and CCMD-3 at 3 and 12 months after the accident. Predictive factors of PTSD symptoms included severity of trauma, unsatisfactory work history, experience of past traffic traumatic history, attitude to trauma, female gender, and vivid memory of the traffic accidents. However, a much lower rate was reported by Wu and Chan (2004) in Hong Kong. Only 4.3% of the interviewed traffic accident survivors were found to have PTSD at 1 week after the accident according to the CAPS and CIER-R (scored ≥ 2 on all 3 subscales). However, these studies have not reported the extent of physical injuries as a result of road traffic accidents.

Li (2005) interviewed adult patients with craniocerebral injury who were treated in out-patient clinics within 3 months after traffic accident. No formal psychiatric diagnostic assessment was made, but a diagnosis of PTSD was made when patients met the following four criteria: (1) presence of a traumatic event, (2) repeatedly experiencing the trauma experience, (3) increased alertness, and (4) avoidance of activities or places associated with the trauma. About 22% of interviewed patients met

these four conditions and were classified as the PTSD group. Compared to the non-PTSD group, the PTSD group showed lower scores on the Wechsler Adult Intelligence Scale-revised China (WAIS-RC), especially on knowledge, math, number span, number signal, completion of pictures, block pattern, and figure arrangement and sequence.

Special Populations

Wang et al. (1996) assessed 21,198 Chinese air force, military, and marine soldiers and trainees. The prevalence rates of PTSD based on CCMD-2 for these four groups were 9.5, 0.48, 0.58, 0.84, and 0.23%, respectively, and 8.7% for highway patrol soldiers and 18% for soldiers sent to rescue work in a sea disaster. In another study on young highway patrol soldiers aged between 17 and 20, about 28% were diagnosed to have PTSD based on CCMD-2-R and psychiatrist ratings (Ng et al., 2002). Compared to the non-PTSD group, the PTSD group also reported higher scores on CSAS, CSDS, and CSCL-90, but lower scores on social support and active coping. Hui et al. (2001) studied risk factors of PTSD among 39 shipwreck military rescuers at 1 month after the rescue work. PTSD prevalence rate was 18% according to a self-rating scale based on the CCMD-2-R criteria. The PTSD group also reported higher scores on the CSCL-90.

Tse, Heung, Wang, and Lau (2001) examined the prevalence of PTSD among 8,627 psychiatric patients who were hospitalized from 1970 to 1979 and another 6,510 from 1994 to 1998. Information from their hospital records was extracted for scoring on the Chinese Life Events Scale and for rediagnosis of DSM-III-R and ICD-10 disorders. Results showed that PTSD rates were 1.47 for women and 1.18 for men in the 1990s, and 1.4% for both men and women in the 1970s. Among women, risks factors for PTSD in the 1990s included marital discord, extramarital affairs, and financial difficulties, whereas risk factors in the 1970s were dominated by sexual assault.

CHALLENGES AND FUTURE DIRECTIONS

This chapter documents available literature on the assessment of PTSD and psychiatric comorbidity in contemporary Chinese societies. In spite of the relatively short history of trauma research in Chinese societies as compared to the United States, there is already an accumulation of relevant studies conducted with Chinese samples. A majority of these studies have adopted Western criteria to define PTSD and Western assessment tools to evaluate PTSD prevalence and symptom severity. While findings are largely consistent with prevailing trauma literature, there are concerns regarding whether PTSD is a legitimate mental disorder category,

whether Western instruments are valid assessment of this disorder, and whether basic assumptions of Western psychosocial trauma models and their treatment implications are applicable in Chinese populations. Quality trauma research that seeks to clarify these concerns becomes increasingly important, as the delivery of mental health care is changing rapidly in Chinese societies with the adoption of evidenced-based approaches to diagnosis and treatment.

In recent decades, the need for clinical assessment tools in Chinese societies has led to the widespread use of translated instruments from the West. In assessing PTSD and psychiatric comorbidity among Chinese trauma survivors, Western diagnostic interview schedules and self-rating scales have been adopted in an imposed-etic approach in that constructs of PTSD and other mental disorders are assumed to be relevant and meaningful in Chinese culture. Results are also directly applied without consideration of crosscultural differences in terms of psychometric properties of instruments or strategies that should be followed to make interpretation meaningful. Philips et al. (1991) have warned that "The clinical utility of translated instruments depends on the scientific rigor with which they are evaluated and revised in the target culture" (p. 369). Future trauma research in Chinese societies should first attend to fundamental issues relating to whether there is any omission of emic constructs that are central to Chinese culture in conceptualizing life adversity and trauma, in expressing symptoms after exposure to specific traumatic events, and in ways of coping with life vicissitudes. Several chapters in this volume have provided examples and approaches in obtaining emic constructs in trauma research; thus, they are not repeated here.

Future PTSD research in Chinese societies should also broaden the scope of investigation to include more diverse trauma types and survivor groups. At present, information about PTSD and related psychiatric disturbances is mainly generated from adult survivors of natural disasters, health epidemics, and road traffic accidents in mainland China and Taiwan. The mental health impact of human-made trauma as in domestic violence, physical and sexual assault, political oppression, and warfare has so far been neglected, and is probably related to its sensitive nature. In addition, very little is known about elderly and children survivors, as well as individuals from ethnic minority groups and rural populations. Given these groups may be subject to different economic, social, and cultural influences as compared to adult urban survivors, it remains unclear whether they will have similar perceptions and reactions to the same life event or trauma. In order to reduce bias, ethno-cultural and qualitative approaches should be adopted in addition to quantitative methods when collecting, interpreting, and comparing data from different survivor groups.

Finally, there is a need to strengthen the sharing and networking among trauma clinicians and researchers within Chinese societies so that

they can engage in concerted efforts not only in the translation and adaptation of Western assessment tools and treatment protocols, but also in delineating emic constructs to devise indigenous trauma models for research and clinical applications. Findings about Chinese trauma survivors should also be disseminated to local, regional, and international audiences to enhance cross-cultural understanding of trauma and its mental health implications.

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APPENDIX 1

According to the Chinese Classification of Mental Disorders (CCMD-3) (Chinese Psychiatric Society, 2001), the defining Criteria of PTSD are as follows:

> This disorder arises as a delayed and/or protracted response to a stressful event or situation of an exceptionally threatening or catastrophic nature . . . The onset of mental disorders follows the trauma with a latency period ranging from a few days to months. Sometimes, the duration may be over many years.

1. Symptom criteria
   (a) The patients have the experience of unusually traumatic events or situation (e.g., natural and man-made calamities).
   (b) There is reappearance of traumatic experience (flashbacks), with at least 1 of the following
      – Involuntary recall of the experience of being attacked;
      – Repeated manifestation of nightmare with traumatic content;
      – Repeated manifestation of illusions, hallucinations;
      – Repeatedly feel affiliation when the scene retakes place in memories (e.g., revisiting a place). It may cause individual unusual affiliation and cause marked psychological reactions (e.g., palpitation, sweat, looking pale).
   (c) Sustained hypervigilance, with at least 1 of the following:
      – Difficulty of falling sleep, or unreality of sleep;
      – Irritability;
      – Difficulty of concentration;
      – Excessively feeling alarmed.
   (d) Avoidance of situation similar to stimulus or related, with at least 2 of the following
      – Trying not to think people and events related to traumatic experience;
      – Avoiding activities or places that may cause agony recall;
      – Unwilling to contact, become cold on relatives;
      – Narrowing of range of interests, but interested in some activities unrelated to traumatic experiences;
      – Unable to recall traumatic experiences (selective amnesia);
      – Loss of long for future
2. Severity criteria: impairment of social function.
3. Course criteria: the onset of symptoms follows the trauma with a latency period ranging from a few days to months (more than half a year is rare), the duration may be at least 3 months.
4. Exclusion: mood disorders, other stress-related disorders, neurosis, and somatoform disorders are excluded.

Chapter 8

Culture and the Assessment of Trauma in Youths

Kathleen Nader

Culture influences or defines youths' characteristic reactions, methods of expressing reactions, and therapeutic needs following traumatic experiences (Nader, in press; see Box 1). Culture shapes the mediating and moderating factors – the traits, circumstances, and environmental issues that may alter outcomes – associated with traumatic response. Cultural heritage molds the family unit, which in turn helps to form a youth's identity development (Sonderegger, Barrett, & Creed, 2004). Findings have been mixed regarding many aspects of youths' traumatic responses. Many factors, including cultural issues, may account for these mixed findings. The norms of one culture may not apply to those of other cultures (Lee, Lei, & Sue, 2001; Rousseau & Drapeau, 1998). The nature of early attachment relationships, for example, is a variable that has influenced psychological outcomes and resilience in children (Zevalkink, Riksen-Walraven, & Van Lieshout, 1999). The distribution of attachment types differs among cultures. Israeli, Japanese, and Indonesian attachment norms differ from those of North Americans. Accurate assessments of youths necessitate adaptations in methods, measures, and interpretations when multicultural or immigrant groups are evaluated within a country or in nations outside of the assessor's own nation.

ASSESSING CULTURALLY DIVERSE GROUPS

Individuals represent themselves in terms of both personal and communal dimensions (Mascolo, 2004). A youth's family cultural background and other personal cultures may affect many aspects of the youth's traumatic reactions, their assessment, and the interpretation of findings (Marsella, Friedman, Gerrity, & Scurfield, 1996; Nader, 1997, 2003, in press; Nader,

Box 1. Traditional Ceremonies After Deaths: From a Child's View

Joshua. Joshua's traditional Jewish grandparents lived with his family. When Joshua was 8, his 3-year-old brother, David, chased a ball into the street and was killed by a passing car. Joshua and his mother had tried to run after David but were too late. Joshua's classmates wondered why he became quiet and wrinkled his brow when they spoke of heaven. When a friend visited his home during the week of "sitting shiva," they wanted to know why the mirrors were covered and the family's clothes were torn.

Sa. After Liberian rebel soldiers killed a village family, all of the children in the village were sent into one of the houses. During the funeral procession, the house was closed, the windows were covered, and chalk was rubbed under the eyes of each child so that the spirit of the dead could not enter into the child and cause him or her harm. Sa watched anxiously to see if the window coverings were secure and the chalk was under each child's eyes.

John. Before his brother's death, 16 year-old John seemed angry with his Native American parents when they tried to get him to honor traditional practices. He wanted to fit among his school peers. After his brother was shot and killed (possibly by someone who held prejudice against Native Americans), John became even more resistant. A year after the death, his family gave a potlatch to honor his brother. Although it gave much honor to his brother among native peoples, John was angry to have family possessions given away rendering them more impoverished and dependent upon others.

An. After a sniper attack on her school playground, An, age 7, kept dreaming of her friend who died in the attack. An was very frightened. She believed that this was a message from her friend and that her friend's soul would cause her harm if no one assisted her soul to pass on from this realm. A Vietnamese Buddhist monk performed a ceremony on the school grounds for the dead souls. An attended a separate ceremony for her friend. She practiced chanting in the way that the monk told her to for 49 days and dedicated its merit to her friend.

Dubrow, & Stamm, 1999). Cultural issues may influence the nature and success of rapport, the understanding of questions, and the youths' ability to understand an interviewer as well as the youth's reporting style, willingness to answer questions accurately, and the meaning of questions, experiences, and words (Nader, in press; Westermeyer, 1987, 1990). Symptoms and traits may not be reported because of differences in reporting style (Mezulis, Abramson, Hyde, & Hankin 2004). Culture greatly affects an individual's view of self and of self in the context of others (Kranz, Ramirez, Flores-Torres, Steele, & Lund, 2005; Mezulis et al.). In one culture, for example, boasting about desirable traits is the norm. In another, modesty and self-effacing behaviors are standard. In the US competitiveness is prevalent. For traditional Mexican-Americans and other interdependent cultures, noncompetitiveness is valued (Kranz et al.).

Aspects of personality, location, and circumstance become entwined with culture and religion and affect treatment and assessment (Nader,

in press). Attitudes, expectations, behaviors, practices, and life experiences differ by location (e.g., rural versus inner city), religion (e.g., sect, specific church/temple community), parents' profession and professional training, and multiple other shaping factors. Discovering a family's beliefs and expectations regarding intervention is a prerequisite for assessment and intervention for youths of differing cultures (Nader, 2003). There is no substitute for learning within a community and engaging community and religious leaders, community members, and the individual patient to learn and to be guided in recognizing a group or individual's specific needs (Westermeyer, 1987; Yee, 2003).

A nation or group's history of traumas such as wars and disasters shape their current cultures and reactions. The Nazi Holocaust is inextricable from Jewish cultural history. According to Lira (2001), political repression and violence in Chilean society has resulted in a "culture of death and terror." Games developed by two or more children may become a part of an ongoing youth culture (Mascolo, 2004). ". . . ashes, ashes, we all fall down!" is a part of a children's game currently played that emerged during the plague in Europe.

ETHNICITY: MIXED FINDINGS IN US SAMPLES

Mixed findings regarding ethnicity and culture in US samples have been attributed to cultural reporting biases, cultural coping styles, or the interaction of culture and other variables (Ahadi, Rothbart, & Yee, 1993; DeVoe, Klein, & Linas, 2003; Mash & Dozois, 2003; de Silva, 1999). Rapport with youths of varied cultures and sanction from authority figures (discussed below) are important to the accuracy of assessments. Specific traits (see "Culture and Personality") and circumstances may confound findings.

Confounding Variables

Studies of youths, trauma, and culture sometimes have been confounded by differences in risk factors among cultures such as a group's numbers and degrees of traumatic exposures, socioeconomic status (SES), or access to services (Costello, Keeler, & Angold, 2001; Fletcher, 2003; Mash & Dozois, 2003; Nader, 2003, in press; Silverman & La Greca, 2002). In a post-September 11, 2001 study of parents and their highly exposed preschool children, DeVoe et al. (2003) found no significant differences in rates of PTSD for White, Mixed, and Minority children (or adults) with high SES. Larger national samples of Euro-American, African-American, and Hispanic-American children have found either no or very small differences related to race or ethnicity when they have controlled for SES,

sex, age, and referral status (Mash & Dozois, 2003). Higher levels of externalizing behaviors found for African-American children in some small studies of child psychopathology are probably related to SES. European American and Native American children also have similar mental health problems with one exception; substance abuse rates have been higher for Native American youths (Costello, Farmer, & Angold, 1999; Mash & Dozois, 2003).

Additional Stressors

Additional stressors may be factors in immigrant or minority youths' reactions. Minority groups are often much less likely to receive specialty mental health services (Hancock, 2005; Mash & Dozois, 2003; Rabalais, Ruggiero, & Scotti, 2002). When negative stereotypes are applied to cultural minorities, youths and adults may have to contend with the additional stresses of discrimination, prejudice, or persecution. Immigrants or displaced persons may contend with culture shock, a loss of resources, loss of power/status, and loss of a comfortable way of life. Immigrant youths often must live in dual primary cultures – one at school and one at home.

Reporting Patterns

Although many studies suggest that parents report more externalizing behavior problems for their children than youths report for themselves, in a study of high risk youths, Lau, Garland, Yeh, McCabe, Wood, and Hough (2004) found this pattern only for Caucasian parents. Caucasian parents reported more problems for their children than the youths reported for themselves. In contrast, minority parents reported fewer problems for their children than youths reported for themselves. In addition, Caucasian parents reported more internalizing and externalizing problems for their adolescent offspring than African-American, Hispanic, or Asian Pacific Islander parents reported for their offspring. Youth reports indicated no differences between ethnic groups for internalizing or externalizing symptoms.

Studies have shown that compared to youths, parents, and trained independent observers, teachers report more externalizing problems, such as attention, aggression, and delinquency problems, for African-American youths (Lau et al., 2004). Lau et al. found that teachers reported more behavior problems for African-American boys than other informants reported for them. Teachers reported more problems for African-American youths than for Hispanics and Caucasians. Their reports differed more from African-American parent or adolescent reports than they differed from Caucasian or Hispanic youth or parent reports. Teachers reported

fewer internalizing problems for African-Americans and Asian/Pacific Islanders than for Caucasians. They reported fewer externalizing problems for Asian Pacific Islanders than youths reported for themselves.

Birth Cohorts

Cultures change over time (Mascolo, 2004; Nader, in press). Youths in different decades or eras grow up in different sociocultural environments (Roberts & Helson, 1997; Twenge & Campbell, 2001). Social norms, development, and other variables important to the assessment of trauma and its possible outcomes may vary significantly for different birth cohorts. For example, although 1990s Russians as a whole rated moderate in individualism, masculinity, and power distance (acceptance that power is distributed unequally), and fairly high in paternalism (protective functions of family are assigned to the state) and uncertainty avoidance, the younger generation had the highest scores in masculinity and the lowest scores in paternalism (Naumov & Puffer, 2000). Between 1960 and 1990 in the US, individualism and a cultural emphasis on self-fulfillment increased (Twenge & Campbell).

NATIONAL, REGIONAL, AND EXPERIENTIAL CULTURES

Like adults, youths belong to more than one cultural group (Nader, in press, 2003) – one or more peer cultures, a family culture, a religious culture, a school and/or job-related culture, and an ethnic culture. Each of these cultures is embedded in the larger national culture (Mascolo, 2004). Within the larger national culture exist multiple subcultures that evolve experientially and regionally. Groups emerge in response to common experiences such as trauma or war (Nader, in press). Important differences in thinking and prescribed behavior may be found, for example, among northern, southern, and western US Americans or among rural versus large city inhabitants. International adoptees may have particular sets of problems that are both similar to and different from other immigrant groups. Individuals who fled a nation before war share some and not other reactions to the war. Social and emotional context is relevant to the assessment of all individuals and may become especially important for adolescents. In adolescence, the process of differentiation accelerates with the proliferation of multiple selves that vary in different social contexts (Harter, Waters, & Whitesell, 1998).

Trauma-Related Subcultures

Subcultures may arise from shared traumas (Nader, in press). Although in some cases trauma victims avoid one another in order to avoid the stigma

associated with victimization or to avoid being reminded of the trauma (Terr, 1979; Webb, in press), a kind of bonding may occur among those who go through intense experiences together (Herman, 1992; James, 1994; Nader, 1997; Ochberg & Soskis, 1982). Trauma-related subgroups may increase or decrease protective factors such as social support or the sanction of specific behaviors. In addition to trauma-bonding, individuals may rally around a specific posttrauma theme (Nader, in press, 1997). These theme-related groups may be at odds with one another and may consequently result in increased or intensified symptoms and the reinforcement of particular behaviors such as retaliation. In one community, parents of deceased youths engaged in conflict with parents of traumatized youths. After a school disaster, teachers grouped by degree of classroom exposure. Youths may become more comfortable with other youths who have been through something of significant emotional impact (Stuber & Nader, 1995). Previously well-behaved boys exposed to separate shootings that killed a peer began to associate with other troubled youths. These youths were determined to find and fight others who might injure them (Nader, in press). Continued affiliation with antisocial peers has been linked to a youth's higher levels of antisocial behavior (Crick et al., 1998; Laird, Jordan, Dodge, Pettit, & Bates, 2001). Such relationships may serve to maintain or to promote maladaptive behavior patterns (Laird et al., 2001). Posttrauma cultures, especially after war or other violence, may be characterized by fear, hatred, and rage. Humiliation and shame may also result from such traumas (Herman, 1992; Scheff, 1997). These conditions may render youths more vulnerable to influences that engage them in violence against a defined enemy (Scheff, 1997; Volkan, 2001).

National Cultures

National and local cultures demonstrate particular expectations, beliefs, and behaviors in common (Nader, in press). Zhang, Kohnstamm, Slotboom, Elphick, & Cheung (2002) observed that Chinese in mainland China, Hong Kong, Taiwan, and the US possessed some common traits that are deeply rooted in the Chinese culture and characterized by Confucian thought, such as self-discipline and moderation. On the other hand, even when they are from distinct ethnic religious, regional and experiential groups, acculturated individuals within a nation, as a whole, are, in some ways, more like one another than like individuals from the nation of their foreign heritage (Hofstede, 1980, Table 1). For example, a *self-serving* or *positivity bias* is an individual's inclination to view things such that a positive self-image is maintained – to attribute successes and good things or events to self; to assign negative or failure events to things that are changeable suggesting that they can be avoided in the future.

Table 1. Hofstede's Dimensions of National Cultures

Cultural Dimension	Definition	High 1980s[a]	Low[b]
Power distance	How much a society's powerful and powerless accept the fact that Power is distributed unequally in institutions and organizations	BEL, TUR, IND, FRA, BRA, COL, VEN, MEX, RUS, SIN, YUG, PHI	ISR, AUT, DEN, IRE, NZL
Individualism/ collectivism	People are supposed to take care of themselves and of their immediate families only versus tight social framework in which people expect their relatives, clan, or organizations to look after them	AUL, CAN, DEN, GBR, GER, IRE, NET, NZL, SWE, SWI, USA	CHL, COL, HOK, MEX, PAK, PER, POR, SIN, TAI, THA, VEN, YUG
Masculinity/femininity	The extent to which a society's dominant values are "masculine" – assertiveness, acquisition of resources, not caring for others or the quality of life	AUT, IRE, ITA, JAP, MEX, PHI, SAF, SWI, VEN	CHL, DEN, FIN, NET, NOR, SWE, POR, YUG
Uncertainty avoidance	The desire to avoid uncertainty or the desire for predictability	AUT, BEL, FRA, GER, GRE, ISR, ITA, JAP, PAK, POR, SA, SPA, TAI, TUR, YUG	DEN, GBR, IRE, HOK, SIN, SWE

© Nader (2005). Derived from Hodgetts (1993); Hofstede (1980); Naumov & Puffer (2000); Most countries fall somewhere between the extremes. Abbreviations: ARG, Argentina; AUL, Australia; AUT, Austria; BEL, Belgium; BRA, Brazil; CAN, Canada; CHL, Chile; COL, Colombia; DEN, Denmark; FIN, Finland; FRA, France; GBR, Great Britain; GER, Germany; GRE, Greece; HOK, Hong Kong; IND, India; IRE, Ireland; ISR, Israel; ITA, Italy; JAP, Japan; MEX, Mexico; NET, Netherlands; NOR, Norway; PAK, Pakistan; PER, Peru; PHI, Philippines; POR, Portugal; SIN, Singapore; SPA, Spain; SWE, Sweden; SWI, Switzerland; TAI, Taiwan; THA, Thailand; TUR, Turkey; USA, United States; VEN, Venezuela; Yugoslavia, YUG.

[a]Nations studied by Hofstede in the business arena that demonstrated high levels of this dimension (65–94) of Power distance, Individualism, Masculinity or Uncertainty avoidance.

[b]Nations demonstrating low levels of the dimension (0–29) of Power distance or Uncertainty avoidance or high levels of Collectivism or Feminity.

Although reported levels differed among groups, in a meta-analysis of 266 studies, Mezulis et al. (2004) confirmed a *self-serving* or *positivity bias* across diverse age, gender, and cultural groups (see "Locus of Control and Culture"). Among national cultures, the bias was very large in *Western* cultures and significantly smaller in Asian cultures. Within the US, levels of the bias were remarkably consistent across ethnic groups. This finding demonstrates the necessity of examining the level of acculturation when assessing posttraumatic outcomes. Age, nationalization, acculturation,

regionalization, personal and family histories including SES and language proficiency, and peer influence contribute to the differences within cultures (Nader, in press; Ramirez, Flores-Torres, Kranz, & Lund, 2005).

Nations. National cultures differ in their acceptable and valued personality styles, expected gender behaviors, and specific attitudes, beliefs, and practices. Amidst the qualities identified as varying among cultures are (1) the *need for structure* (Hofstede's Uncertainty Avoidance – the need for formal rules, belief in absolute truths, specified leaders and experts, and intolerance of deviant ideas and behaviors; Hofstede, 1980; Soeters, 1996); (2) a *masculine versus feminine focus* – in addition to the masculine values directed toward ego goals, achievement, careers, and high salaries, feminine societies place a priority on the quality of life and relationships; they value social goals such as taking care of the environment and the poor, weak, and needy (Hofstede, 1980; Lloyd, 1999; Soeters, 1996); (3) *individualism versus collectivism* – the emphasis on independence versus interdependence (Hofstede, 1980; Markus, Kitayama, & Heiman, 1996; Shiang, 2000; Shiang, Kjellander, Huang, & Bogumill, 1998; Triandis, Kashima, Shimada, & Villareal, 1986); (4) prevalent *gender behaviors* (Ahadi et al., 1993); (5) long-term versus short-term *time orientation* – long-term future planning versus immediate access to and usage of resources (Arrindell, 2003); (6) specific *coping styles* (Ahadi et al., 1993; Pole, Best, Metzler, & Marmar, 2005); and (7) accepted methods of *emotional expression*. Because of their importance to assessments and findings regarding youths, differences in interdependence versus dependence, cultural variations in emotional expression, reporting practices, and differences in the qualities most commonly reported for youths, genders, and personalities are discussed here. Culture-bound syndromes are discussed in other chapters of this book.

Independence Versus Interdependence

Individuals in different regions of the world define themselves and are influenced in relationship to a primary focus on independence or on connectedness (Markus, Kitayama, & Heiman, 1996; Nader, in press; Shiang, 2000; Shiang et al., 1998; Triandis et al., 1986). Interdependent versus Individualistic preferences are not reflected in the numbers of close relationships in individuals' inner, middle, and outer circles (Antonucci, Akiyama, & Takahashi, 2004). Numbers of such relationships have been similar across cultures. For independence-oriented nations, the valued self is highly individualistic, autonomous, and seeks to conquer new frontiers. Interdependence-oriented (collectivistic) nations such as Asian, Latino, and African cultures, stress the good of the group before individual needs. *Western* cultures such as the US, northern Europe, and Australia often are more independence oriented. Although the US generally highly

values individualism, many American subcultures (e.g., African and Chinese American) include values of interdependence (Boyd-Franklin & Franklin, 1998; Nader, in press; Nader, Dubrow, & Stamm, 1999; Watson, 1998).

Values of independence versus interdependence are reflected in cultural parenting practices (Watkins & Williams, 1992). These practices shape children's temperaments, behaviors, and symptoms. For example, although both cultures attended to the needs of their infants and children, studies found American mothers' encouraged activities and independence while Japanese mothers' soothed and quieted children and encouraged group harmony. American mothers punished by making children stay home; Japanese mothers punished by putting children out of the house (McDermott, 1991).

Reporting Practices

Cultural and religious beliefs influence how individuals express and report distress as well as how they respond to traumas and to treatment (McGoldrick, 1998; Nader, 2004). The length of time (days, weeks, months, or years) it takes for a person to reveal personal traumatic reactions varies by culture (Kinzie, 1993).

Differences in Emotional Expression. The same situation may evoke widely different emotional expressions from different cultural groups (Mills, 2001; Nader, in press). Culturally recognized and sanctioned ways of expressing depression or anxiety may range from silent suffering to intense emotionality (Boehnlein, 2001; Laria & Lewis-Fernández, 2001; Lee et al., 2001; Shiang, 2000; de Silva, 1999; Velez-Ibanez & Parra, 1999). For some cultures (e.g., Asian, Middle Eastern), voicing mental health problems may shame or stigmatize (Kinzie, 1993; Shiang, 2000). The greater stigma associated with mental health problems in such cultures may result in the underreporting of symptoms or avoidance of mental health assistance (Lee, 1996; Nader, 2003; Shiang, 2000; Yee, 2003). Youths from these cultures may complain of physical symptoms instead of emotional ones. This allows the elicitation of social support without stigmatization and shame (Shiang, 2000). In such cultures, it is essential to recognize the import of physical complaints (Lee, 1996; Shiang, 2000).

Issues of self-control provide an example of differences in children's symptomatic expressions (Nader, in press). Studies suggest that in societies that require controlled behaviors such as Kenya, Thailand, and Jamaica, children exhibit more *over-controlled* problem behaviors–fears, feelings of guilt, somatic concerns, depression, and anxiety (Lambert & Weisz, 1989; Mash & Dozois, 2003). US children, in contrast, have rated particularly high on *under-controlled* problems like arguing, disobedience at home, and cruelty to others (Weisz & Sigman, 1993).

Parent Reporting. A culture's emphasis on certain traits, such as conscientiousness, and variations in descriptive style are important when assessing parent reports in multicultural groups. Parent reporting styles differ among cultures. Zhang et al. (2002) found that Chinese parents more often used negative (or critical) terms than did Dutch parents to describe their children. In another study, American mothers rated their low achieving children as high as Japanese and Chinese mothers rated their high achieving children on motivational, academic, and intellectual characteristics (Ahadi et al., 1993).

Self-Descriptions. Methods of describing self and symptoms distinguish cultural groups from one another (Nader, 2006, in press). A lower self-serving bias than other members of a culture is associated with increased levels of psychopathology. As discussed earlier, the self-serving bias is generally higher among Western nations and lower among Asian nations. Mezulis et al. (2004) found significant variability in the magnitude of the bias among individual Asian cultures. Japan and Pacific Island samples reported no self-serving bias, India a moderate bias, and China and Korea a large bias. Mezulis et al. suggest that differences in reporting styles may be the reason that Japanese and Pacific Islander samples display no self-serving bias. Self-description differences are important to item construction as well. McInerney, Lillemyr, and Sobstad (2004) examined self-esteem in two Western (individualist) versus two non-Western (collectivist) cultures. They found a method effect related to how positive and negative question components were ordered. A positive against a negative method effect appeared for the two collectivist groups.

Contextual Differences

Context is important to the elicitation of youth or parent-reports as well as to the observation of behaviors. In general, youths may behave and report differently in different contexts. Cultural differences may influence findings in specific testing situations. Cultures in which young children are rarely separated from their parents may be more reactive and symptomatic in response to situations requiring separations (Takahashi, 1990). For Indonesian mothers, Zevalkink et al. (1999) found that the quality of parental caregiving differed in the home setting where interactions were unstructured from caregiving in a structured lab play session.

Interpretation of Symptoms and Behaviors

Symptoms or experiences are interpreted differently among cultures (Nader, 2003, in press; Westermeyer, 1990). Some African, Hispanic, and Asian groups attribute physical and psychological disturbances to mystical or spiritual causes (Velez-Ibanez & Parra, 1999; Westermeyer, 1987).

In some American and Asian cultures particular hallucinations or spiritual visions are valued experiences. Dissociative experiences may be sought for cleansing, coping, and healing purposes. In one culture dreams of the deceased may signal the dreamer's distress or a move toward resolution in the grieving process (Nader, 2003). In another culture dreams are believed to represent intrusion or signaling from the dead. For traditional Southeast Asian communities, dreams of the dead signal the deceased person's message of unrest or foreboding and necessitate that living relatives make amends or preparations (Gerber, Nguyen, & Bounkeua, 1999; Box 1). In particular Native American cultures, renaming a relative after a dead person is a way of honoring the dead (Stamm & Stamm, 1999). After one disaster, an uninformed therapist interpreted it as an attempt to replace the dead.

The predictive significance of child behaviors varies across cultures (Nader, in press). In Western cultures, children's shyness and oversensitivity have been associated with vulnerability, peer rejection, and social maladjustment. For Shanghai Chinese children, these same traits are associated with leadership, school competence, and academic achievement (Ahadi et al., 1993; Chen, Rubin, & Li, 1995; Mash & Barkley, 2003; Mills, 2001).

Culture and Personality

Variations in prevalent personality traits among cultures may affect study outcomes. Findings regarding culture and personality have varied by gender, reporting source, and assessment measure (Nader, in press). US studies have demonstrated that specific personality traits or types, such as *difficult personality* (Chess & Thomas, 1991), *inhibited* (Kagan, Snidman, & Arcus, 1995), and *introverted* youths (Otis & Louks, 1997), have been associated with increased vulnerability to anxiety disorders or to increased trauma symptoms (Nader, in press; Rothbart, Ahadi, Hershey, & Fisher, 2001).

Biederman et al. (1990) found an increased risk of multiple anxiety, overanxious, and phobic disorders for inhibited children. As discussed, these same traits have different significance in other cultures. Cultures exhibit variations in desirable or prevalent personality traits and differently define the traits that are more or less accepted in girls and in boys (Ahadi et al., 1993; Heinonen, Räikönnen, & Keltikangas-Järvinen, 2003; Nader, in press).

Measures of Personality. For assessment purposes, it is essential to recognize the considerable variability of traits within a nation. Measures of personality vary in their basis (see Nader, in press). Findings regarding personality trait differences among cultures have varied to some extent in relationship to the traits assessed and by source (self versus observer-report).

Some personality traits, such as those described in the five factor model (or 3–7 factors depending on age; see Nader, in press), are believed to be rooted in biology (Terracciano et al., 2005). Other traits appear to be more social constructs. For college students and adults, the factor structures found in US self-reports of the five factor traits replicated among most of 50 cultures studied (McCrae, Terracciano, & 78 Members of the Personality Profiles of Cultures Project, 2005b). Some differences are reported for African national personality structures. Differences exist among cultures in the mean levels of specific traits (McCrae, Terracciano, & 78 Members of the Personality Profiles of Cultures Project, 2005a). Europeans and Americans, for example, scored higher on Openness to Experience and Extraversion than did Asians and Africans. Using a measure of Jungian-based traits, the Student Styles Questionnaire, Oakland (2001) found differences in youths' trait preferences among cultures. Oakland did not find significant differences between Chinese and US youths in extraversion.

Gender Differences. Multiple factors, including culture, must be taken into account when assessing gender and other differences (Nader, in press). Assessed adult male–female gender differences are small but are generally consistent with gender stereotypes (Terracciano et al., 2005). Women score higher on warmth and men on assertiveness, for example (Terracciano et al.), and women are more positive than men in their assessments of others (McCrae et al., 2005b). Cultures differ in the magnitude of sex differences. McCrae et al. found that rich, egalitarian, individualistic, and masculine cultures (see Hofstede, 2001; Table 1), such as European and American cultures in contrast to Asian and African cultures, have marked sex differences. Gender typical *behaviors*, in contrast to gender *traits*, may be a reflection of role requirements rather than of trait differences.

Researchers have found gender differences among cultures for youths (Nader, in press). Ahadi et al. (1993) studied 6–7-year olds in the People's Republic of China (PRC) and the United States. Gender differences found in US children were reversed for the PRC children: PRC girls had higher Activity, lower Inhibitory Control, higher Impulsivity and High Intensity Pleasure (i.e., sensation seeking). Higher levels of sensitivity to low levels of stimulation (Perceptual Sensitivity and Low Intensity Pleasure) were found to be greater for girls in the US and for boys in the PRC.

Multicultural Groups

Levels of youth and family acculturation are important to the assessment of multicultural groups. Acculturation varies in style and rapidity among immigrant groups and within families (Nader, 2003; Sonderregger et al., 2004). Youths are more likely than adults to adopt an acculturation style of adaptation to a host country (Hancock, 2005; Sonderegger et al., 2004).

Children tend to adapt faster than adults to a new culture (Garcia-Preto, 1998). The greater the cultural gap between family members, the more likely it is for conflicts to erupt between parents and children (e.g., during adolescence around the issue of courtship) (Garcia-Preto, 1998; Gerber et al., 1999; Park, 1996). This may add to posttrauma distress. The pursuit of adopting a host culture while maintaining traditional cultural integrity has served as a buffer against acculturative stress and psychopathology (Sonderegger et al., 2004).

Culture, Risk, and Resilience

For multicultural groups, risk and protective factors may be mediated by other influences such as duration in host culture, acculturation style, cultural coping styles, and self-concept (Sonderegger et al., 2004; see "Self-View and Social Support"). A number of risk and resilience factors are associated with youths' traumatic reactions (Nader, in press). Following traumatic events, higher levels of social support have been associated with lower levels of trauma for both children and adults, for example (La Greca, Silverman, Vernberg, & Prinstein, 1996; Rabalais et al., 2002). Cultural norms affect the manner in which a youth's support systems respond to his or her traumatization as well. Research suggests a bidirectional link for social support and self-esteem with youths' abilities to cope with stressful situations (Sonderegger et al., 2004). Individuals normally incorporate perceived levels of support and approval from others into their judgments of their worth as a person (Harter et al., 1998). Youths, particularly, are vulnerable to devaluation because of their minority status by majority groups peers. Threats to an individual's sense of being valued or respected (e.g., humiliation or devaluation) can increase arousal symptoms (Gilligan, 2003; Nader, 2006; Scheff, 1997; Wilson, 2006).

PREPARING FOR ASSESSMENT

With any culture, preparation for assessment is important. Preparation includes establishing rapport, providing a safe and comfortable environment, reducing group anxiety, and introducing and conducting the assessment in culturally relevant ways. Establishing rapport includes attention to qualities of the interviewer and interview style, respect for cultural and religious needs, and recognition of posttrauma needs.

The Interviewer

In addition to the importance of competence in working with traumatized youths, an interviewer's rapport and acceptance by a youth are enhanced

by the interviewer's respect for the youth (Ramirez et al., 2005). Becoming acquainted with a culture within the culture's community is recommended (Ramirez et al., 2005; Westermeyer, 1990). It is important that the interviewer understand words, phrases, and behaviors that represent culturally relevant expressions of distress or regression. Members of a culture may feel more comfortable obtaining assistance from traditional healers instead of western-trained clinicians (Awwad, 1999; Dubrow & Nader, 1999; Valez-Ibanez & Parra, 1999; Yee, 2003). Clinicians and researchers may incorporate elements of traditional culture or may include traditional healers into the assessment and treatment processes (Danieli, 1998; Nader, in press, 2003).

Many factors affect the acceptance of a clinician or researcher. Traditional Native Americans might refuse to see a therapist who is too young to be a medicine person (Stamm & Stamm, 1999). Traditional Asian Americans may be reluctant to share information with individuals who do not speak their language and understand their culture (Yee, 2003). Children often are receptive to interventions from adults who have the sanction of their authority figures including parents and community leaders. Such endorsement is important to all ages, but may be more complex for work with some adolescents with varying degrees of acculturation (Box 2). Respect for and cooperation with adults is expected in most interdependent cultures such as Asian and Hispanic groups (Ramirez et al., 2005).

Preludes to Rapport

Providing interventions in any culture requires contact and rapport with authority figures or leaders of the household, school, and/or community (Nader, 2003, in press). For some traditional cultures specific individuals must sanction interventions. It is important to recognize community and family hierarchies (Nader, Dubrow, & Stamm, 1999; Ramirez et al., 2005; Yee, 2003). In traditional Southeast Asian cultures, an age hierarchy exists (Gerber et al., 1999). In Native American groups, recognized elders do not include all people over a certain age (Stamm & Stamm, 1999).

Understanding usual styles of interaction within a culture can assist rapport and acceptance by parents and youths. For Mexican-American immigrants, Hancock (2005) suggests use of indirect methods of gathering information until trust is established. Such methods may include sensitive curiosity about the immigration experience. Cultures vary in their tolerance of and need for eye contact, physical proximity, and attitudinal warmth. For Mexican-American children, Ramirez et al. (2005) recommend that assessors and clinicians begin with a casual chat, warmth and individualized attention, and responsiveness. They recommend a warm handshake and close physical proximity to reduce anxiety. Close physical

Box 2. Case Examples

David. Fifteen-year-old David was wounded in a school shooting. He was badly traumatized by his experience. The clinician who was to assess and treat David for his PTSD had learned about their traditions through study and work among Southeast Asian families. She felt a deep respect for their traditions and an admiration for the loving nature of their parenting. With his parents, she arranged for a shaman to join her, David, and his family in the hospital for a ceremony to return David's lost soul to his body. David did not want to go through the ceremony. He was embarrassed by the idea of it and said that the non-Asian therapist had sold out by inviting a shaman to conduct the ceremony. David's 17-year-old sister said to him, "It seems odd, I know, but you'll see. It really helps."

Lia (Fadiman, 1997). In the healing ceremony for Lia, a Hmong American, the *twix neeb* (shaman/healer) shook his rattle loudly so that Lia's soul would hear it . . . the pig to be sacrificed (and later eaten by the group of relatives and friends gathered for the ceremony) was paid with spirit money for his great gift to Lia. When the divination horns indicated that the pig had accepted, the shaman thanked the pig and used his saber to cut Lia's sickness away . . . With veil, gong, and rattle working, he entered an ecstatic trance . . . He chanted ancient incantations speaking to his familiar spirits and negotiating with *dabs* (malevolent spirits) for release of Lia's captive soul . . .

Chou (Eshowsky, 2005). The shaman asked gang members and wannabes why they liked to fight . . . The ceremony included ritual blessings and invocation of protections, singing in an old language, rattle, and dance. Two days included journeying, storytelling, drumming, healing, council, and recreation . . . A boy came to the camp and challenged Chou, a Hmong American looked up to by the other boys. Chou broke the boy's nose. The next day, Chou was withdrawn and morose. In a private walk with Chou, the shaman used his rattle to begin a journey on his behalf. Chou's lost soul parts were related to abandonment and violence. The shaman had a vision of Hmong adults carrying a bright heart shape. They chose Chou to be a healer and sent this to him. They wanted Chou to know that their people were old and precious and that he was the carrier of their hopes. The shaman blew the gift into Chou . . . During the rest of the time, instead of resisting, Chou began to facilitate the camp process.

proximity may cause anxiety or be misinterpreted by some acculturated US Americans. Although direct eye contact is the norm for many American cultures, avoidance of direct eye contact between individuals is considered respectful in some cultures such as traditional Asian Indians and Southeast Asians. Lack of eye contact from a child to an adult is a sign of respect from Mexican-American children (Ramirez et al., 2005).

Preparing Individuals and Environments for Assessment

Before assessing individuals following traumatic events, it is essential to prepare youths, family members, and the environment for assessment (Nader, in press). Some methods of preparation are important in any

culture. Others are culture specific. Ensuring a youth's physical safety and wellbeing must precede any attempts to assess formally his or her traumatic reactions (McCleery & Harvey, 2004; Nader, 1999, in press). It is important, initially, to restore safety, prevent additional traumatization, attend to physical injuries and needs, and provide support (Nader, 1999). Actual safety may not be enough to make youths feel safe. It may be necessary to move youths to a new location, provide medical care, and permit time with family. The primary assessor may then make contact with community leaders and administrators and with parent groups, and attend to cultural practices and beliefs regarding the event, deaths, and mental health (Nader, in press; see below). Unless cultural needs are addressed, assessments may not be accurate or therapeutic (Westermeyer, 1990). Understanding cultural norms can prevent misunderstandings. Adherence to time and schedules, for example, varies among and within cultures. Mechanisms for protecting the privacy of reporting youths are essential for all cultures. In some cultures, it is essential to life and health. In Middle Eastern cultures, even in this era, revealing a girl's rape may lead to her death.

Preparatory Rituals

Cultural and religious rituals may become important when interacting with families or communities (Nader, 2003; Box 1). Specific observances may alleviate depressive and anxiety symptoms. Some African, Asian, and Hispanic cultures practice rituals for protection or cleansing, such as those used to dispel evil spirits, ghosts, or negative thought forms or to invoke good or holy spirits, and rituals to please or appease supernatural forces (Bibb & Casimir, 1996; Brown, 1989; Gerber et al., 1999; Nader, Dubrow, & Stamm, 1999; Yee, 2003). For Southeast Asian cultures, it may be important to remove from the environment lingering dead souls before youths and their families will feel safe (Gerber et al., 1999; Nader, 2003, 2004). Native American and Southeast Asian cultures use specific methods to cleanse the troubled spirit or restore the soul after trauma (Box 2). Some of these methods have been adapted for use with traumatized American adults such as soldiers (Wilson, 2006). African and Middle Eastern children usually do not participate in funerals (Nader et al. 1999). Liberian African youths, for example, are not allowed to view dead bodies. In some cultures, such as some US cultures, under normal circumstances, funeral viewing of the body, if it is reasonably in tact, is considered important to the grieving processing.

Preparing the Setting

Safety and comfort are important to youths of any culture when being questioned about their traumatic reactions. Adjusting the setting for

children raised in the traditions of a culture not that of the therapist/assessor may enhance rapport. Ramirez et al. (2005) have pointed out the importance of providing culturally familiar materials. This may include niches in the office with particular cultural décor and culturally appropriate toys. The use of European American play terms, toys, and environments may delay or inhibit the participation and communication of non-Euro-American youths (Kranz et al., 2005). Such environments may promote an attempt to conform to majority cultural expectations.

Introducing the Assessment

Introducing the assessment may make participation in assessment more desirable. In order to enhance the possibility of complete and truthful answers when conducting research assessments, Kessler, Mroczek, and Belli (1999) suggest using instructions that are worded to motivate. This may include presenting the altruistic purposes of the assessment such as to help those exposed to the current event or to such experiences in the future. In cultures where admitting symptoms may cause stigmatization, the introduction may need to counteract such stigma. In addition, some cultures discourage the expression of specific emotions such as fear in males, anger, or the desire for revenge (Nader, in press). Children from cultures in which there is stigma for expressing distress or mental health problems may need preliminary permission to express distress. This may include, for example, mentioning that even the most respected people of that culture (the strongest men, the elders, presidents) may feel upset, sad, or angry after experiences like these. For such cultures, it may be important to conduct individual interviews, when possible, rather than relying on completion in a group. Some evidence suggests that youths' completion of scales in a group setting elicits more socially desirable responses (Nader, 2004; Piers & Herzberg, 2002).

ADAPTING MEASURES

The Culture of Youths

Researchers have adapted measures for specific types of traumas such as abuse or car accidents, particular populations such as international adoptees and refugees, and varied cultures (Nader, in press). Cultural translations and using a translator are discussed in greater detail in other chapters. A few additional issues are important to remember when cultural adaptations are made for youth populations. In a sense, the levels of childhood represent multiple cultures apart from adulthood. The study of childhood trauma began with the adaptation of adult assessment measures

for children and adolescents (Nader, 1997, 2004). This required attention to language, mindset, characteristic expressions of distress, particular vulnerabilities, and other aspects of age. Effective assessment and treatment of youths necessitates cognizance of age as well as culture-related issues and personal qualities. Translating measures or using a translator to question an adult requires understanding the ways in which specific emotional states, behaviors, and other symptoms are described and viewed within the culture. Translating and adapting, for a culture's youths, requires understanding the differences in the ways these issues are presented, described, and permitted for youths of different ages in the culture. It necessitates understanding the impact of both the questioning and the answers on the youths. As described earlier, admitting to mental health problems may result in stigma or in punishment in some cultures.

Testing Translations

A system of translation and back-translation is used when adapting measures for different cultures (Canino & Bravo, 1999; Karno, Burnam, Escobar, Hough, & Eaton, 1983). Back translations involve having someone other than the original translators translate the culturally adapted measure back into the scale's original language to see if translated items still measure the intended symptom or trait. Using adult translators and back-translators without an awareness and understanding of how youths will interpret the translated wording is problematic. Most youths may not understand the more sophisticated or adult-appropriate emotional concepts that may be understood by precocious or older youths and adults. Using more intellectually sophisticated youths to test wording may result in measures that are not appropriate for the general population of youths. When adapting an adult measure of grief reactions for youths, the children of college professors with better than average vocabularies understood the word 'yearn' as used in the scale. Other 8-year olds either did not know what it meant or thought it meant something unmentionable (Bret whispered, "You know. When you go number 1").

Assessing Treatment Methods

Assessments of the success of treatments should include whether the methods have been culturally adapted. Failure to honor cultural traditions may completely undermine an otherwise effective method or may prohibit the needed cooperation of parents (Fadiman, 1997). In interventions with youths that include storytelling or interpretation, understanding a culture's myths, folklore, favorite stories, and worldview is important. When treatments include toys, some researchers and clinicians recommend culturally appropriate toys (Ramirez et al., 2005). Some play

therapy assessment and treatment methods are nondirective (Axline, 1947). In cultures such as traditional Mexican-American families, however, youths are not accustomed to taking the lead when an adult is present (Ramirez et al., 2005).

Variations in the application of methods are essential to their assessment. Like other treatment methods, rituals for a specific problem may be applied differently by different healers, holy persons, or shamans. Moreover, rituals may be altered for specific groups. For example, soul loss indicates the loss of soul or soul parts (fragmentation of self) because of an action or an experience such as trauma or addiction (Eshowsky, 2005; Fadiman, 1997). Such loss is believed by some Southeast Asian cultures to be at the root of illness and some psychological symptoms. Fadiman describes the use, among the Southeast Asian Hmong, of *ua neeb kho*, a shamanic ritual, which includes ritual animal sacrifice to barter for the return of an ill or traumatized person's soul (Box 2). Eshowsky has used drumming, rhythmic chants, and dancing a conflict or story with Southeast Asian and African-American gang members in order to heal soul loss (Box 2).

Regression and Reversion

Following traumatic events, regression and reversion are common (Nader, in press; Ramirez et al., 2005). Even well-acculturated youths may revert to an original language or move between two languages and may rely upon traditional beliefs and practices. A switch into an original language may reflect deep emotions or comfort and competence in the language (Ramirez et al., 2005; Westermeyer, 1990). An original language may revive past experiences and permit access to affect-laden material (Ramirez et al., 2005). Like adults, youths may adhere more strictly to religious beliefs and practices following traumas. Youths may again have fears related to childhood tales and youthful expectations. A 16-year-old immigrant from a South American war zone admitted only in private that he again had fears of scary creatures from the tales of his youth. The commonality of regression and reversion underscore the need to understand a youth's inherited traditions.

INTERPRETATION OF FINDINGS: ASSOCIATED VARIABLES

Variables that have served to mediate or moderate traumatic reactions may differ among cultures (Lindley & Walker, 1993; Nader, in press). A study of adults exposed to similar traumas (war, conflict, mass violence) in four different nations (Algeria, Cambodia, Ethiopia; Gaza; de

Jong et al., 2001) revealed that, of ten main types of risk factors, the only risk factor shared among the four countries was conflict-related trauma after age 12. Risk and resilience factors, such as trauma history, specific personality traits, attachment status, locus of control, and self-esteem, have been included among the variables that influence youths' traumatic stress reactions and among variables that differ among cultures (Nader, in press; Wilson, 2006). Self-view may influence posttrauma outcomes and may be affected by trauma. In the US, high self-esteem may serve as a protective factor; trauma may injure self-esteem. For American youths, low levels of internal locus of control, strong belief in chance, and low self-esteem in adolescents have been linked to maladaptive coping styles, depression, pessimism, anxiety, poor health habits, substance abuse, less involvement in school activities, and a high degree of societal estrangement (Haine, Ayers, Sandler, Wolchik, & Weyer, 2003; Nowicki & Strickland, 1973). Parenting practices, valued traits, methods of describing and viewing the self, and other variables differ among cultures (Francis, 1997; Nader, 2006, in press). Discussions of cultural differences in personality traits and self-concept presented earlier and *locus of control* and *social support* presented here demonstrate the importance of age and cultural differences to accurate assessment and analysis.

Locus of Control and Culture

Research suggests an association between maladaptive control-related beliefs and some of the symptoms and disorders associated with trauma (Hammen & Rudolph, 2003; Nader, in press). Beliefs may affect traumatic reactions. Traumatic experience may affect control beliefs. Environmental stress, including traumatic stress can reduce a sense of control (Deardorff, Gonzalez, & Sandler, 2003). Assessments of what one could or could not have done related to a traumatic experience may become a part of reactions and needs in treatment. Helplessness (perceived lack of control) and guilt (perceived control over negative outcomes) have been associated with increased symptoms.

Defining Control-Related Beliefs

Findings about control beliefs have varied to some extent across studies, perhaps in part, because control beliefs have been defined in a number of ways (Hawley & Little, 2002; Nader, in press). Most studies define high levels of internal locus of control as youths' perceptions that their own actions or attributes bring about their successes and failures (Bolger & Patterson, 2003). Some studies point out the benefits of accurate assessments of internal versus external control over events and outcomes (Ozolins and Stenstrom, 2003; Wyman, 2003) (see also, *positivity bias* above). Some

researchers distinguish between primary and secondary control beliefs (Nader, in press). Primary control beliefs are beliefs about one's ability to change a situation (Deardorff et al., 2003). Secondary control beliefs suggest the ability to adapt to a situation. For youths who live in areas with higher levels of stress or who are a part of certain cultural groups, primary control beliefs may not prove adaptive (Deardorff et al., 2003; Nader, in press). Primary control beliefs may not be consistent with the family centered, collectivistic, or religious beliefs emphasized in some non-European American cultures (Freeberg & Stein, 1996). Although one study of 4–6th grade children in nine inner-city schools demonstrated that primary control beliefs differentiate stress-affected and stress-resilient youths (Cowen et al., 1992), a later analysis (Magnus, Cowen, Wyman, Fagen, & Work, 1999) showed that these findings were not true for the African-American youths in the same sample.

Self-View and Social Support

A neurobiological prime directive for humans is to promote individual survival and the perpetuation of the species (Perry, 1999). For most of human history, humans evolved with specific capabilities as a part of group cultures that lived together in extended families, tribes, or clans (Perry, 2006). The survival of group members depended upon their cooperative efforts. At a basic and primitive level, a child's survival depends upon his or her value to others – to his or her attachment figures and to the collective. In collectivistic cultures one's value to the collective is highly regarded. Even in independent cultures, where physical survival is possible for a lone individual, the ease of functioning and access to resources is enhanced by one's increased value to others.

Perceived value to others affects self-perception and social and emotional well-being. Experiences that devalue an individual, such as traumas, can be experienced as threats to survival as well as to value. As mentioned earlier, higher levels of social support are associated with lower levels of trauma (Boehlein, 2001; La Greca et al., 1996; Rabalais et al., 2002; de Silva, 1999; Westermeyer & Ueker, 1997).

For many variables including social support, the transactional nature of variables complicates findings. For example, Zevalkink et al. (1999) found that Sudanese-Indonesian mothers living in extended family situations provided less support for their offspring. This low quality of support was associated with disorganized attachments. Disorganized attachments in infancy have been associated with aspects of child psychopathology, with unusual levels of aggression, with dissociative-like behaviors, and with increased vulnerability to PTSD (Hesse et al., 2003; Liotti, 2004). Zevalkink et al. suggest that, like Pakistani mothers living in extended family groups, Sudanese-Indonesian mothers in such situations

may be at greater risk of depression and anxiety that in turn interferes with supportive parenting.

Some evidence demonstrates that social support significantly affects view of self. In a study of children from China and from the former Yugoslavian Republics who immigrated to Australia (Sonderregger et al., 2004), Chinese primary school children were more likely to demonstrate poor self-concept and low self-esteem if they reported minimal social support and minimal identification with their cultural heritage. Ethnic nationalism and social support predicted self-concept. Self-concept predicted self-esteem, which in turn predicted trauma, anxiety, and hopelessness levels. The results were similar for Yugoslavian primary school children. For them, however, ethnic nationalism was not significantly associated with self-concept. Goodness of fit amidst a new culture may be of significance. Former Yugoslavian youths reported higher self-concepts than Chinese youths, perhaps, because, like Australians, their sociocultural norms were predominantly European (Sonderregger et al., 2004).

The impact of social support may be more complex for adolescents. For Chinese adolescents, Sonderregger et al. (2004) found that social support was not associated with self-concept, self-esteem, or distress. Contrary to findings regarding social support in other studies, for Yugoslavian adolescent youths, social support was inversely related to self-concept and had a negative influence on trauma and anxiety. Sonderegger et al. suggest that this unexpected finding may be a result of former Yugoslavian parents' continued war-related distress and its effects on their support giving. It is also possible that, for adolescents seeking to belong in a new society, the support of peers is more important than the support of parents. Moreover, the humiliating experience of war may diminish perceptions of the value of parents' opinions. An adolescent Bosnian boy fled with his family to a nearby country that was no longer in the midst of war. His entire culture had been denigrated and humiliated by the Serbs. His family had suffered incarcerations, name-calling, spitting, and beatings during the war. He and his family now lived in a refugee camp. His father was not allowed to work in their host country. Resources were scarce. Their new circumstances added to their difficulties. The boy felt that his parents were powerless. Although he appreciated their encouragement, he did not find it comforting.

CONCLUSIONS

Adaptations in methods and measures may be necessary for multicultural groups within a country, for immigrant groups, or in nations outside of the assessor's own nation. Cultural adaptation of assessment measures and techniques differs for youths from adaptations for adults. In addition

to cultural differences in language, description and reporting styles, traits, relationship style, and the expressions of distress, youths present age related variations in both lingual and behavioral expressions. Recognition of differences in acculturation, confounding factors, and additional stresses is also important to the assessment of trauma in multicultural groups of youths.

In addition to national cultural heritage, youths may belong to religious, experiential, peer, and other cultures. For youths attempting to belong in a foreign culture – especially adolescents, the support of mainstream and peer cultures may be more than or equally important to that of family. Youth groups, families, and environments must be prepared for assessment in culturally appropriate ways. Preparation and adaptation of methods may decrease some symptoms and help to protect youths from cultural sanctions following their admission of symptoms and experiences.

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Chapter 9

The Peritraumatic Dissociative Experiences Questionnaire: An International Perspective

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EMPIRICAL STUDIES OF TRAUMA AND DISSOCIATION

After receding into relative obscurity for much of the twentieth century, there has been a vigorous renewal of interest in the role of dissociation in the understanding of human responses to catastrophic events. The theoretical contributions and clinical observations of Janet, which had been largely eclipsed by developments within modern ego psychology, self-psychology, and more recently in neurobiology, have enjoyed a resurgence of interest. Putnam (1989), and van der Kolk and van der Hart (1989a, 1989b) have provided contemporary reinterpretations of the contributions of Janet to the understanding of traumatic stress and dissociation.

Paralleling the resurgence of interest in theoretical studies of trauma and dissociation, there has been a proliferation of research studies addressing the relationship of trauma and general dissociative tendencies. Hilgard (1970) observed that students rated as highly hypnotizable reported more frequent histories of childhood punishment than their low-hypnotizability peers. Chu and Dill (1990) reported that psychiatric patients with a history of childhood abuse reported higher levels of dissociative symptoms than those without histories of childhood abuse. Carlson and Rosser-Hogan (1991), in a study of Cambodian refugees, reported a strong relationship between the amount of trauma the refugees

had experienced and the severity of both traumatic stress symptoms and general dissociative tendencies.

Stutman and Bliss (1985) reported in a nonpatient population that veterans who had high levels of posttraumatic stress disorder (PTSD) symptoms were more hypnotizable than their counterpart veterans who were low in PTSD symptoms. Spiegel, Hunt, and Dondershine (1988) compared the hypnotizability of Vietnam combat veterans with PTSD to patients with generalized anxiety disorders, affective disorders, and schizophrenia, as well as to a normal comparison group. The group with PTSD was found to have higher hypnotizability scores than both the psychopathological and normal controls. Hypnotizability scores in childhood have been shown to have stable trait-like characteristics, raising the possibility that traumatized individuals with higher levels of pretrauma-exposure hypnotizability may be more prone to developing PTSD. It is also possible that chronic PTSD results in changes in the level of hypnotizability. Prospective studies are required to disentangle these possibilities.

A profound relationship has been reported for childhood trauma and dissociative identity disorder (DID). In discussing the causes of DID, Kluft (1993) proposes a four-factor theory: (1) inherent capacity to dissociate, (2) traumatic life experiences that overwhelm the adaptational capacities of the child to utilize nondissociative defenses, (3) the role of the environment in shaping the development of fragmented aspects of personality development, and (4) an inadequate availability of restorative experiences by protective others. Kluft proposes that the dissociative processes that underlie multiple personality development continue to serve a defensive function for individuals who have neither the external or internal resources to cope with traumatic experiences. Coons and Milstein (1986) reported that 85% of a series of 20 DID patients had documented allegations of childhood abuse. Similar observations have been made by Frischolz (1985) and Putnam, Guroff, Silberman, Barban, and Post (1986). The nature of the childhood trauma in many of these cases is notable for its early age of onset, severity, multiple elements of physical and sexual abuse, threats to life, bizarre elements, and profound rupture of the sense of safety and trust when the perpetrator is a primary caretaker or another close relation.

There has been a long-standing debate about whether dissociation at the time of a traumatic event, including depersonalization and derealization, represents a defensive strategy to protect the trauma victim from overwhelming threat or alternatively a threat-driven failure of defense in which unmanageable levels of terror, horror, and helplessness interfere with coping capacities, increase fear conditioning, and result in greater memory consolidation. New data from our studies of police officers evaluated before and after the World Trade Center attacks (Marmar et al., 2006) reveal that peritraumatic dissociation is strongly positively associated with peritraumatic panic, and that both pretraumatic dissociation

and peritraumatic panic independently contribute to the explanation of PTSD symptoms 18 months after the attacks. These findings are consistent with those of Gershuny and Thayer (1999) and Sterlini and Bryant (2002) that anxious arousal associated with fear of death and fear of loss of control are central to triggering dissociative reactions, and at variance with a long-held view that peritraumatic dissociation reduces terror, horror, and helplessness during life threat exposure. Further, Koopman et al. (1994) found that peritraumatic dissociative symptoms to be associated with greater peritraumatic anxiety and also predicted the development of PTSD.

INTRODUCTION TO THE PDEQ: DISSOCIATIVE REACTIONS AT THE TIME OF TRAUMA EXPOSURE

One fundamental aspect of the dissociative response to trauma concerns immediate dissociation at *the time the traumatic event is unfolding*. Trauma victims, not uncommonly, will report alterations in the experience of self, time, place, and meaning, which confer a sense of unreality to the event as it is occurring. Dissociation during trauma may take the form of altered time sense, with time being experienced as slowing down or rapidly accelerated; profound feelings of unreality that the event is occurring, as though the event were a dream, a movie or a play; experiences of depersonalization; out-of-body experiences; bewilderment, confusion, and disorientation; altered pain perception; altered body image or feelings of disconnection from one's body; tunnel vision; and other experiences reflecting immediate dissociative responses to trauma. We have designated these acute dissociative responses to trauma as peritraumatic dissociation (Marmar, Metzler, & Otte, 2004; Marmar, Weiss, & Metzler, 1998; Marmar et al., 1999; Marmar, Weiss, Metzler, Ronfeldt, & Foreman, 1996; Marmar, Weiss, Schlenger, et al., 1994; Tichenor, Marmar, Weiss, Metzler, & Ronfeldt, 1997; Weiss, Marmar, Metzler, & Ronfeldt, 1995).

Although actual clinical reports of peritraumatic dissociation date back nearly a century, systematic investigation has occurred more recently. Spiegel (1993) reviewed studies of detachment experiences at the time of trauma, one feature of peritraumatic dissociation. Noyes and Kletti (1977) surveyed 101 survivors of automobile accidents and physical assault. They reported feelings of unreality and altered experience of the passage of time during the accident in 72% of participants, automatic behaviors in 57%, sense of detachment in 52%, depersonalization in 56%, sense of detachment from one's body in 34%, and derealization in 30%. Hillman (1981) reported on the experiences of 14 correctional officers held hostage during a violent prison riot. The hostage victims described employing dissociative perceptual alterations to cope with the terror

and pain of their experience, including time distortion and psychogenic anesthesia to protect against overwhelming pain. Wilkinson (1983) investigated the psychological responses of survivors of the Hyatt Regency Hotel skywalk collapse in which 114 people died and 200 were injured. Survivors commonly reported depersonalization and derealization experiences at the time of the structural collapse. Siegel (1984) studied 31 kidnapping and terrorist hostages, and reported that during the hostage experience, 25.8% experience alterations in body imagery and sensations, depersonalization, and disorientation, and 12.9% experienced out-of-body experiences.

Holen (1993), in a long-term prospective study of survivors of a North Sea oil rig disaster, found that the level of reported dissociation during the trauma was a predictor of subsequent PTSD. Cardena and Spiegel (1993) reported on the responses of 100 graduate students from two different institutions in the Bay Area following the 1989 Loma Prieta earthquake. At the time the earthquake was occurring, the participants reported experiencing derealization and depersonalization; time distortion; and alterations in cognition, memory, and somatic sensations. These results suggest that among nonclinical populations, exposure to catastrophic stress may trigger *transient dissociative phenomena*. Koopman, Classen, and Spiegel (1994) investigated predictors of posttraumatic stress symptoms among survivors of the 1991 Oakland Hills fire storm. In a study of 187 participants, dissociative symptoms at the time the firestorm was occurring more strongly predicted subsequent posttraumatic symptoms than did anxiety and the subjective experience of loss of personal autonomy.

These independently replicated clinical and research findings point toward an important vulnerability role for *peritraumatic dissociation* as a risk factor for subsequent PTSD. These findings were at first surprising, given the prevailing clinical belief that dissociative responses to trauma at the time of occurrence of life-threatening or otherwise terrifying events conferred a sense of distance and safety to the victim. For example, an adult survivor of childhood incest reported that during the experience of being sexually abused, she would leave her body and view the assault from above, with a feeling of detachment and compassion for the helpless little child who was being sexually assaulted. Although out-of-body and other peritraumatic dissociative responses at the time of traumatic stress occurrence may defend against even more catastrophic states of helplessness, horror, and terror, dissociation at the time of trauma is one of the most important risk factors for the subsequent development of chronic PTSD. Possible causal relationships between peritraumatic dissociation and the heightened risk for PTSD are discussed in the section of the chapter addressing mechanisms underlying peritraumatic dissociation.

THE PERITRAUMATIC DISSOCIATIVE EXPERIENCES QUESTIONNAIRE: A MEASURE OF IMMEDIATE DISSOCIATIVE RESPONSES TO TRAUMATIC EVENTS

On the basis of the important clinical and early research observations on peritraumatic dissociation as a risk factor for chronic PTSD, we embarked on a series of studies to develop a reliable and valid measure of peritraumatic dissociation. We designate this measure the peritraumatic dissociative experiences questionnaire (PDEQ; Marmar, Weiss, & Metzler, 1997). The first version of the PDEQ was a rater version, consisting of nine items addressing dissociative experiences *at the time the traumatic event was occurring*: (1) moments of losing track or blanking out; (2) finding the self-acting on "automatic pilot"; (3) a sense of time changing during the event; (4) the event seeming unreal, as in a dream or play; (5) feeling as if floating above the scene; (6) feeling disconnected from body or body distortion; (7) confusion as to what was happening to the self and others; (8) not being aware of things that happened during the event that normally would have been noticed; and (9) not feeling pain associated with physical injury.

In a first study with the PDEQ, the relationship of peritraumatic dissociation and posttraumatic stress was investigated in male Vietnam theater veterans (Marmar, Weiss, Schlenger, et al., 1994). Two hundred fifty-one male Vietnam theater veterans from the Clinical Examination Component of the National Vietnam Veterans Readjustment Study were examined to determine the relationship of war-zone stress exposure, retrospective reports of dissociation during the most disturbing combat trauma events, and general dissociative tendencies with PTSD case determination. Peritraumatic dissociation was assessed with a rater version of the PDEQ. Total score on the PDEQ was strongly associated with level of posttraumatic stress symptoms, level of stress exposure, and general dissociative tendencies.

Total PDEQ score was weakly associated with general psychopathology as assessed by the 10 clinical scales of the MMPI-2. Logistical regression analyses supported the incremental value of dissociation during trauma, over and above the contributions of level of war-zone stress exposure and general dissociative tendencies, in accounting for PTSD case determination. These results provided initial support for the reliability and validity of the rater version of the PDEQ, and for a trauma dissociation linkage hypothesis. Retrospective reports of greater dissociation during traumatic stress exposure were associated with greater likelihood of meeting criteria for current PTSD.

In a first replication of this finding, the relationship of peritraumatic dissociation with symptomatic distress was determined in emergency services personnel exposed to traumatic critical incidents (Marmar,

Weiss, Metzler, Ronfeldt, et al., 1996; Weiss, et al., 1995). A total of 367 emergency services personnel, including police, firefighters, EMT/paramedics, and California Department of Transportation workers, who had responded to either a large-scale mass disaster operation or smaller critical incident were investigated. One hundred fifty-four of the EMS workers had been involved in the 1989 Interstate-880 Nimitz Freeway collapse that occurred during the Loma Prieta Bay Area Earthquake. A variety of predictors of current symptomatic distress were measured, including level of critical-incident exposure, social support, psychological traits, locus of control, general dissociative tendencies, and peritraumatic dissociation. Findings demonstrated that level of current symptomatic distress were positively associated with degree of exposure to the critical incident, and negatively associated with level of adjustment. After controlling for both exposure and adjustment, symptomatic distress could still for the most part be predicted by social support, experience on the job, locus of control, general dissociative tendencies, and dissociative experiences at the time of critical incident. The two dissociative variables, total score on the dissociative experience scale (DES; Bernstein and Putnam, 1986) and total score on the PDEQ, were strongly predictive of symptomatic response, even after controlling for exposure, adjustment, and the three other predictors.

Initial assessments in this study were conducted approximately 2 years after the Loma Prieta Earthquake. At follow-up, on average 3.5 years after the earthquake, we examined the longitudinal course and predictors of continuing distress in 332 emergency services personnel (Marmar et al., 1999). We found that despite modest improvement, rescue workers were at risk for chronic symptomatic distress. Peritraumatic dissociation accounted for significant increments in current PTSD symptoms, over and above exposure, adjustment, years of service, locus of control, social support, and general dissociative tendencies. Greater exposure and greater PDEQ scores were the best predictors of continuing distress.

In an extension and replication of our findings with male Vietnam Veterans, we studied the relationship of peritraumatic dissociation and posttraumatic stress in female Vietnam theater veterans (Tichenor et al., 1997). Part of the impetus for this study was to assess the relationship of peritraumatic dissociation with posttraumatic stress response in a female sample, as the two earlier studies focused primarily on male participants. Seventy-seven female Vietnam theater veterans were investigated using the rater version of the PDEQ. Total score on the PDEQ was found to be associated strongly with posttraumatic stress symptomatology, as measured by the Impact of Event Scale, and also positively associated with level of stress exposure and general dissociative tendencies, the latter measured by the DES. Scores on the PDEQ were unassociated with

general psychiatric symptomatology, as assessed by the 10 clinical scales of the MMPI-2. As in the two earlier studies, PDEQ scores were predictive of posttraumatic stress symptoms above and beyond the level of stress exposure and general dissociative tendencies. The findings provide further support for the reliability and validity of the PDEQ, and provide additional support for a linkage between trauma and dissociation, building upon our earlier findings with male Vietnam War veterans and emergency services personnel.

We have also investigated the relationship of peritraumatic dissociation with current posttraumatic stress response in participants exposed to the 1994 Los Angeles area Northridge earthquake (Marmar, Weiss, Metzler, & Ronfeldt, 1994). The sample comprised 60 adult men and women who had lived close to the epicenter of the earthquake and were working for a large private insurance company. A self-report version of the PDEQ was used to assess dissociation at the time of the earthquake occurrence. As in the earlier studies with male and female veterans and emergency services personnel, reports of dissociation at the time of the traumatic event were predictive of current posttraumatic stress response symptoms, after controlling for the level of exposure.

We next examined the relationship of peritraumatic dissociation and posttraumatic distress in cross-sectional survey of police officers serving in the New York, Oakland, and San Jose Police Departments (Brunet et al., 2001). The PDEQ was revised for this study, deleting item 9 "not feeling pain associated with physical injury" because of low frequency of occurrence and concerns that analgesia at the time of injury may be mediated by neurohormonal rather than dissociative response. On the basis of clinical reports from participants in our earlier studies, we added two new items, (9) "feeling confused, that is having difficulty making sense of what was happening" and (10) "feeling disoriented, that is being uncertain about where you were or what time it was." In a sample of 702 police officers, internal consistency for the revised 10-item version was high (coefficient alpha = 0.85). Univariate analyses revealed that greater PDEQ scores were associated with greater cumulative PTSD symptoms to the self-identified worst critical incident occurring in the line of duty ($r = 0.43$; $p < 0.001$).

This report focuses on the development of the peritraumatic distress inventory (PDI), a companion measure to the PDEQ. The PDI assesses level of terror, horror, helplessness, grief, anger, and panic at the time of critical incident occurrence. Of interest, PDEQ and PDI scores were strongly positively associated ($r = 0.59$; $p < 0.001$). This finding supports the view that greater peritraumatic dissociation does not protect against peritraumatic emotional distress, but rather is associated with greater dysphoric arousal at the time of exposure. While strongly positively correlated in this sample of urban police officers, both PDEQ and PDI

independently contributed to the prediction of current PTSD symptom levels after controlling for the effects of the other.

Across these studies, the PDEQ has been demonstrated to be internally consistent, strongly associated with measures of traumatic stress response, strongly associated with a measure of general dissociative tendencies, strongly associated with level of stress exposure, and in our studies of male and female veterans unassociated with measures of general psychopathology. These studies support the reliability and convergent, discriminant, and predictive validity of the PDEQ.

INDEPENDENT STUDIES OF THE ENGLISH LANGUAGE VERSION OF THE PDEQ

Strengthening these findings are multiple independent studies utilizing the PDEQ by investigators in other PTSD research programs. Bremner et al. (1992), utilizing selective items from the PDEQ as part of a measure of peritraumatic dissociation, reported a strong relationship of peritraumatic dissociation with posttraumatic stress response in an independent sample of Vietnam War veterans. In the first prospective study with the PDEQ, Shalev, Peri, Schreiber, and Caneti (1996) examined the relationship of PDEQ ratings gathered in the first week following trauma exposure with posttraumatic stress symptomatology at 5 months. In this study of acute physical trauma victims admitted to an Israeli teaching hospital emergency room, PDEQ ratings at first week predicted stress symptomatology at 5 months, over and above exposure levels, social supports, and Impact of Event Scale scores in the first week. This study is noteworthy in that it is the first finding with the PDEQ in which ratings were gathered prospectively. Retrospective ratings of peritraumatic dissociation months, years, or decades after the occurrence of traumatic events are subject to the bias that greater current distress may result in greater recollection of dissociation at the time of traumatic stress occurrence. Shalev and colleagues' findings are, therefore, important in supporting the earlier findings utilizing retrospective ratings of peritraumatic dissociation.

Ursano et al. (1999) examined the relationship between peritraumatic dissociation and PTSD in motor vehicle accident victims. They found that the most common peritraumatic dissociative symptom was time distortion, present in 56.6% of the 122 participants. Subjects with peritraumatic dissociation were 4.12 times more likely to have acute PTSD and 4.86 times more likely to develop chronic PTSD. The relative risk was independent of risk associated with the presence of PTSD before the accident. In a related publication from the same study, Fullerton et al. (2000) reported that younger subjects were more likely to experience peritraumatic dissociation, as were those with an injured passenger. Being single

and Caucasian was also associated with greater peritraumatic dissociation. After adjusting for age and passenger injury, prior major depression was related to greater peritraumatic dissociation. Those who were younger and reported a history of major depression had the greatest number of peritraumatic dissociate experiences.

In a more detailed analysis of gender differences in PTSD from the same data set of 122 participants following motor vehicle accidents, Fullerton et al. (2001) reported that while the risk for acute PTSD was 4.64 times greater for women, men and women had similar frequencies of peritraumatic dissociation. In multiple logistic regression analysis, gender was no longer a significant predictor of PTSD after adjusting for peritraumatic dissociation. However, there was a highly significant gender by peritraumatic dissociation interaction. Women with peritraumatic dissociation were 7.55 times more likely than men with peritraumatic dissociation to develop PTSD. Of those with peritraumatic dissociation, 59.6% of women but only 16.3% of men developed PTSD. Given that women are twice as likely as men to develop PTSD during their lifetime (Kessler et al., 1995), the importance of peritraumatic dissociation as a mediator of gender as a risk factor is highlighted by this finding.

Bernat, Ronfeldt, Calhoun, and Arias (1998) studied 937 college students who identified lifetime experiences of traumatic events, and in response to their most stressful event completed measures of exposure, PTSD symptoms, and peritraumatic reactions. After controlling for vulnerability factors and exposure characteristics, both peritraumatic dissociation and peritraumatic emotional and physical reactions were strongly associated with PTSD symptom levels. Of interest PDEQ levels were strongly positively associated with both peritraumatic physical and emotional reactivity, consistent with the findings of Brunet and colleagues showing that greater emotional distress and physical manifestations of anxiety are strongly associated with greater peritraumatic dissociation.

Birmes et al. (2001) studied 48 French crime victims within 24 h of traumatic exposure. The participants were followed to assess acute stress responses 2 weeks after the assault and posttraumatic stress at 5 weeks. Higher levels of peritraumatic dissociation and acute stress following violent assault were found to be risk factors for early PTSD.

In one of the first truly prospective longitudinal studies of risk factors for PTSD, Hodgins, Creamer, and Bell (2001) studied 233 junior police officers in Australia. Participants were assessed using a self-report methodology during academy training and again 12 months later. At 1-year follow-up, general psychological health problems were predicted by personality style, gender, and trait dissociation. In contrast, PTSD symptom levels at follow-up were more strongly predicted by severity of incident exposure and by PDEQ scores. The strongest predictor of posttraumatic stress symptoms was peritraumatic dissociation.

In a second prospective longitudinal study, Engelhard et al. (2003) evaluated 1,370 Dutch women volunteers in early pregnancy. Subsequently, 126 experienced pregnancy loss and completed self-report measures 1 and 4 months later. Peritraumatic dissociation at the time of loss was predicted by baseline expectations of lower control over emotions in the event of pregnancy loss, general dissociative tendencies, and lower educational attainment. Peritraumatic dissociation was not predicted by neuroticism, absorption, and prior stressful life events. Greater peritraumatic dissociation predicted greater acute PTSD symptom levels. This relationship was mediated by self-reported memory fragmentation and thought suppression of pregnancy. Peritraumatic dissociation was also predictive of PTSD symptoms at 4 months after pregnancy loss, and this association was mediated by level of acute PTSD symptoms.

Gershuny, Cloitre, and Otto (2003) studied 146 nontreatment-seeking college women who personally experienced one or more traumatic events. Zero-order correlations revealed that greater peritraumatic dissociation was associated with greater current PTSD symptom severity, greater frequency of lifetime traumatic events, greater nonspecific fear, helplessness and horror at the time of exposure, greater fear of death of the time of exposure, and greater fear of losing control of the time of exposure. Hierarchal multiple regression analyses indicated that the relationship between peritraumatic dissociation and posttraumatic stress was mediated by fear of death and fear of loss of control at the time of exposure. The authors note that while the data suggest that dissociation drives panic and panic drives the subsequent risk for PTSD, it is uncertain whether fears about death and losing control are a cause or consequence of peritraumatic dissociation. Their findings once again highlight the hand and glove relationship between peritraumatic dissociation and peritraumatic terror, which are likely to act alone and in interaction to interfere with adaptive emotional and biological processing of traumatic events.

Although most independent studies, including those in Europe and Australia, have been confirmatory, not all have supported the prediction that peritraumatic dissociation accounts for current PTSD symptom levels. Mellman et al. (2001) studied 50 patients admitted to a trauma center and found that early symptoms of heightened arousal and disengagement coping, but not peritraumatic dissociation or a diagnosis of acute stress disorder, were associated with follow-up PTSD severity. Further research is indicated to determine whether specific traumatized populations, including those with injuries severe enough to warrant admission to a physical trauma center, where they frequently receive narcotic analgesics, may alter recollections or experiences of peritraumatic dissociation.

Marshall and Shell (2002) reported findings from a cross-lagged panel analysis of a sample of young adult survivors of community

violence. They utilized a modified 7-item version of the PDEQ, noting high correlations between the modified version and the original PDEQ. Assessments of peritraumatic dissociation in PTSD symptom severity were determined at baseline within days of the assault, at 3-month follow-up and at 12-month follow-up. Covariance structure modeling, using the EQS software program, was the primary data analytic method. In both the initial and final models, peritraumatic dissociation was strongly associated with PTSD symptom severity within each time point, replicating earlier results. Peritraumatic dissociation at baseline strongly predicted initial PTSD symptom levels at baseline, after controlling for injury severity and neuroticism.

Of interest, in this study, the prediction of follow-up PTSD symptom level from initial peritraumatic dissociation level was mediated by the level of initial PTSD symptom severity. The latter finding is broadly consistent with an emerging model, which is that peritraumatic dissociation is a marker of immediate unmanageable terrifying arousal, which in turn drives initial PTSD symptom responding because of memory over consolidation and increased fear conditioning. Initial PTSD symptom responding in turn determines long-term PTSD symptomatic status.

INTERNATIONAL STUDIES WITH THE PDEQ: DUTCH VERSION

Kleber and van der Hart (1998) published a Dutch language version of the PDEQ. The Dutch measure has been used in the study of peritraumatic dissociation and emotions as predictors of PTSD symptoms following childbirth (Olde et al., 2005). Utilizing a prospective, longitudinal design, 140 women were studied from the first week after delivery to 3 months postpartum. Both perinatal dissociative reactions and perinatal negative emotional reactions were predictive of PTSD symptoms at 3 months postpartum. The effects of perinatal dissociation were partially mediated by perinatal emotional reactions, consistent with our model of peritraumatic panic and related emotional distress driving peritraumatic dissociation.

INTERNATIONAL STUDIES WITH THE PDEQ: FRENCH VERSION

Birmes et al. (2005) published a validation study of the self-report version of the PDEQ in two samples of French-speaking individuals exposed to trauma. Ninety trauma victims presenting to a Montréal emergency department were administered the PDEQ several hours after traumatic exposure and completed trauma-related measures 2 weeks and 1 month

following trauma. Principal components factor analysis revealed a single factor solution. Convergent validity of the French version of the PDEQ was supported by correlations between the PDEQ and acute PTSD symptom measures. The French language version of the PDEQ showed satisfactory test–retest reliability and internal consistency.

Jehel et al. (2005) administered the French language version of the PDEQ in a sample of 127 French-speaking individuals assessed at their first psychiatric visit following a traumatic event. PDEQ ratings were positively associated with measures of peritraumatic distress as assessed by a companion measure, the French language version of the PDI. This study provides further support for the model of greater peritraumatic panic and related emotional distress being associated with greater levels of peritraumatic dissociation.

INTERNATIONAL STUDIES WITH THE PDEQ: GERMAN VERSION

Fuglsang et al. (2002) reported findings in a sample of 332 accident victims utilizing a German language version of the PDEQ. The PDEQ was used to assess acute stress disorder symptoms; 38% of the variance in acute stress disorder symptom levels was explained in a regression model including length of stay at an intensive care unit, prior psychiatric illness, sense of coherence, perceived death threat, appraisal of accident severity, preventability of accident by others, pain, and appraisal of coping ability concerning physical recovery. Further findings with the German language version of the PDEQ have been published in a related report by Schnyder and Moergeli (2002).

INTERNATIONAL STUDIES WITH THE PDEQ: ISRAELI VERSION

Shalev and colleagues utilized a Hebrew language version of the PDEQ in cross-sectional and longitudinal prospective designs. The Hebrew language version of the PDEQ administered 1 week after trauma predicted PTSD symptoms 1 month and 4 months in a sample of 239 trauma-exposed individuals recruited from a general hospital emergency department (Shalev et al., 1997). In a study of 211 trauma survivors recruited from a general hospital emergency department survivors with PTSD had higher heart rates at the emergency department and reported more intrusive symptoms, exaggerated startle, and peritraumatic dissociation than those with major depression (Shalev et al., 1998). In a third study, the relationship between PTSD symptoms

and cognitive functioning was evaluated within 10 days of traumatic exposure (Brandes et al., 2002). Survivors with higher levels of PTSD symptoms show ED impaired attention and immediate recall for figural information and lower IQ, but did not have higher levels of impairment in verbal recall and learning. The observed differences were not accounted for anxiety or peritraumatic dissociation, but for by depressive symptoms.

INTERNATIONAL STUDIES WITH THE PDEQ: JAPANESE VERSION

Hamanaka et al. (2006) reported on a Japanese language version of the PDEQ in a study of acute stress disorder and PTSD in severely injured motor vehicle accident victims. Predictive factors for PTSD included peritraumatic dissociation and additional acute stress disorder symptoms, persistent physical disability and physical injury severity. The Japanese language version of the PDEQ is currently being used in a multisite study of accident victims at Tokyo emergency departments.

INTERNATIONAL STUDIES WITH THE PDEQ: BRAZILIAN PORTUGUESE VERSION

Fiszman et al. (2005) present data supporting the cross-cultural adaptation of the PDEQ, self-report version to Brazilian Portuguese. Two experienced psychiatrists bilingual in English and Brazilian Portuguese translated the original questionnaire independently. The translated version was then back translated into English. In the next step, the back translations were assessed from a referential meaning perspective. Back translations were shown to have good relevance with respect to referential meaning compared to the original measure. The measure was next tested at a university clinic in Rio de Janeiro in a sample of 10 PTSD participants with age range from 21 to 50 years. At a final step, additional changes in the synthesis version were made in order to increase acceptability with the target sample.

INTERNATIONAL STUDIES WITH THE PDEQ: PALESTINIAN VERSION

Punamaki et al. (2005) studied the role of peritraumatic dissociation and gender in the association between trauma and mental health in a Palestinian community sample. An Arab language version of the eight

items revised PDEQ was used in the study. A random sample of 311 Palestinian women and 274 men, aged 16–60 years, from the Gaza Strip participated. Participants were asked about lifetime trauma and peritraumatic dissociation in relationship to their most severe traumatic experience. Women reported a lower level of lifetime trauma than men. Analysis of moderating effects revealed that greater peritraumatic dissociation was associated with greater symptoms of hostility in both men and women, and greater symptoms of depression in men.

INTERNATIONAL STUDIES WITH THE PDEQ: TURKISH VERSION

Geyran et al. (2005) conducted a study to determine the validity and reliability of the Turkish version of the PDEQ. A total of 104 participants who met the diagnosis of PTSD and 65 controls were assessed. PDEQ scores in the PTSD group were higher than those in the control groups. Total PDEQ scores were found to be correlated moderately with the total scores on the DIS-Q, a dissociation questionnaire. Cronbach's alpha for the Turkish version of the PDEQ is high, supporting a single dimension. The study supports the validity of the Turkish version of the PDEQ for the assessment of peritraumatic dissociation; the measure has high internal consistency, and is useful in differentiating earthquake related PTSD from other psychiatric diagnoses and normal subjects.

INTERNATIONAL STUDIES WITH THE PDEQ: SUMMARY AND NEXT STEPS

The PDEQ has been translated and successfully tested in multiple cultural and language contexts. Across studies, the measure has shown to be reliable and valid. Dissociation at the time of trauma is a strong predictor of subsequent PTSD symptoms in American, French Canadian, South American, Western European, Middle Eastern, and Asian samples. Cross-cultural studies also support the view that peritraumatic dissociation is positively associated with peritraumatic emotional distress, including importantly panic reactions at the time of traumatic exposure. In some studies, acute stress symptoms mediates the relationship between peritraumatic dissociation and PTSD symptoms. Additional studies are currently in progress with the Japanese language version of the measure; a Chinese version is being developed for use with accident and domestic violence victims in Shanghai and Beijing; adaptation is being developed for use in studying relationship of traumatic exposure to physical and sexual assault and community distraction in a sample of Darfur refugees in

Cairo; and studies are in progress on the use of the measure in Spanish-speaking populations.

Future studies will further explore the model that greater peritraumatic dissociation reflects greater psychobiological vulnerability to affect dysregulation at the time of life threat. Support for this model is provided by recent studies in neuroimaging, neurogenetics, and psychophysiology of PTSD. Lanius and colleagues have reported differential brain activation patterns in PTSD patients with prominent dissociative symptoms, including activation of the insula. Polymorphism in FKKB5 was associated with peritraumatic dissociation in medically injured children (Koenen et al., 2005). Greater peritraumatic dissociation in sexual assault victims was related to reduced psychophysiological responding to reminders of trauma (Griifin, Resick, & Mechanic 1997). These studies provided initial support for an emerging phenotype of trauma-related dissociation characterized by a greater difficultly in affect regulation at the time of life threat exposure leading to peritraumatic panic and related emotional distress and in turn to peritraumatic dissociation. The PDEQ holds promise as a brief self-report marker for this phenotype. Identification of this neurobiologic determined trauma-related dissociative phenotype may also explain why the PDEQ has been strongly predictive of PTSD in multiple cultural contacts.

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APPENDIX A

Peritraumatic Dissociative Experiences Questionnaire – Self-Report Version

Instructions: Please complete the items below by circling the choice that best describes your experiences and reactions *during the* _____ *and immediately afterward. If* an item does not apply to your experience, please circle "Not at all true."

1. I had moments of losing track of what was going on – I "blanked out" or "spaced out" or in some way felt that I was not part of what was going on.

1	2	3	4	5
Not at all true	Slightly true	Somewhat true	Very true	Extremely true

2. I found that I was on "automatic pilot" – I ended up doing things that I later realized I hadn't actively decided to do.

1	2	3	4	5
Not at all true	Slightly true	Somewhat true	Very true	Extremely true

3. My sense of time changed – things seemed to be happening in slow motion.

1	2	3	4	5
Not at all true	Slightly true	Somewhat true	Very true	Extremely true

4. What was happening seemed unreal to me, like I was in a dream or watching a movie or play.

1	2	3	4	5
Not at all true	Slightly true	Somewhat true	Very true	Extremely true

5. 1 felt as though I were a spectator watching what was happening to me, as if I were floating above the scene or observing it as an outsider.

1	2	3	4	5
Not at all true	Slightly true	Somewhat true	Very true	Extremely true

6. There were moments when my sense of my own body seemed distorted or changed. I felt disconnected from my own body, or that it was unusually large or small.

1	2	3	4	5
Not at all true	Slightly true	Somewhat true	Very true	Extremely true

7. I felt as though things that were actually happening to others were happening to me – like I was being trapped when I really wasn't.

1	2	3	4	5
Not at all true	Slightly true	Somewhat true	Very true	Extremely true

8. 1 was surprised to find out afterward that a lot of things had happened at the time that I was not aware of, especially things I ordinarily would have noticed.

1	2	3	4	5
Not at all true	Slightly true	Somewhat true	Very true	Extremely true

9. I felt confused; that is, there were moments when I had difficulty making sense of what was happening.

1	2	3	4	5
Not at all true	Slightly true	Somewhat true	Very true	Extremely true

10. I felt disoriented; that is, there were moments when I felt uncertain about where I was or what time it was.

1	2	3	4	5
Not at all true	Slightly true	Somewhat true	Very true	Extremely true

APPENDIX B

Peritraumatic Dissociative Experiences Questionnaire – Rater Version

Instructions: I'd like you to try to recall as best you can how you felt and what you experienced at the time [most upsetting event] happened, including how you felt the few minutes just before. Now, I'm going to ask you some specific questions about how you felt *at that time*.

[*Note:* DK = Don't know, 01 = Absent or false, 02 = Subthreshold, 03 = Threshold.]

1. (At that time) Did you have moments of losing track of what was going on: that is, did you "blank out," "space out," or in some other way not feel that you were part of the experience?	DK	01	02	03
2. (At that time) Did you find yourself going on "automatic pilot," that is, doing something that you later realized you had done but hadn't actively decided to do?	DK	01	02	03
3. (At that time) Did your sense of time change during the event; that is, did things seem unusually speeded up or slowed down?	DK	01	02	03
4. (At that time) Did what was happening seem unreal to you, as though you were in a dream or watching a movie or a play?	DK	01	02	03
5. (At that time) Were there moments when you felt as though you were a spectator watching what was happening to you – For example, did you feel as if you were floating above the scene or observing it as an outsider?	DK	01	02	03
6. (At that time) Were there moments when your sense of your own body seemed distorted or changed – that is, did you feel yourself to be unusually large or small, or did you feel disconnected from your body?	DK	01	02	03

7. (At that time) Did you get the feeling that something that was happening to someone else was happening to you? For example, if you saw someone being injured, did you feel as though you were the one being injured, even though that was not the case?	DK	01	02	03
8. Were you surprised to find out after the event that a lot of things had happened at the time that you were not aware of, especially things that you felt you ordinarily would have noticed?	DK	01	02	03
9. (At that time) Were there moments when you had difficulty making sense of what was happening?	DK	01	02	03
10. (At that tune) Did you feel disoriented, that is, were there moments when you felt uncertain about where you were or what tune it was?	DK	01	02	03

Chapter 10

The Impact of Event Scale: Revised

Daniel S. Weiss

INTRODUCTION

Posttraumatic stress disorder (PTSD) was introduced into the world psychiatric nomenclature in 1978 (World Health Organization, 1978) with the publication of the ICD-9, documenting the cross-cultural recognition of the typical symptomatic response to exposure to traumatic life events (e.g., Horowitz, 1976). The characteristic core of the disorder includes the distressing oscillation between intrusion and avoidance. Intrusion is characterized by nightmares, unbidden visual images of the trauma or its aftermath while awake, intrusive thoughts about aspects of the traumatic event, sequelae, or self-conceptions. Avoidance is typified by deliberate efforts to not think about the event, not talk about the event, and avoid of reminders of the event. Also characteristic are more active attempts to push memories and recollections of the event or its aftermath out of mind by increasing use of alcohol or drugs, overworking, or other strategies designed to divert attention or to so exhaust someone that he or she is temporarily untouched by the intrusive phenomenology. In addition to the frank avoidance, Horowitz also described emotional numbing as a not uncommon sequel to exposure to a traumatic life event (Horowitz, 1975; Horowitz & Kaltreider, 1977). There is empirical evidence supporting three of these four phenomena. For example in analyses of the most commonly used structured clinical interview for PTSD, the Clinician-Administered PTSD Scale (Weathers, Keane, & Davidson, 2001), evidence of the prominence of these clusters has been presented (King, Leskin, King, & Weathers, 1998).

Following from this conceptualization, Horowitz and colleagues (Horowitz, Wilner, & Alvarez, 1979) published a simple but powerful self-report measure for assessing the magnitude of symptomatic response in the past 7 days to a specific traumatic life event that was titled the Impact

of Event Scale (IES). (Sadly, many citations and publications using the IES have used the plural of "event," labeling it the *Impact of Events [sic] Scale*. This innocent error, occurring perhaps because when the name of the scale is spoken one cannot easily distinguish between singular and plural, may have influenced bibliographic information and searches to some extent, since searching for either may overlook the other.)

Published before the appearance of the formal diagnostic criteria (American Psychiatric Association, 1980), the original IES comprised two subscales: intrusion (the sum of seven items), and avoidance (the sum of eight items) that mapped on to what was described in the B and C criteria of the diagnosis of PTSD – the signs and symptoms of intrusive cognitions and affects together or oscillating with periods of avoidance, denial, or blocking of thoughts and images. The scale used a somewhat unusual response format: Not at all = 0, Rarely = 1, Sometimes = 3, and Often = 5.

The scale did not assess the third set of PTSD symptoms, the hyperarousal symptoms presented in the D criterion of the diagnosis of PTSD with the exception of disturbances in sleep. Thus, the phenomena of hypervigilance, angry outbursts, and exaggerated startle response were not covered in the original scale. The findings from the Department of Veterans Affairs Cooperative Study that examined in the laboratory the hyperarousal phenomena of PTSD (Keane et al., 1998) found, somewhat unexpectedly, that a proportion of those diagnosed with PTSD did not show the characteristic psychophysiological arousal to laboratory triggers. Despite the steady increase in the evidence that the fight or flight response manifest in the hypothalamic–pituitary–adrenal (HPA) axis is clearly implicated in the development, maintenance, or both of PTSD (Deebiec & Ledoux, 2006; Pitman et al., 2002; Yehuda, 2006), the results of the VA Cooperative Study are consistent with the notion that a subset of those with PTSD have less salient evoked hyperarousal responses. The exclusion of this domain from the original IES may have been associated with this phenomenon, but as a consequence the original IES was unable to assess symptomatic status in the three domains that comprise the diagnosis of PTSD.

In support of the two subscales, Horowitz et al. (1979) presented data that were consistent with two homogeneous clusters of items tapping by intrusion and avoidance (Cronbach's, 1951; alpha for intrusion = 0.79, for avoidance = 0.82). The correlations between the two subscales ($r = 0.42$, 18% of the variance) were small enough to allow for meaningful independence of the two subscales. The test–retest reliability was satisfactory, with coefficients of 0.87 for intrusion and 0.79 for avoidance.

Zilberg, Weiss, and Horowitz (1982) showed that the psychometric characteristics of the IES and the accompanying conceptual model of responses to traumatic stress that had given rise to its development held in a cross-validation sample. The data were from outpatients with

traumatic grief and a contrast group who had also experienced the death of a parent but had not sought treatment and were adjusting normally to their loss. Both groups were evaluated at three points in time.

The results revealed that item endorsement percentages ranged from 44% to 89% when the patient and contrast groups were combined, underscoring the salience of the phenomena tapped by the item pool. The rank order of items based on frequency of endorsement in the combined group was put side by side with the rank order reported in the initial publication of the IES. The Spearman rank correlation (Spearman, 1904) of 0.86 ($p < 0.001$) suggested that the content of experiences following traumatic grief as represented tapped by the item pool of the IES was similar across both types of events and patient versus nonpatient populations.

A factor analysis was conducted using a principal factors procedure with a varimax rotation to assess the item assignments on the intrusion and avoidance subscales. Two factors were extracted. For all items, the factor loading on the hypothesized factor was higher than it was on the other factor. This was taken as evidence of the coherence of the two subscale item sets. Reliability data were also reported in this cross-validation study. Coefficients of internal consistency were reported for both subscales for all three time points for the two groups both separately and combined. These coefficients ranged from 0.79 to 0.92.

An important component of this study was the thorough examination of the nature of the relationship between the intrusion and avoidance subscales. This was undertaken to compare inferences from either the total score that was used or the two subscale scores. The case was advanced that if correlations of 0.40–0.60 in magnitude for all six of the time by group conditions, then there would be little recommend maintaining separate subscale scoring. The empirical findings and the conceptual rationale both indicated that separate subscale scores be retained because even though in five of the six conditions the subscales were substantially correlated (ranging from 0.57 to 0.78), the patient sample at the pretherapy evaluation point produced a coefficient of only 0.15, a conspicuously different result. Consequently, these data suggested that using only a total score could well obscure important differences in symptomatic status across phenomenological domains.

Sundin and Horowitz (2002) recently summarized published research on the original IES's psychometric characteristics. They presented nonweighted averages across 18 studies of coefficient alpha. The result for the Intrusion subscale was 0.86 and 0.82 for the Avoidance subscale. This chapter also presents estimates of stability over time. They found that the longer the time interval between the test and the retest, the lower the coefficient. Nevertheless, none was below 0.51. In this analysis, Sundin and Horowitz did not consider the overall level of symptoms of the different samples, an issue raised by Zilberg et al. in their (1982) paper.

As well, this issue was not taken into account in the calculation of the nonweighted average correlation of the two subscales of 0.63 across the 18 studies. Evidence that this issue needs to be considered in the interpretation of results was highlighted in the review of factor analyses of the 15 items. In these 12 studies, it appeared that only seven supported the two factor structure, with three obtaining three factors (avoidance and numbing being separate), and two finding only a single factor. The latter is what would be expected from samples where the proportion of those having significant symptomatology is low, a matter described in more detail elsewhere (Weiss, 2004b). A summary of 18 studies presented the correlations between a variety of other measures of symptoms and intrusion and avoidance. Most were appropriate, though it appeared that divergent validity was an issue that required further study, since the correlations with general symptoms were larger than the average relationship of the two subscales. This is a finding that appears to not be limited to the IES, as much research concentrates on convergent validity and does not present analyses that would detract from the case for the adequacy of the measure or scale in question.

In a more detailed review of the literature on the IES (Weiss, 2004a), it was noted that the original IES has been the most widely used self-report measure of stress response or PTSD symptoms of reexperiencing and numbing and avoidance of any measure. As of May 2001, the PILOTS database reported its use in 1,147 studies. The next most frequent measure was the Beck Depression Inventory (Beck, Ward, Mendelson, Mock, & Erbaugh, 1961). The next most frequent measure of PTSD symptoms was the Mississippi Scale for Combat-Related PTSD (Keane, Caddell, & Taylor, 1988) with fewer than half of the citations. A search of PsychINFO targeting only empirical studies revealed 515 citations. In that review it was not possible to determine if data using the original IES were collected or whether the study used the Impact of Event Scale-Revised (IES-R) (Weiss, 2004a; Weiss & Marmar, 1997) in any study appearing after 1996.

THE INITIAL PILOT WORK ON THE IES-R

Despite the usefulness of the original IES, complete assessment of the response to traumatic events required tracking of response in the domain of hyperarousal symptoms. Beginning with data from a longitudinal study of the response of emergency services personnel to traumatic events, including the Loma Prieta earthquake (e.g., Weiss, Marmar, Metzler, & Ronfeldt, 1995), a set of seven additional items, with six to tap the domain of hyperarousal, and one to parallel the DSM-III-R and now DSM-IV diagnostic criteria for PTSD were developed, piloted, and then used. These additional seven items were interspersed with the existing

seven intrusion and eight avoidance items of the original IES using a table of random numbers to establish placement. The IES-R comprises these 22 items, and was originally presented in the first edition of this reference work (Weiss & Marmar, 1997).

An important consideration in the construction of the revised IES was to maintain comparability with the original version of the measure as much as was possible. Consequently, the one week time frame to which the instructions refer in measuring symptomatic response was retained, as was the original scoring scheme of frequency – 0, 1, 3, and 5 for the responses of "Not at all," "Rarely," "Sometimes," and "Often." The only modification to the original items that was made was to change the item "I had trouble falling asleep or staying asleep" from its double-barreled status into two separate items. The first is simply "I had trouble staying asleep" and because of a somewhat higher correlation between it and the remaining intrusion items it was assigned it to represent the original item in the Intrusion subscale. The second item, "I had trouble falling asleep" was assigned to the new Hyperarousal subscale because of its somewhat higher correlation with the other hyperarousal items, its somewhat lower correlation with the intrusion items, and its more apparent link with hyperarousal than with intrusion. The six new items comprising the Hyperarousal subscale target the following domains: anger and irritability, jumpiness and exaggerated startle response, trouble concentrating, psychophysiologic arousal upon exposure to reminders, and hypervigilance. As mentioned earlier, the one new intrusion item taps the dissociative-like reexperiencing captured in true flashback-like experiences. The reader is referred to Weiss (2004a) for a summary of the internal consistency of the three subscale, all of which were strong, the pattern of item-total correlations, test–retest stability, which was also satisfactory, and communality of the interitem correlations.

On the basis of the experience with those data, and considerations of the insufficiency of frequency as a completely summarizing marker for self-report, the over-weighting of responses of "Sometimes" and "Often" in the scoring scheme, the IES-R molted into a measure with the following characteristics: (1) the directions were modified so that the respondent is not asked about the frequency of symptoms in the past 7 days but is instead asked to report the *degree of distress* of the symptom in the past 7 days; (2) the response format was modified to a 0–4 response format with equal intervals – 0 = Not at all, 1 = A little bit, 2 = Moderately, 3 = Quite a bit, 4 = Extremely – rather than the unequal intervals of the original scale; and (3) the subscale scoring was changed from the sum of the responses to the mean of the responses, allowing the user to immediately identify the degree of symptomatology merely by examining the subscale scores, since they are presented in the same metric as the item responses, something the original scale did not. These changes brought the IES-R in

parallel format to the SCL-90-R (Derogatis, 1994), allowing for direct comparison of endorsement of symptom levels across these two instruments.

ISSUES IN ALTERNATE VERSIONS IN A DIFFERENT LANGUAGE

One of the key tasks of any research project is to insure that the instruments used are reliable and valid measures of the phenomenon or construct under study. For a variety of reasons, many measures that have contributed to the growing cross-cultural literature in traumatic stress and PTSD were initially developed in English, the IES-R being no exception. Consequently, for use with samples whose native language is not English, a translation of the measure is required. Given this requirement, it is useful to review some of the issues involved in that process.

In a recent paper, Mallinckrodt and Wang (2004) present a thorough and thoughtful review of some of the most important issues, as well as making some recommendations. These authors cite Hambleton's work on the difference between literal translation and what is described as *adaptation* of items from one language to another. For example, the English phrase "go on automatic pilot" if translated literally into German, will not give the sense of engaging in behaviors without active deliberation that is only recognized after the fact. Thus, if only a literal translation were adopted, the reliability and validity would be compromised. Mallinckrodt and Wang (p. 369) present Hulin's view that "[a] pair of items from the original scale and its adapted version are said to be equivalent when two individuals with the same amount or level of the construct being measured have equal probabilities of making the same response to the different language versions of the same item."

Flaherty et al. (1988) suggested that there were five levels of equivalence that an adapted measure should possess in order to show that it has cross-cultural validity. The first, *content equivalence*, involves establishing that the content domain of items is relevant and appropriate for both cultures. The second, they describe as *semantic equivalence*, establishing that each item of the new measure communicates the meaning of its parallel item on the original scale. The third is more methodological: *technical equivalence* addresses the question of whether the data collection method (e.g., self-report) produces comparable results in each culture. The fourth, *criterion equivalence*, involves evidence of parallel comparisons to within-culture norms. The fifth and final equivalence is *conceptual*. This addresses whether the construct or phenomenon has the same meaning in each culture. The claim of ordered equivalence posits that subsequent levels of equivalence cannot be achieved in the absence of equivalence in all prior levels.

For at least the last three decades, back-translation has been the method most commonly used to adapt a measure developed in one language and culture to another (Brislin, 1970). The approach involves first translating the measure from the original to the new language, then having the translated measure retranslated back into the original language, and finally verifying the retranslated measure with the original measure. More recently (Hambleton, 1994), the International Test Commission has offered guidelines for the translation process. First, the team of translators should comprise individuals who are fluent in both the original and proposed language and in addition these individuals should have some familiarity or expertise with the construct being measured. If at all possible, the team members should be native members of the proposed culture. As well, they should have familiarity with the principles of scale development and item writing. An especially desirable characteristic would be the capacity to view constructs in light of what Gough (1966, 1990) termed *folk concepts*. Folk concepts are nontechnical deeply embedded dimensions of personality that ordinary members of a culture appreciate and understand intuitively, concepts such as dominance, ambition, or attractive.

As in other judgment tasks such as the determination of dynamic formulations (DeWitt, Kaltreider, Weiss, & Horowitz, 1983) or making diagnoses (Weiss, 2003), individuals doing the translation should work independently and not confer prior to completing the task. Mallinckrodt and Wang note that some have suggested that at this step if both the original and the translation are considered simultaneously, rather than using the original as the criterion, that the resulting translation will have a better chance of not floundering on problems involved with literal translation.

The next step is to have a completely separate team of translators (with the same attributes as the first) start with the translated product from the first team and to construct a back-translation into the original language. Obviously, they should be unfamiliar with the original measure. As before, the members should first work alone, and then confer to produce a final scale.

The final step is to have an expert panel compare the original and back-translated versions, with the same safeguards for independence as in the previous two steps. If the results are deemed to be equivalent then the process can terminate. If the results are not sufficiently equivalent, then the whole process should be repeated until an acceptable level of equivalence is obtained. Mallinckrodt and Wang also point out that the instructions must be viewed as an integral part of the process.

In their presentation, Mallinckrodt and Wang offer suggestions for the next phase of the process, one that they describe as quantitative verification using a *dual-language, split-half* approach (p. 370). This procedure closely resembles an approach offered by Norman (1965) for verification

of prediction models in regression approaches and is based on Mosier's methodology. This procedure comprises seven elements.

First, a large (exceeding 300 individuals) criterion sample that has provided data at the item level on the original measure is identified. They note that if construct validation measures are also available in this dataset that this is preferable.

Second, a bilingual sample is identified and checked for bilingual fluency. At least 30 individuals who identify with the target culture are advised.

Third, two forms of the measure are created such that for each form half of the items are derived from the original measure and the other half stem from the adapted measure with the item order such that items from one or the other source are all grouped together. This step also contains the proviso that for measures with a subscale structure, such as the IES-R, the two forms should contain items from all the subscales with as balanced a representation as possible. To counterbalance order effects of language, both forms in this step are used to generate two additional forms with the order of language reversed. Thus, if O1S1 = half of the original language items from subscale 1, O2S1 = remaining half of original language items from subscale 1, O1S2 = half of the original language items from subscale 2, O2S2 = remaining half of original language items from subscale 2, A1S1 = half of the adapted language items from subscale 1, A2S1 = remaining half of adapted language items from subscale 1, A1S2 = half of adapted language items from subscale 2, and A2S2 = remaining half of the adapted language items from subscale 2, the four versions of the measure will have the following formats: (1) combination of O1S1 and O1S2 followed by A1S1 combined with A1S2, (2) combination of A2S1 and A2S2 followed by O2S1 combined with O2S2, (3) combination of A1S1 and A1S2 followed by O1S1 combined with O1S2, and (4) combination of O2S1 and O2S2 followed by A2S1 combined with A2S2.

Fourth, each of the 30 members of the bilingual sample is randomly given one of the above four formats to complete, along with any other measures being utilized in the process (e.g., measures of convergent or divergent validity).

Fifth, if possible, data on test–retest stability are collected. Ideally, the interval between administrations should be the same for all 30 participants. Mallinckrodt and Wang suggest that the form for retest either be identical across administrations or describe a more complicated and time consuming optional approach. Here, all 30 participants complete two forms at the initial test session and the remaining two forms at the retest.

Sixth, the data are analyzed to produce the following results: (a) dual-language split-half reliability, (b) coefficient alpha internal consistency, (c) test–retest reliability, and (d) the analog of a multitrait multimethod matrix approach (Campbell & Fiske, 1959) for examining construct validity.

For the comparison of the two alpha coefficients, an *F*-test proposed for this purpose is recommended (Feldt, 1969). The approach recommended for the split-half reliability, test–retest reliability, and construct validity is one that has been employed elsewhere by the author (Weiss, 1979): the actual correlation coefficients become the raw data and comparison of these coefficients is accomplished using the *r* to *z* transformation.

The seventh and last element in the approach is practical only if a sample of appropriate native speakers large enough for the number of items to be examined is available (see Tinsley & Tinsley, 1987). The recommendation is to conduct a confirmatory factor analysis with the adapted version comparing its dimensionality to that found in the original version's criterion sample, or if the dimensionality is in question, to the several competing solutions. One of the vexing issues in this approach is that the assessment of goodness of fit of these models is considerably less clear than is commonly appreciated or acknowledged (Tomarken & Waller, 2003).

For the IES-R, the question of what model is most appropriate is not a straightforward decision. From the evidence so far, the structure of the scales may well be dependent on the nature of the sample being studied. The work of Zilberg et al. (1982) reported earlier clearly showed that the relationship between Intrusion and Avoidance varied as a function of level of distress and time elapsed since the event. In another set of data (Creamer, Bell, & Failla, 2003), the same phenomenon was noted: ". . . correlations among the subscales were higher in the community sample than in the treatment sample" (p. 1489) and this led to variations in the best-fitting models.

Indeed, it may well be the case not only for the IES-R, but for many if not most symptom measures of PTSD, the phasic nature of the symptom pattern, its longitudinal course, and the polythetic nature of the diagnosis make it less than clear what the structure of any measure ought to be. Because the time elapsed since the exposure to the traumatic event exercises such a significant impact on the symptom presentation. As well, given the reality that what Meehl (1995) termed the definitory criteria for PTSD are not known, the problem is more complex. Given that the field has accepted as defining of PTSD use of what are for disorders with known etiology (e.g., AIDS) merely evidentiary criteria (e.g., decreased CD-4 count, wasting, opportunistic infections, dementia), the nature of the structure of evidentiary characteristics has wholly different meanings and implications. Another example is Alzheimer's disease. The definitory characteristics are the plaques and tangles. Symptomatic manifestations, such as memory problems, acting out, and sunsetting, are not used to structure the nature of the disorder. Rather, the issue is commonness or uncommonness of course or symptom presentation. This viewpoint is presented in more depth elsewhere (Waller & Meehl, 1998) and cannot be

developed further here. It is sufficient to note, however, that the inference pattern of structure used for ability or intelligence, or even personality, probably does not well map onto situations where there are distinct subgroups whose clustering of symptoms is of key significance.

INTERNATIONAL VERSIONS OF THE IES-R

The efficiency and directness of the IES-R has led scholars in a variety of different countries and cultures to produce versions in non-English languages. A review of the literature revealed that the work accomplished for the international versions approached the recommendations of Mallinckrodt and Wang (2004) to varying degrees. It is, of course, an empirical question as to whether the detailed and extensive approach suggested by these authors would produce a more reliable or valid version than a more manageable approach. Published data are in the literature for formal translations as well as ad hoc translations in the context of an investigation of another question. Of the former, the following versions can be found (listed alphabetically): Chinese (Wu & Chan, 2003), French (Brunet, St-Hilaire, Jehel, & King, 2003), German (Maercker & Schuetzwohl, 1998), Japanese (Asukai et al., 2002), and Spanish (Baguena et al., 2001). A Bosnian version of the IES-R is described in a study that compares refugees to nonrefugee (Hunt & Gakenyi, 2005). Nonpublished (as of this writing) versions exist in Dutch (S. Bal, personal communication, September 23, 1998), Italian (Giannantonio, 2003), Norwegian (as cited in Kanagaratnam, Raundalen, & Asbjornsen, 2005), and Persian (Panaghi, Hakimshooshtary, Attari moghadam, & Ghorbani, 2005). There may well be other versions as well, as there has been informal communication with the author considering translations into Lithuanian, Portuguese, and Turkish.

Internal Consistency. The published results of the various international versions reveal reassuring consistency in the basic psychometric characteristic of internal consistency of the IES-R. In the Chinese version, for example, coefficient alpha was 0.89 for the Intrusion subscale, 0.85 for the Avoidance subscale, and 0.83 for Hyperarousal subscale. In the initial presentation of the French version, coefficient alpha was 0.86 for the Intrusion and Avoidance subscales, and 0.81 for the Hyperarousal subscale. The German version produced coefficient alpha of 0.87 for the Intrusion subscale, 0.78 for the Avoidance subscale, and 0.87 for the Hyperarousal subscale. The initial presentation of the Japanese version presented coefficients for four different samples: Intrusion – 0.91, 0.88, 0.89, and 0.91; Avoidance – 0.88, 0.81, 0.84, and 0.90; and Hyperarousal – 0.86, 0.80, 0.80, and 0.86. In the aggregate, as well individually, all the coefficients reveal considerable subscale homogeneity. These results are consistent with the

outcome of viable versions of the measure, and are what would be expected given the results of the English version (Weiss, 2004a).

Test–Retest Stability. The data regarding cross-time stability, an important characteristic of reliability from the perspective of reproducibility, were also consistent and encouraging. The initial publication of the Chinese version reported these data: $r = 0.74$ for Intrusion, $r = 0.52$ for Avoidance, and $r = 0.76$ for Hyperarousal. The French translation reported $r = 0.73$ for the Intrusion subscale, $r = 0.77$ for the Avoidance subscale, and $r = 0.71$ for the Hyperarousal subscale. The data collected for the Japanese version did not examine stability in as differentiated an approach as the other versions did. Instead of examining each subscale separately, only the total score of the three subscales was analyzed, and a Spearman (1904) rank order correlation was presented. In the sample of 114 participants, the data yielded $r_s = 0.86$. As for the findings with internal consistency, the stability data are what would be expected based on the findings from the original version.

Scale Intercorrelations. Zilberg et al. (1982) showed that the correlations of intrusion and avoidance in the original IES varied as a function of time elapsed since the traumatic event and level of symptomatology. Though the data from the French and Chinese translations (the Japanese translation did not present these data) could not address the correlations in this differentiated manner, they did, nonetheless, report the subscale correlations. In the French version, the correlation of Intrusion with Avoidance was $r = 0.62$ and with Hyperarousal was $r = 0.69$. The correlation of Avoidance with Hyperarousal was $r = 0.56$. The analogous data in the Chinese version were $r = 0.76$, $r = 0.83$, and $r = 0.75$. For the German version, in a same sample of former political prisoners, correlations of 0.61 (Intrusion and Avoidance), 0.85 (Intrusion and Hyperarousal), and 0.65 (Avoidance and Hyperarousal) were reported.

Scale Structure. In the initial reports of the international versions, analyses were presented that proceeded beyond the simple subscale intercorrelations. A summary of these is presented below. These results should, however, be viewed in light of the comments regarding evidentiary characteristics as compared to descriptive characteristics as described above.

The Chinese version data yielded a single strong factor that accounted for 45% of the variability in the item set. The data from the French version were subjected to a principal components analysis and with a varimax rotation. The results were not definitive. Both a two factor and a three factor solution were interpreted. The two factor solution comprised an avoidance factor and a combined intrusion–arousal factor. This was similar to the structure found in the Spanish version. The three factor solution replicated the three symptom criteria of PTSD: hyperarousal, avoidance, and intrusion. Item loadings (the correlation of the item with the score on the factor) for the set of 22 items were almost completely

coherent with each item loading most strongly on its own scale, though there were instances of low communality (the item did not go with any of the others in these data).

In contrast, the German version produced data that were most consistent with a four factor result. These were interpreted as factors measuring intrusion, avoidance, hyperarousal, and a separate numbing dimension. This is the same result as one reported for the Clinician-Administered PTSD Scale by King and his colleagues (1998).

The Japanese data used a kind of factor analysis termed "Varclus," marketed by the SAS Institute (1999), that attempts to find groups of variables that are as correlated as possible among themselves and as uncorrelated as possible with variables in other clusters. The key difference is that all variables start in a single cluster, and additional clusters are formed based on parameters set by the user. The paper reporting the Japanese reported neither the extraction method (principal components versus centroid) nor anything other than a forced three cluster solution. The results suggested that a model comprising three clusters of items fit those data best: an intrusion–hyperarousal cluster, an avoidance cluster, and a third cluster of numbing and sleep and cognitive distress. These clusters were not orthogonal. The correlation of cluster 1 and 2 was $r = 0.74$, 1 and 3 was $r = 0.73$, and 2 and 3 was $r = 0.62$. These correlations are of roughly the same magnitude as the regular subscales reported above.

The conclusion to draw from this set of analyses is that although the international versions of the IES-R show very similar basic psychometric properties in terms of internal consistency, stability, and subscale correlations, at the level of analysis of underlying dimensions, the picture is more complicated. Some of this variability is no doubt due to sample differences in size, homogeneity, and level of distress, but it well may be that differences in exposure to the trauma under study, differences in time elapsed since the exposure, and differences in comorbidity contribute to this pattern of results. Though the model that Mallinckrodt and Wang (2004) suggests that such variability may be a cause for concern, it is important to reiterate that at the level of structure, trait versus state issues may be more of an issue. More research about this topic would be welcome and hopefully clarifying.

A SAMPLING OF USE OF THE IES-R INTERNATIONAL VERSIONS

Keeping pace with the burgeoning PTSD literature, there is a growing literature using international versions of the IES-R. These studies use both English and other language versions, and cover a wide range of events, populations, age ranges, and research questions. The presentation below

is by no means exhaustive, and instead is merely a sampling, with no claims as to representativeness as to topic, wideness of usage, or other grouping or categorical variables. The order of presentation is by year of publication and within year alphabetically by first author's last name.

The German version of the IES-R was utilized in a study of individuals living in Germany who had had a life-threatening cardiac event and received an implanted cardioverter defibrillator (Baumert, Simon, Gündel, Schmitt, & Ladwig, 2004). The authors directed special attention to the relationships among the subscales as well as an examination of the concordance of scores on the Hyperarousal subscale with psychophysiological responses within the context of an acoustic startle reflex paradigm. The decision was made to use an outdated scoring algorithm (0, 1, 3, 5), thus rendering problematic the generalizability of the conclusions the authors drew. An attractive feature of the study was the use of a receiver operating characteristic (ROC) (see Kraemer, 1992) approach to classification regarding hyperarousal. The data revealed that the internal consistency of the Intrusion and Avoidance subscales was above 0.80, whereas the coefficient was 0.66 for the Hyperarousal subscale. In these data, the ability of scores on the Hyperarousal subscale to distinguish those who had strong psychophysiological responses to the acoustic startle paradigm from those who had weak responses was disappointing. In fact, the operation of the Hyperarousal subscale in this sample was less strong than either Intrusion or Avoidance. The authors acknowledge the possibility that because this sample attained lower scores on the subscales than more standard traumatic events typically produce, this may have affected the characteristics of the measure in unknown ways.

A second study in Germany using the German version examined similarities and differences among victims of a recent trauma, patients with PTSD, and healthy controls regarding deployment of attention, heart rate responses and self-ratings to trauma relevant pictures (Elsesser, Sartory, & Tackenberg, 2004). This was a complex study employing measures of heart rate and electromyogram assessment of eye blink response to acoustic startle. A dot probe task, and color picture task included trauma relevant, generically aversive and emotionally neutral stimuli to help shed light on the hyperarousal aspect of PTSD, and, in this study, Acute Stress Disorder. The total sample comprised 86 individuals divided as 37 with recent exposure, 18 with PTSD that averaged a bit more than 2 years time elapsed, and 31 healthy controls. There were a number of findings, including a tendency to show heart rate acceleration to trauma-related material in both exposed groups. Of special interest regarding the IES-R, PTSD patients obtained higher scores than the group who had experienced recent trauma. As well, the investigators demonstrated that those with more intrusions showed a bias away from trauma-relevant presentations, suggesting that the Intrusion subscale

can capture differences that are manifested in standard experimental behavioral paradigms.

Hunt and Evans (2004) were interested in the constructs of emotional intelligence and the phenomenon of monitoring versus blunting with respect of symptoms after traumatic exposures in a study conducted in the United Kingdom. Individuals who obtain high scores on monitoring are active processors of traumatic events and are open to information, whereas individuals who tend to avoid information are described as employing a blunting approach. Hunt and Evans used the standard IES-R with the older scoring algorithm and gathered data on a sample of 442 individuals of whom 233 were female. Of the 442, 298 reported exposure to a traumatic event, and it is for this subsample that the IES-R findings apply. Statistically significant higher scores on all three subscales were obtained by the women in the study. The effect sizes (Rosenthal, 1994) for Intrusion, Avoidance, and Hyperarousal were 0.30, 0.36, and 0.43, respectively. There was no relationship between a total score across the three subscales (a variable some researchers choose to compute) and the measure of monitoring ($r = -0.03$), but there was a significant but small effect for blunting ($r = 0.14$, $p < 0.005$). The authors also hypothesized that those with higher emotional intelligence scores would report less symptomatic distress. These findings were stronger than those for monitoring and blunting. The correlation was –0.31 for the Intrusion subscale, –0.29 for the Avoidance subscale, and –0.32 for the Hyperarousal subscale.

The Sarin gas attack in the Tokyo subway in 1995 provided the opportunity to examine symptomatic status at 5 years follow-up for 34 exposed individuals (Ohtani et al., 2004). The Japanese version of the IES-R was utilized in this study, as was the Clinician-Administered PTSD Scale (Blake et al., 1995; Weathers et al., 2001). The investigation examined a potential pool of 565 exposed who were treated in the emergency room at the time of exposure. Responses totaled 170, with 64 agreeing to consider participating. Of these, 34 provided full data. The authors presented item-level data for the IES-R, providing an unusual opportunity to look at specific symptoms. The authors reported that more individuals (76%) endorsed some level of hypervigilance ("I felt watchful and on guard") than any other item. The item least endorsed (12%) was from the Avoidance subscale – "I felt as if it hadn't happened or wasn't real." The two sleep disturbance items were tied for the percentage of survivors (9%) who indicated extreme distress in the last week. Looked at from the perspective of the subscales, there was little differentiation in the subscales regarding the average percentage of individuals who reported no symptomatology when pooled across all the items within each subscale: Intrusion, 57%; Avoidance, 59%; and Hyperarousal, 56%. Finally, there was evidence of construct validity in the relationship between the IES-R and the Clinician-Administered PTSD scale.

This same sample provided a subsample of individuals whose auditory P300 event-related potentials were related to brain morphology, specifically anterior cingulate gray matter volume (Araki et al., 2005). In this study, the IES-R was part of the battery that was compared between those who carried a diagnosis of PTSD (n = 8) and those who did not (n = 13). Using the Japanese version, and using only total score, the authors reported a statistically significant difference (t = 2.68, $p < 0.017$) with an effect size of 1.3, large effect using the metric recommended by Cohen (1988). The key finding of this research was that those with PTSD showed significantly lower P300 amplitudes in response to an oddball task; these scores were not, however, associated with scores on the IES-R. As well, there was some suggestion that the degree of lowered P300 amplitude was related to reduced volume in the brain area examined – the anterior cingulate. This latter finding, however, though intriguing, cannot at this point be thought of as established.

The English version of the IES-R was utilized in an investigation among Jerusalem residents seen in an emergency room following exposure to a traumatic incident (Bachar, Hadar, & Shalev, 2005). The question under investigation in this project was whether a measure of narcissistic traits and vulnerability would show some association with the development of PTSD. The authors showed that those who were more symptomatic at 1 month, and 4 months, had significantly higher levels of narcissistic vulnerability at baseline were. Because the focus of the report was on the scale to measure narcissistic vulnerability, actual coefficients between it and the subscales of the IES-R were not specifically reported. Instead, these variables and the Beck Depression Inventory were reported to correlate with the vulnerability measure in the range of 0.24–0.39, across both time points.

The German version of the IES-R was utilized in a study at the Medical University of Vienna, in Austria (Bunzel, Laederach-Hofmann, Wieselthaler, Roethy, & Drees, 2005). The sample comprised long-term survivors of heart transplant with a period of uncertainty before the transplant that life was sustained by a circulatory assist device and their partners who were assessed retrospectively. These authors chose to use a cut-off score from the total score to estimate a diagnosis of PTSD. They found that none of the patients but 23% of the partners achieved a score high enough to be termed having PTSD. Concurrently, therefore, the partners scored significantly higher than the transplant patients on all three subscales. The effect size was 0.82 for Intrusion, 0.56 for Avoidance, and 0.82 also for Hyperarousal. In this study the IES-R was able to detect effects between differentially exposed groups, though it might have been thought that those who were ill would have found the incident more traumatic than the helpless partner.

The French version was part of the assessment package in a study of adolescents in Toulouse, France, following the explosion of a chemical

factory so strong that it produced a tremor measuring 3.4 on the Richter scale (Godeau et al., 2005). These authors confined their use of the IES-R to those participants 15 and 17 years old, though the directly exposed sample of 577 comprised 11- and 13-year olds as well. The study focused on what the authors termed "symptoms consistent with PTSD" (SCW-PTSD), thus avoiding the thorny issue of diagnosis via self-report, but this was just another way to described symptomatic elevations. They compiled a control sample of 900 nondirectly exposed children and conducted the survey 9 months after the event. Among many results, they found that almost 30% of 15- and 17-year olds who were directly exposed had salient symptoms as compared to approximately 5% in the nondirectly exposed. Within those directly exposed, older children had higher symptoms levels and girls had twice the level of symptoms as boys. There were other results related to being injured, having severe damage at school or at home, and having a cumulative impact of multiple consequences, the participant and a family member both injured, compared to one or no injuries.

Hong Kong was the locale for a study utilizing the Chinese version the IES-R and severe acute respiratory syndrome (SARS) was the topic at issue (Ho, Kwong-Lo, Mak, & Wong, 2005). Only one of two samples studied included data about the IES-R. This group comprised 97 staff members who had been infected with SARS, a response rate of 30% of those approached. The study was focused on a measure of fear of SARS with aspects of Infection, Insecurity, and Instability as well as a total score. There were robust correlations between Intrusion, Avoidance, and Hyperarousal and all four fear variables, ranging from a low of 0.23 between Avoidance and Infection, and a high of 0.66 between Intrusion and total score. On average, the highest correlations for the four Fear variables were with Intrusion and the lowest was for Avoidance. Elevations on the subscales ranged from 1.24 to 1.57, which were higher than in the initial validation sample (Wu & Chan, 2003).

The Bosnian version was employed in a study of refugees and nonrefugees (Hunt & Gakenyi, 2005). The sample of refugees showed higher levels on symptoms than nonrefugees, with those who were older showing higher scores. Unlike in many other studies, in this sample of 69 refugees and 121 nonrefugees, there was no difference in scores as a function of gender. The authors in this project also chose to adopt a cut-off score, though they used a nonstandard metric so the exact value is not particularly illuminating. Nevertheless, they found that 77% of the refugees as opposed to 45% of nonrefugees exceeded their categorical designation. Even when age and traumatic experience were controlled, refugee status still produced higher scores than nonrefugee status. This study also examined the effect of personality variables. There was a significant correlation between a measure of Harmavoidance and Intrusion (r = 0.17) and Hyperarousal (r = 0.28), but not with Avoidance.

Some cross-cultural studies examine a group of individuals originally from one culture in another culture. This situation characterizes a study of

20 adult former Tamil rebels from Sri Lanka being studied in Norway (Kanagaratnam et al., 2005) using the Norwegian version of the IES-R but with an outdated scoring algorithm. The focus of the researchers was on symptoms and ideological commitment. The sample was approximately 25 years old and comprised only two women. They had been in Norway an average of 69 months. In this study, the relationship symptom level and other factors were assessed via a rank order correlation. Neither age, nor length of training, nor length of exposure, nor time elapsed, nor time in Norway was associated with level of distress, which did show considerable variability, so restriction of range is not a strong explanatory factor. As the authors anticipated, weaker commitment to the Tamil cause was associated with significantly lower levels of Avoidance and Hyperarousal, but not Intrusion.

SUMMARY AND CONCLUSIONS

The IES-R has generated a number of formal international versions, several informal versions that have appeared in the context of a topically oriented peer-reviewed publication, and a number of unpublished international versions. At the level of basic psychometric properties, the published data suggest impressive concordance in terms of internal consistency, test–retest stability, and subscale correlations even though the methods used have not employed all aspects of a comprehensive and exhaustive approach that is admittedly challenging and expensive to undertake. The relationships of the subscales to each other also appear to be relatively similar across versions. Findings regarding the underlying dimensions of the item pool are less coherent. One reason is the decision of the researcher to seek dimensions that are independent or correlated, since these dictate different analytic strategies. A second has to do with whether the emphasis is empirical or conceptual. A third has to do with individual characteristics of samples, traumatic events, prevalence of problems, time elapsed, and similar issues. More extensive data will help clarify this state of affairs.

There is a broad and growing literature using the IES-R in both the original English version in a variety of nationalities and cultures, as well as international versions in a variety of different languages in a set of diverse and different cultures. The picture that emerges is of a robust and interesting set of findings that will undoubtedly continue to grow and expand. Cautions in interpreting the literature include the continuing use of nonrecommended metrics for scoring item responses (e.g., 0, 1, 3, 5), forming scale scores by summing items rather than taking the mean, thereby making results not comparable across studies, as well as other variations including changes in directions, time-frame, incident description, and the other items enumerated elsewhere (Weiss, 2004a).

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Chapter 11

Posttraumatic Stress in Asylum Seekers from Chechnya, Afghanistan, and West Africa: Differential Findings Obtained by Quantitative and Qualitative Methods in Three Austrian Samples

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INTRODUCTION

In the present chapter, we will give an account of the culture-specific facets of traumatic stress and of posttraumatic symptomatology in their respective societal contexts as they have been reported by asylum seekers belonging to different ethnic groups. We also intend to highlight the multiple and culture-dependent strain, asylum seekers are suffering from while trying to adjust to a foreign society and while being left in uncertainty about being granted asylum. We will also examine the pathogenetic impact that societies can have on individuals as well as the differential coping styles, resulting from divergent evaluations of traumatic events by people stemming from various parts of the world. From these findings, we will derive recommendations for diagnosing posttraumatic stress and for developing culturally sensitive treatment concepts when dealing with asylum seekers and refugees from non-Western societies. Special emphasis will be laid on differences between the three cultures under consideration.

Asylum seekers from Chechnya, Afghanistan, and West Africa were the strongest ethnic groups among 24,676 foreigners who applied for political asylum in Austria in 2004 (Department of the Interior, 2004) and

therefore we were particularly interested in them. The mostly deplorable situation of estimated 40 million refugees and asylum seekers worldwide, which is accompanied by a lack of scientific knowledge about them, has been outlined comprehensively in Wilson and Drozdek's (2004) edited book "Broken Spirits." Experiences of mutilation, rape, or torture, as well as being witness of one's relatives or friends being assassinated, are quite common among them and thus, not surprisingly, psychiatric disorders, especially symptoms of posttraumatic stress, have been found frequently in asylum seekers and refugees. Various contributions to a book edited by Bracken and Petty (1998) stress the importance of including social, political, and cultural factors into diagnosis and therapy. They also pointed out that the concept of PTSD not only is derived from Western psychiatry (trying to categorize mental diseases) but also criticized that trauma – in this approach – is seen as an event affecting an individual person and thus having to be dealt with individually – in diagnosis as well as in therapy and although some symptoms seem to be universal, their significance and importance may vary considerably across different cultures.

Focusing on Chechnya, an extremely high incidence of traumatization has been reported, for example, by Médecins Sans Frontières (2004), Politkovskaja (2003), and Zelenova, Lazebnaia, and Tarabrina (2001). Mghir, Freed, Raskin, and Katon (1995), Palmer (1998), and Wardak (1993) reported posttraumatic symptomatology in displaced persons from Afghanistan, and Fox (2003), Fox and Tang (2000), and Tang and Fox (2001) did so with respect to West African refugees and asylum seekers. These as well as similar findings have been coherently and complementarily interpreted by Isaenko and Petschauer (1999) for Chechnya, and by Peddle, Monteiro, Guluma, and Macaulay (1999) for West Africa.

By Western psychiatry and clinical psychology, sequelae of traumatization usually have been described in terms of the diagnostic criteria of posttraumatic stress disorder (PTSD), provided by the current version of the diagnostic and statistical manual of mental disorders (DSM-IV-TR, American Psychiatric Association, 2000). Silove (2004) argued that symptoms of posttraumatic stress like sleep disturbance, heightened arousal, or hypervigilance can be interpreted as biologically useful adaptive mechanisms and these symptoms seem to share a common biological basis (Elbert & Schauer, 2002). Still, even in descriptions by Western medicine, posttraumatic symptoms can vary and the phenomenon of comorbidity has been emphasized. Apart from the conventional Diagnostic Criteria of PTSD, e.g., depression, conversion disorder, substance abuse, or symptoms of other anxiety disorders frequently occur in survivors of psychological trauma (Ehlers, 1999). Baron, Jensen, and DeJong (2003) illustrated the specific problems of refugees in regard to presentation of symptoms as well as the possible aggravation of their situation by lack of knowledge in respect to cultural issues.

When focusing on non-Western populations, the diagnostic categories of PTSD are clearly insufficient. With respect to Western diagnostic instruments being transferred to other cultures and pointing to the caveats formulated by Marsella's (1998) Global-Community Psychology, Marsella, Dubanoski, Hamada, and Morse (2000) warned about possible ethnocentric bias and called for important aspects of cross-cultural equivalence of psychometric measures:

1. *Cultural equivalence* means that the concepts and definitions used must be culturally meaningful and valid for the ethnic group investigated.
2. *Linguistic equivalence* pertains to adequate techniques of translation and back-translation.
3. *Conceptual equivalence* means that the concepts used must have an equivalent meaning in the foreign culture, e.g., modesty may be interpreted as inappropriate shyness and as a lack of social security in a Western culture while being culturally highly desirable in Eastern Asia (Shweder & Haidt, 2000).
4. *Scale equivalence* demands that the measurement procedures be comparable between cultures. For example, according to Marsella et al. (2000), people from non-Western cultures sometimes have difficulties in dichotomizing reality by giving "True-" and "False-" answers.
5. *Normative equivalence* means that comparable norms should be available for all populations under consideration.
6. Aspects of *factorial validity* across cultures were highlighted.
7. The specific problems arising from *self reports* were highlighted.

Berry, Poortinga, Segall, and Dasen (1992) addressed part of these points when they named three prerequisites for a diagnostic instrument to be transferred to another culture and to be translated into another language: (1) behavior addressed by the assessment instrument must have equivalent meanings in both cultures, (2) the factorial structure and item-intercorrelations have to be similar in both versions of the instrument and among both samples, and (3) the quantitative results obtained by the instrument must be equivalent, i.e., in the case of a psychometric instrument, its norms must be comparable in both populations. These desiderata make it quite clear that the DSM-IV-TR, allegedly universal, diagnostic criteria cannot sensibly be applied to indigenous populations by simply translating them to foreign languages.

Considering these arguments, with respect to clinical problems, the DSM-IV-TR diagnostic criteria may be suspected that they do not adequately account for the specific needs of non-Western societies, although some culture-specific syndromes have been included in the DSM-IV-TR appendix. This is quite evident from the viewpoint of Cultural Psychology, which emphasized the diversity of human emotions among

different ethnic groups (Shweder & Haidt, 2000; Shweder, 2001) as well as from Pike's (1954) considerations, who distinguished an *emic* from an *etic* procedure in cross-cultural comparisons. While the emic approach examines a culture's phenomena from an "inward" perspective, i.e., in terms of the investigated culture itself, the etic approach aims at developing universal or generic categories, which meet the requirements of all cultures. Triandis (1972) pointed out that

> The one who adopts the etic can easily miss the most important aspects of the phenomena which he wishes to study. Either of these approaches, however, is preferable to the *pseudoetic* approach used by many psychologists doing cross-cultural research. The pseudoetic approach is in fact an emic approach developed in a Western culture (usually the United States) which is assumed to work as an etic approach. Thus instruments based on American theories, with items reflecting American conditions, are simply translated and used in other cultures. Only rarely does this approach yield useful results. (Triandis, 1972, S. 39)

With respect to psychiatric diagnoses applied to foreign cultures, Kleinman (1977) wrote

> Here we have the evidence of a category fallacy, perhaps the most basic [. . .] error one can make in cross-cultural research. [. . .] studies of this kind go on to superimpose their own cultural categories on some sample of deviant behavior in other cultures, as if their own illness categories were culture-free. (Kleinman, 1977, p. 4).

Similarly, Berry et al. (1992) criticized an "imposed etic approach" (p. 233), which is equivalent to Triandis' "pseudoetic." In order to enable Western researchers to investigate non-Western cultures, Berry et al. suggested with respect to Berry (1989) and to Hui and Triandis (1985) to conduct emic studies both in one's own and in the foreign culture examining similarities and differences and, in a next step to adapt one's research paradigm to the new culture ("*derived etic*," Berry et al., p. 233). Thus cross-cultural comparisons are made possible on a sound basis.

Marsella and Yamada (2000) argued against an oversimplified medical model in psychiatry and clinical psychology, advocating a culturally sensitive view. They stated "that our realities, including our scientific realities, are all culturally constructed" (p. 7), a fact that implies the danger that people who hold the power, e.g., the representatives of Western biologically oriented psychiatry, dictate reality, at the expense of ethnic minorities whose specific needs are not adequately recognized. Summerfield (1999), with respect to Kirmayer (1989), pointed toward the increasing medicalization of traumatic stress by Western society, while in non-Western, collectivistic societies, trauma-related distress is commonly understood as a consequence of a disrupted "social and moral order" (Summerfield, 1999, p. 1455). As Kirmayer (1996) pointed

out, non-Western societies do not share the dualism of body versus mind, which is characteristic of the Western medical worldview, emphasizing somatic, as opposed to psychological complaints. This fact frequently has been addressed as "somatization" of psychological symptoms, but Kirmayer (2006), in accordance with Marsella, Kaplan, and Suarez (2002), correctly pointed out that somatic components are known worldwide as essential elements of the symptomatology pertaining to anxiety and affective disorders. It should be noted, however, that patients from collectivistic societies used to place a very high value on interpersonal balance with an emphasis on avoiding interpersonal conflict. Therefore, to non-Westerners, somatic symptoms may seem more acceptable and easier to communicate than psychological symptoms, which might imply accusing other people of having contributed to them by interpersonal conflict and disharmony.

The limitations of the PTSD concept in non-Western cultures have been emphasized by numerous authors (e.g., Bracken, Giller, & Summerfield, 1995; de Silva, 1993; Frey, 2001; Friedman, 1997; Kirmayer, Young, & Hayton, 1995; Marsella, Friedman, Gerrity, & Scurfield, 1996; Mezzich, Kleinman, Fabrega, & Parron, 1996; Mollica & Caspi-Yavin, 1992; Summerfield, 1999, 2002) and ample empiricial evidence supports their conceptual considerations. In survivors of torture from the Sudan and from Malawi, Peltzer (1998) and in those from Khmer, Hinton, Hinton, Um, Chea, and Sak (2002) found that PTSD only partly accounted for traumatic symptomatology. Ford (1997) found that conventional symptoms of PTSD were replaced by somatic ones in people from non-Western cultures as a result of a different conception of self. Similar results were reported by Matkin, Nickles, Demos, and Demos (1966) with respect to patients from Vietnam, by Mattson (1993), referring to people from Cambodia and Loas, and by Vontress and Ebb (2000) for Northern African immigrants in France. Mumford et al. (1991) reported that somatic symptoms frequently replaced conventional symptoms of PTSD in different ethnic groups from India, China, and Africa.

Thus, diagnoses employing the rigid Diagnostic Criteria suggested for PTSD by DSM-IV-TR frequently grossly underestimate the incidence of traumatic stress in people from non-Western populations (de Girolamo & McFarlane, 1996). Stamm and Friedman (2000) argued that intrusion and hyperarousal seem to appear in all cultures, while other conventional diagnostic elements of PTSD, namely dissociation and avoidance, obviously are specific to Western society.

Considering these limitations with respect to established methods of clinical diagnoses, it is quite obvious that qualitative approaches should be employed in order to assess symptoms of trauma in a culture-sensitive way. In this case, assessments should be conducted without theoretical assumptions and should be open toward culture-specific symptoms not

known to Western science. Most importantly, diagnostic interviews should be carried out by clinicians knowledgable about the culture-specific peculiarities of the population involved.

In addition, as a promising psychometric alternative, a number of questionnaires have been developed toward assessing psychological trauma symptoms without relying solely on the PTSD diagnostic criteria provided by DSM-IV-TR. Some of these instruments have been developed specifically for non-Western populations. To name only two examples, the Hopkins symptom checklist-25 (HSCL-25, Mollica, Wyshak, de Marneffe, Khuon, & Lavelle, 1987) and the Harvard trauma questionnaire (HTQ, Mollica et al., 1992) were developed specifically for an Indochinese population of trauma survivors. It should be taken into account, however, that "non-Western" cultures can be expected to be anything but homogenous and therefore diagnostic instruments have to be validated for each ethnic group even when they proved to be reliable and valid in other non-Western populations.

Therefore, one aim of the research program presented here was to determine culture-specific reliability and validity with participants from Chechnya, Afghanistan, and West Africa for the Hopkins symptom checklist-25 (HSCL-25, Mollica et al., 1987), the Harvard trauma questionnaire (HTQ, Mollica et al., 1992), the impact of event scale (IES-R; Weiss and Marmar, 1997), the Bradford somatic inventory (BSI, Mumford et al., 1991), the clinician-administered PTSD Scale (CAPS-1, Blake et al., 1990), and the social adaptation self-evaluation scale (SASS; Bosc, Dubini, & Polin, 1997). These findings, pertaining to the psychometric properties of the diagnostic instruments in each culture, were reported by Renner, Salem, & Ottomeyer, 2006 and are only summarized below.

By contrast, in the present chapter we will focus on the differences found by interviews and by psychometric measures between asylum seekers from Chechnya, Afghanistan, and West Africa. Following the assumption that people from non-Western societies by no means pose a homogenous population, we hypothesized that between the three ethnic groups there would be significant differences with respect to trauma events as well as to posttraumatic symptomatology. Moreover, we expected to find cross-cultural differences with respect to cultural influences contributing to traumatic stress as well as to coping mechanisms resulting from the individuals' cultural background.

The present research also takes into consideration the theoretical view formulated by Eisenbruch (1991) who argued that the conventional diagnosis of PTSD should be replaced by the notion of "cultural bereavement" pointing to the fact that for people stemming from collectivistic societies, the mere separation from their extended families and support groups constitutes a traumatic event conducive to clinical symptoms. Thus, even without a relationship to preceding traumatic events, cultural

differences between the three ethnic groups, with respect to their problems in adapting to the host country will be considered.

Most importantly, aiming at an assessment as comprehensive as possible, we employed both quantitative and qualitative methods. By quantitative methods, i.e., psychometric measures, we inquired about a number of given symptoms, while by qualitative methods, i.e., diagnostic interviews, we asked participants to report spontaneously.

METHOD

Participants

One hundred fifty asylum seekers in Austria, 50 from Chechnya, 50 from Afghanistan, and 50 from West Africa participated. The participants' demographic statistics are summarized in Table 1.

The majority of Chechen (96%) and all Afghan participants were Muslims. Two (4%) Chechens were Christians. Fourty-four West Africans, i.e, 88% of them, were Christians, four were Muslims, and one African participant did not belong to a religious community. One West African did not report his religious denomination.

The prevailing part of the West African participants came from Nigeria (N = 37). Three participants came from Cameroon and two from Gambia. There was one participant from Ghana, Guinea, Liberia, and Sierra Leone, respectively. Four West Africans refused to report their countries of origin.

We intended to recruit a sample that should be characteristic of Chechen, Afghan, and West African asylum seekers in Austria. Participants were recruited by personal contacts, partly with the help of authorities and extreme care was taken to exclude selection bias. In order to have a sample typical for the population of asylum seekers, we decided not to follow a suggestion to exclude those with a high degree of

Table 1. Demographic Statistics of Participants

	Chechnya (N = 50)	**Afghanistan (N = 50)**	**West Africa (N = 50)**
Proportion of women	25 (50%)	11 (22%)	4 (8%)
Age: Mean (SD)	32.4 (10.7)	32.5 (9.0)	27.5 (7.1)
Age range (years)	18–63	18–53	18–48
Proportion married	33 (66%)	34 (68%)	6 (12%)
Proportion of urban (vs. rural) origin	27 (54%)	31 (62%)	27 (54%)
Proportion granted asylum	19 (38%)	23 (46%)	2 (4%)

Westernization. As can be seen from Table 1, approximately half of the participants stemmed from rural regions and it can be expected that the highest degree of Westernization can be found in the cities. With respect to religion, the high proportion of Christians among West Africans does not exclude a high degree of affiliation to traditional African culture. In fact, we found a high incidence of body sensations among them, which are known to be clinical symptoms characteristic for African patients (Renner, Peltzer, Salem, & Ottomeyer, 2007).

Quantitative Methods: Psychometrics

A set of psychometric measures, partly trauma-specific and partly assessing general psychopathology, was employed. These instruments proved to be reliable and valid when used with trauma survivors from non-Western societies but previously had not been examined with respect to their reliability and validity with participants from Chechnya, Afghanistan, and West Africa. We reported the results pertaining to the instruments' psychometric properties in another publication (Renner et al., 2006), and will summarize them below.

Trauma-Specific Measures

The Harvard trauma questionnaire (HTQ) was developed by Mollica et al. (1992). Its first section comprises a list of frequent trauma events that can be supplemented by additional items for a specific culture. The second section asks about the most serious traumatic event including a detailed description of it. Section three pertains to head or brain injuries that might contribute to the clinical symptomatology. The fourth section is the psychometric part of the HTQ assessing posttraumatic symptoms. Items 1–16 are intended to be used universally (e.g., "recurrent thoughts or memories of the most hurtful or terrifying events," "unable to feel emotions," or "less interest in daily activities"). Items 17–30, in the original version of the HTQ, have been formulated specifically for Indochinese participants and thus should be modified when used with other cultures. Therefore, we replaced part of these items according to our previous studies and to literature. In the present chapter, which is aimed at *comparing* the three cultures with respect to symptomatology, only items 1–16 will be considered as they were the same for all three subsamples. The items of the HTQ Sect. 4 have to be answered by "not at all" (1), "a little" (2), "quite a bit" (3), or "extremely" (4).

In the present research, on the basis of internal consistencies (Cronbach's α) we found the HTQ (Item 1–16) to be highly reliable in all three subsamples (Chechens $\alpha = 0.91$, Afghans $\alpha = 0.90$, West Africans

α = 0.87). For all the instruments, convergent validity was assessed[1] employing diagnostic interviews as a criterion on the basis of ROC ("receiver operating characteristic") curves. For the Chechen subsample, by ROC analysis, an area under the curve (AUC) of 0.88 with a 95% confidential limit (CL) of 0.77–0.99 was obtained. For the Afghan subsample, an AUC = 0.85 (CL 0.75–0.96) and for the West African subsample, a rather poor AUC = 0.75 (CL 0.61–0.88) was obtained.

The revised version of the *impact of event scale* (IES-R) was introduced by Weiss and Marmar (1997) (see also Chap. 8 in the present volume). It comprises the subscales, pertaining to intrusion (eight items like "I thought about it when I didn't mean to"), avoidance (eight items like "I tried to remove it from my memory"), and hyperarousal (six items like "I had trouble concentrating"), respectively. In the present sample, however, the subscales were not replicated. The IES-R items are keyed "not at all" (0), "a little bit" (1), "moderately" (2), "quite a bit" (3), and "extremely" (4).

In all three subsamples, reliabilities were satisfactory (Chechen subsample α = 0.93, Afghan subsample α = 0.96, and West African subsample α = 0.91). Convergent validity, as assessed by the AUC, was 0.75 (CL 0.61–0.89) for the Chechen, 0.87 (CL 0.77–0.97) for the Afghan, and 0.81 (CL 0.69–0.93) for the West African subsample. The original factorial structure, however, was not replicated in our sample.

In contrast to the HTQ and the IES-R, which are questionnaires on a self-report basis, the *clinician-administered PTSD scale* (CAPS-1, Blake et al., 1990, 2000) is a structured interview. Basically, the CAPS-1 is designed to assess the diagnostic criteria of PTSD and, as a result, provides a "yes" or "no" diagnosis of traumatization following DSM-IV. This is done on the basis of 17 items that assess the "frequency" and the "intensity" (both ranging from 0 to 4) of each PTSD symptom. A symptom is counted as positive, if a minimum frequency of 1 and a minimum intensity of 2 was reported.

With respect to the convergent validity of DSM-IV criteria of PTSD, our previous study has yielded extremely poor results. In the Chechen subsample, PTSD-criteria yielded 16 (32%), in the Afghan subsample 17 (34%), and in the West African subsample 12 (24%) false-negative diagnoses, which mostly were due to the avoidance and arousal criteria not being completely fulfilled (Renner et al., 2006).

As suggested by Blake et al. (2000), however, the CAPS-1 can also be used as a psychometric instrument by summing up the frequency

[1] An instrument's power to predict the result of the diagnostic interview was assessed for each of the three subsamples by "receiver operating characteristic" (ROC) curves. The larger the "area under the curve" (AUC), the better the instrument's validity. An AUC > 0.90 is interpreted as "excellent" and an AUC > 0.80 as "good" (for details see, Tape, 2005 and Renner et al., 2006).

and intensity ratings without taking the DSM-IV diagnostic criteria into account. When using the "frequency plus intensity" sums for each symptom, the CAPS-1 yielded very good reliabilities (Chechen subsample $\alpha = 0.90$, Afghan subsample $\alpha = 0.91$, West African subsample $\alpha = 0.91$) and outstanding convergent validities were achieved (Chechen subsample AUC = 0.98, CL 0.95–1.01; Afghan subsample AUC = 0.90, CL 0.80–0.99; West African subsample AUC = 0.91, CL 0.83–0.99). These validities, however, could be partly interpreted as a method artifact, because in this case, a structured interview, the CAPS-1, was validated against a diagnostic interview.

Measures Assessing General Psychopathology

The *Hopkins symptom checklist-25* (HSCL-25) was devised for Indochinese respondents by Mollica et al. (1987) as a shortened version of the American form of the Hopkins Symptom Checklist. Thirteen of its items pertain to depressive symptoms (e.g., "crying easily"), ten to symptoms of anxiety (e.g., "feeling fearful"), and two items address somatic symptoms (e.g., "poor appetite"). There are the following response categories: "not at all" (0), "a little" (1), "quite a bit" (2), and "extremely" (3).

In our previously published research, for the HSCL-25 satisfactory reliabilities were found (Chechen subsample $\alpha = 0.92$, Afghan subsample $\alpha = 0.96$, West African subsample $\alpha = 0.91$). While measuring general psychopathology quite well, the HSCL-25 predicted a clinical diagnosis of traumatization only in Afghans (Chechen subsample AUC = 0.78, CL 0.65–0.91; Afghan subsample AUC = 0.82, CL 0.71–0.94; West African subsample AUC = 0.70, CL 0.55–0.84). The original scales were not replicated in the present sample by factor analysis.

Mumford et al. (1991) developed the *Bradford somatic inventory* (BSI) with the goal to assess body-related symptoms primarily in non-Western participants. For women, there are 44 items and for men there are 2 additional ones. Respondents are asked to indicate the frequency of symptoms during the past month ("absent" = 0, "present on less than 15 days during past month" = 1, "present on more than 15 days during past month" = 2). Again, we found excellent reliabilities in all three subsamples (Chechen subsample $\alpha = 0.96$, Afghan subsample $\alpha = 0.95$, West African subsample $\alpha = 0.97$). Just like the HSCL-25, however, the BSI predicted traumatic symptoms in Chechen and West African participants less well than in Afghans (Chechen subsample AUC = 0.75, CL 0.62–0.89; Afghan subsample AUC = 0.82, CL 0.71–0.94; West African subsample AUC = 0.73, CL 0.58–0.87).

The social adaptation self-evaluation scale (SASS, Bosc et al., 1997) yielded extremely poor reliabilities and validities in our previous research and thus was not included in the present study (cf. Renner et al., 2006 for details).

As many Chechens did not learn to read and write their mother tongue at school, for them, all the questionnaires were translated to Russian. The Afghan participants received a Farsi translation, while West Africans responded to the English version of the questionnaires.

Qualitative Methods: Diagnostic Interviews

With the help of interpreters, Chechen participants were interviewed in Russian and Afghan participants in Farsi. Interviews with the West African participants were conducted in English. All participants were informed about the confidential nature of the research and asked to give their informed consent orally. In recognition of their cooperation, participants were paid 20 euros after conducting the interviews and filling in the questionnaires.

The primary application of the diagnostic interviews was using them as the criterion for the convergent validity of the psychometric instruments utilized in this research.

Taking into consideration, that the response to traumatic experience can not only vary in terms of symptoms or syndromes emerging and disturbing the individual concerned but also the fact that the cultural background may contribute to a considerable extent to the quality, severity, and duration of bodily or mental suffering, we decided to choose a second approach to appraise the interviews led with our sample of people from Chechnya, Afghanistan, and West Africa. To gain more insight into cultural factors influencing well-being or the lack of it, we searched the interviews for spontaneous statements that might shed light on the following questions[2]:

1. Which are factors mentioned by the interview partners themselves, preventing, enhancing, or moderating the outbreak of symptoms or supporting health and well-being in their own perception?
2. Which are factors mentioned by the interview partners themselves, that are considered strainful, thus onsetting or worsening symptoms and/or preventing well-being?
3. Which symptoms from the range of PTSD are stated spontaneously (without looking at a psychometric instrument and thus getting "ideas" about possible symptoms)?
4. Which factors are mentioned that can be considered culture-specific symptoms of malaise (posttraumatic symptoms within the broader context of cultural influence) – perceived by the clients in

[2] In doing so, we were keeping Anthony Marsella's advice about ethnocultural studies and the words of a Bosnian refugee working with him – in mind: "no more MPPQRS (sic MMPI) and that stuff. You want to help me, you want to know what is wrong, listen to my story." (Personal Communication, A. J. Marsella, 17th August, 2004).

the aftermath of traumatic experience and conceived as negative change in comportment or well-being?

5. Which are the traumatic events most frequently mentioned and conceived as particularly agonizing: (a) from a personal point of view (b) from a cultural point of view, and is there a connection between the personal and the cultural point of view?*

In addition, we searched for spontaneous[3] statements suggesting that traumatic experience led to positive change in terms of, e.g., increased sense of spirituality, personal growth, or feeling stronger after the crisis (cf., Tedeschi & Calhoun, 1996).

RESULTS

Quantitative Results

In order to find out which measures or single symptoms differentiate the individuals most effectively according to their provenance, discriminant analyses were computed. Aiming at reducing the information obtained to a manageable size, the stepwise procedure, as provided by SPSS 11.5, was employed.

In a first step, the scores of each group obtained on each of the psychometric instruments were entered in the analysis. By the stepwise procedure, the total scores of the HTQ, the BSI, and the CAPS-1 were retained in the analysis, whereas the HSCL-25 and the IES-R scores were excluded. Two discriminant functions were obtained. The first function had an eigenvalue of 0.671 and the second one had an eigenvalue of 0.148. For the first function, the canonical correlation was 0.634 and for the second one 0.359. For function 1, Wilks' Lambda was 0.521 ($p < 0.000$) and for function 2, it was 0.871 ($p < 0.000$). The first discriminant function correlated with high scores on the BSI and low ones on the HTQ and the CAPS, i.e., it pertained to somatization. The second function correlated with high scores on the HTQ, the BSI, and the CAPS-1. Function 1 discriminated West Africans (low values) from Chechens (high values), function 2 Afghans (low values) from Chechens (high values), but altogether only 62.0% of cases were classified correctly.

Therefore, we decided to compute further analyses on the item level. Those 76 variables that differentiated on the 1%-level among the groups were entered into the analysis. By the stepwise procedure, 15 variables were extracted, the descriptive statistics of which are shown in Table 2.

* We thank an anonymous reviewer for these suggestions.

[3] Our psychotherapeutic experience with asylum seekers kept us from directly addressing the possibility of positive change as a consequence of traumatic experience, as some people tend to misunderstand such questions as cynical.

Table 2. Descriptive Statistics of the Test Items Discriminating among the Three Ethnic Groups

	Chechnya		Afghanistan		West Africa	
	M	*s*	*M*	*s*	*M*	*s*
Blaming yourself	0.62	0.92	0.36	0.80	1.08	1.19
Faintness	1.28	0.83	1.06	1.06	0.66	0.98
Trapped	0.94	0.77	0.54	1.01	1.16	1.17
Jumpy	1.94	0.89	1.52	0.79	1.46	0.76
On guard	2.38	0.97	1.16	0.55	1.72	0.95
Avoiding activities	2.22	0.97	1.26	0.53	2.58	1.36
Numb	1.74	1.19	0.40	0.83	0.88	1.24
Trouble concentrating	0.96	1.21	1.40	1.18	0.82	1.34
Watchful	1.86	1.14	0.38	0.92	0.90	1.23
Feeling tired	1.00	0.64	0.80	0.57	0.46	0.61
Sick in the stomach	0.80	0.70	0.12	0.39	0.16	0.47
Heart felt weak	1.08	0.67	0.28	0.61	0.10	0.36
Avoidance of thoughts or feeling ($F + I$)[b]	3.38	1.77	1.40	1.71	4.16	2.76
Detachment ($F + I$)[b]	0.52	1.09	0.78	1.42	2.12	2.64
Restricted range of affect ($F + I$)[b]	0.94	1.63	0.42	1.14	2.30	2.74

[b]$F + I$ = Frequency plus Intensity (CAPS).

The eigenvalues of the two discriminant functions were 2.211 and 1.730, explaining 56.1% and 43.9% of the variance, respectively. For function 1, the canonical correlation was 0.830, and for function 2 it was 0.796. For function 1 through 2, Wilk's Lambda was 0.114 ($p < 0.000$), and for function 2, it was 0.366 ($p < 0.000$).

The canonical discriminant function coefficients are shown in Table 3.

As can be seen from Table 3, function 1 is characterized by somatic complaints like being "sick in the stomach" or feeling weakness in the heart as well as by the conception of "feeling on guard" and "watchful," whereas cognitive symptoms ("trouble concentrating") tend to be absent. Function 2, on the other hand, pertains to symptoms of avoidance, of feeling trapped and of a restricted range of affect, while feelings of tiredness and faintness tend to be absent.

Figure 1 shows the values of the canonical discriminant functions for each subject as well as the group centroids for participants from Chechnya, Afghanistan, and West Africa.

From Fig. 1, it can be seen that, by the two discriminant functions, the three ethnic groups can be differentiated quite well. Discriminant function

Table 3. Canonical Discriminant Function Coefficients (Quantitative Data)

	Function 1	Function 2
Blaming yourself (HSCL-25, Item 3)	–0.18	0.29
Faintness (HSCL-25, Item 6)	0.19	–0.49
Trapped (HSCL-25, Item 17)	0.09	0.43
Jumpy (HTQ, Item 6)	–0.12	–0.54
On guard (HTQ, Item 9)	0.53	0.46
Avoiding activities (HTQ, Item 11)	–0.04	0.44
Numb (IES-R, Item 13)	0.29	0.02
Trouble concentrating (IES-R, Item 18)	–0.49	–0.36
Watchful (IES-R, Item 21)	0.32	0.05
Feeling tired (BSI, Item 27)	–0.06	–0.80
Sick in the stomach (BSI, Item 29)	1.12	0.01
Heart felt week (BSI, Item 42)	0.98	0.06
Avoidance of thoughts or feeling ($F + I$[a]) (CAPS-1, Item 6)	–0.04	0.22
Detachment ($F + I$) (CAPS-1, Item 10)	–0.23	0.07
Restricted range of affect (F + I) (CAPS-1, Item 11)	–0.07	0.24
Constant	–1.25	–1.04

[a]$F + I$ = Frequency plus Intensity.

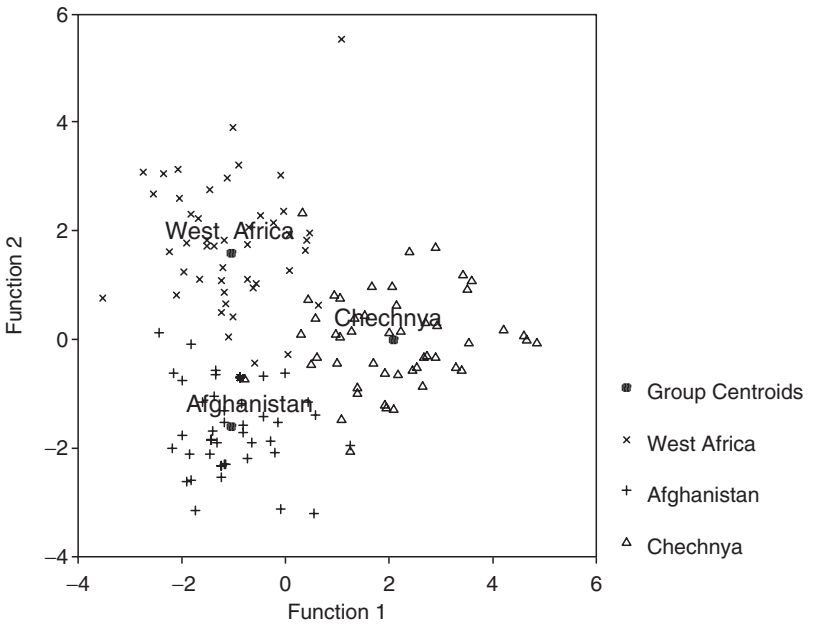

Figure 1. Canonical discriminant functions with individual scores and group centroids (quantitative data)

1 separates the Afghan and West African from the Chechen subsample, while function 2 separates the Afghan subsample from the West African one. Table 4 gives the classification results. Altogether, 92% of the cases were classified correctly.

Qualitative Results

As reported in detail by Renner et al. (2006), in the course of the diagnostic interviews, in the Chechen subsample there were 31 (62%), in the Afghan subsample there were 22 (44%), and in the West African subsample there were 24 (48%) participants showing symptoms of posttraumatic stress. The groups do not differ significantly with respect to the proportion of participants showing symptoms of traumatic stress.

Shown in Tables 5–9 are the topics, the frequencies of spontaneous remarks counted in this domain, and the statistical significance of the difference between the ethnic groups as determined by χ^2-tests (highest number of counts printed in italics).

(1) Factors that can prevent, enhance, or moderate the outbreak of symptoms or support health and well-being (factors considered helpful in coping with trauma): We derived 23 topics that alluded to factors focusing on this domain and are shown in Table 5.

After having fled war, violence, and unstable political situations at home, the participants emphasized the positive effect of living in a safe country, without having to fear for their lives. A Chechen appreciating this safety said "When we first came here, my kids crept under the table at the slightest sound of a sirene or at any bang and even the popping of a cork would send them flying off under the next piece of furniture. This weekend there was a display of fireworks in town and we all went to watch – you don't know what it means to us to feel safe." In fact, nearly all participants gave tribute to the safe surroundings in respect to an amelioration in their existential orientation: "The first impression that really changed my life was when I realized – I am in a land where people recognize the rights of another one."

Table 4. Classification Results (Quantitative Data)

	Predicted Group Membership			
Actual Group Membership	**Chechnya**	**Afghanistan**	**West Africa**	**Total**
Chechnya	47 (94%)	1 (2%)	2 (4%)	50
Afghanistan	1 (2%)	48 (96%)	1 (2%)	50
West Africa	1 (2%)	6 (12%)	43 (86%)	50

Table 5. Factors Considered Helpful in Coping with Trauma

Factors Considered Helpful	Chechnya	Afghanistan	West Africa
Feeling safe in Austria ($p < 0.01$)	*49*	42	27
Relief by asylum being granted ($p < 0.01$)	38	*40*	17
Socializing/meeting with people ($p < 0.01$)	*38*	12	13
Language course ($p < 0.01$)	*32*	11	5
Concentrating on the children ($p < 0.01$)	*30*	13	5
A flat of one's own ($p < 0.01$)	*26*	11	3
Vocational training or schooling(own or children's) ($p < 0.01$)	*22*	9	3
Family reunion ($p < 0.01$)	3	*20*	1
Keeping in touch with family at home ($p < 0.01$)	*19*	14	4
Integration in Austria ($p < 0.01$)	15	*17*	3
Hobby (read, listen to music, tinker, cook) ($p < 0.01$)	*12*	4	1
Religion ($p < 0.01$)	2	1	*11*
Any kind of exercise (e.g., sports, taking walks) ($p < 0.01$)	3	*10*	0
No news from home ($p < 0.01$)	2	*9*	0
Smoking ($p < 0.01$)	2	1	*4*
Grouptherapy (women) ($p < 0.05$)	*4*	0	0
Illegal drugs or alcohol ($p < 0.05$)	0	0	*3*
Work permit (n.s.)	19	*30*	*22*
Forgetting about the past (n.s.)	3	*7*	5
Support given by Austrians (n.s.)	*5*	0	4
Information on Austrian culture (n.s.)	*4*	2	1
Peace in my home country (n.s.)	*4*	3	2
Thoughts of revenge (n.s.)	*2*	0	1

Being granted or having been granted asylum was a major issue as well – West Africans, primarily single men – bearing the time they had to wait with more patience than the Afghans and Chechens, who also had their families to look after and felt responsible for the decision to have left home: "I was so relieved, we could stay – I don't want to think what would have happened if we had to leave right when the children were just starting to settle in a bit." Chechens emphasized the importance of learning the language more than Afghans, who mostly had already some basic knowledge of German, or West Africans, who found it quite easy to communicate in English.

Meeting with other members of the own ethnic group seemed especially important to Chechens: exchanging experiences, having a chat in

their mother tongue, or just socializing made them feel less homesick, lonely, and left out. They also stressed the positive effect of concentrating on their children the most: "When I take care of the kids, I forget where I am, what happened to me and what may still lie ahead – I'm just happy to be able to be with them and take care of them," said a young Chechen woman who had lost her husband and parents in the war. The hopes for an improvement of well-being or given reasons for the amelioration were mostly connected to family issues as far as Afghans and Chechens were concerned. A flat of their own, schooling for the children, intergration in Austria, or family reunion – once asylum would be granted – seemed of major importance to those two ethnic groups. Hope was also kept up by keeping in touch with family and friends back home: "The only time I can forget about my ordeal and my problems is when I talk to my daughter on the phone," said a Chechen woman who had fled her war-torn country with four of her children, having had to leave her eldest daughter behind because she lived in another part of the country and had been unable to join with her family.

Some West Africans found relief in religion ("God will make it well for me," "I know one day God can make things better for me," "We have prayer partners and discuss matters, we go to the same church, so we are like brothers here") – sometimes regardless of their religious denomination "My father is a Moslem, while my mother is a Christian – so I pray in a Moslem line every morning and every Sunday I go to church," and they felt better by taking walks and trying not to hear any news from home that might strain them.

The importance of being allowed to work was stressed by all three ethnic groups concerned and especially the men seemed eager to care for their families ("I would feel like a different person, if I could work and upkeep my family," "If I got a job, I would feel like a man again"), as well as to get away from the inactive part they played at home (this accounted for Afghans and Chechens) or they thought that being allowed to work might help to ensure their personal well-being: "I would even work without money, just to pay for what they feed me, it's not good to stay idle, it makes a man unhappy and starts you thinking about the past," "You know I like to work, to busy myself, in Africa I didn't stay at home a single day of my life, I got up and went to work. Here I am idle and sitting, if I could find something to do, I would feel better," "We get up and eat, then we sit, then we eat again and then we sit again – to work means to be alive to me, to sit is like an old person, ready to die," was the way some West Africans emphasized this topic.

(2) Factors that are considered strainful – thus onsetting or worsening symptoms, preventing well-being, or both: We derived 24 topics that alluded to factors focusing on this domain, which are shown in Table 6. As can be seen in Table 6, a multiple variety of things considered as strain-

Table 6. Factors Considered Unhelpful and Strainful

Factors Considered Strainful	Chechnya	Afghanistan	West Africa
Worrying about relatives and friends back home ($p < 0.01$)	16	*32*	6
No occupation ($p < 0.01$)	2	17	*19*
Conversations about home country ($p < 0.01$)	4	*18*	0
Getting news from home ($p < 0.01$)	*7*	*16*	2
Fear of deportation ($p < 0.01$)	3	*13*	4
Feeling lonely ($p < 0.01$)	3	3	*12*
Worrying about perspectives for the future ($p < 0.05$)	12	*22*	9
Waiting for asylum ($p < 0.05$)	9	*21*	17
Feeling of guilt because someone was hurt/ killed ($p < 0.05$)	1	*6*	1
Death of a relative during absence ($p < 0.05$)	0	*6*	2
Feel badly treated by Austrians ($p < 0.05$)	4	0	*6*
Fearing own aggressiveness ($p < 0.05$)	0	*4*	0
Hurt pride, feeling as a suppliant ($p < 0.05$)	*3*	0	0
Communication problems (language) (n.s.)	*10*	5	3
Feeling homesick (n.s.)	*7*	4	6
Lack of understanding for sufferings at home (n.s.)	3	3	*6*
Children annoying me (n.s.)	*5*	3	0
Worrying about integration (n.s.)	*5*	0	2
Mistrust of fellowmen (n.s.)	*5*	2	2
Unfamiliar food (n.s.)	1	0	*4*
No possibility to visit some relative's grave (n.s.)	*3*	*3*	0
Fearing vendetta (n.s.)	2	*3*	0
Feeling of shame for being raped (n.s.)	*2*	*2*	0
Restricted freedom of movement (n.s.)	1	*2*	1

ful and upsetting were mentioned by the participants. The factors leading to discomfort and unease though had varying impact on people of different ethnic background – in quality of perception as well as in reported frequencies.

Far more Afghans than Chechens were worried about their relatives back home, sometimes to the extent of fearing phone calls from home and constantly listening to news programs in order to be informed about possible incidents in the vicinity of their neighborhood at home. The aggrieving impact of conversations about their home country as well as the emotional effect of (mostly bad) news from home was a further

stumbling block in respect to aspired recovery and well-being especially for Afghans. West Africans seldom had the opportunity to contact their relatives and many had adopted an "out of sight – out of mind" attitude for the sake of their own peace of mind. A woman from Cameroon said that she believed God would watch over her loved ones and a man from Nigeria said that he was busy taking care of himself and "hoped and prayed his family would do the same." Afghan and Chechen women often said that conversations reminded them of trivial things like vegetables only available at home or customs they missed.

Some Afghans did feel homesick, but as the major part of them are living in Austria with their families, this complaint came from unmarried men or from those having left their entire family back home.

Waiting for the official notification in the course of the application and the fear of not being granted asylum with the potential of a pending deportation was a great threat to many participants and made them feel helpless and depressed. Especially, Afghans sometimes had been waiting for many months and were sick and tired of the uncertainty. Some participants reported a higher level of aggression in everyday life and said that they feared losing their temper and felt ashamed when this happened.

Of course, communication problems due to lack of language skills were sometimes mentioned but mostly by Chechens who only recently had arrived in Austria. Another very common complaint was the lack of occupation due to the fact that asylum seekers are denied a work permit and even after having been granted asylum, chances of finding a job stay slim. Especially, West Africans felt bad about having no occupation and not at all astoundingly mostly men felt negatively affected since women were well occupied with their daily chores of cooking, cleaning, taking care of the children, and trying to appease their husbands. West Africans stated that "it's difficult living without something to do," that "I'm not used to sit around idle," or that "an idle man is an evil man." The lack of occupation probably also accounts for some of the other statements about strainful factors in life like feeling annoyed with the children and obviously the reported higher level of aggression also roots in the enforced idleness.

Some participants – mostly Afghans – talked about their feelings of guilt because someone had been hurt or killed through their fault. Some had participated actively in the war, some felt they had not sufficiently protected relatives or friends, and one woman felt guilty because her younger sister had been killed during a visit to her house. Although quite a few Chechens talked about their participation in the fighting, they seemed rather proud of their commitment than expressing regret or guilt.

The negative impact of being restricted in moving around (e.g., because accommodations were situated in remote areas or by lack of financial means to travel) was mentioned, mainly because this reduced

the possibilities of meeting with peers, visiting friends, and keeping in touch with the ethnic community within the surroundings.

Missing perspectives for their future life in Austria (their own or their children's) was a point brought up by all ethnic groups.

Judged by the frequencies of complaints and worries, the Afghans were the most strained and discomforted of the three ethnic groups involved.

(3) Symptoms stated spontaneously, as far as they are assignable to PTSD: Table 7 shows the symptoms assignable to some of the PTSD diagnostic criteria and mentioned spontaneously by the participants in the course of the interview. The interviews took place prior to the administration of the psychometric instruments and thus we avoided to bias the participants by giving them "ideas" on possible symptoms.

The symptoms most often mentioned in all three ethnic groups were sleep disturbances and nightmares, although West Africans seemed less affected than Afghans and Chechens. The Chechens were more irritable and seemed tense and rather thin skinned, whereas the Afghans were more disturbed by an overall depressed mood, perpetual thoughts about the bad experiences they had made, or the situation of war back home and came across as anxious and uneasy. Even the difference in tone was

Table 7. Spontaneously Stated Symptoms (Assignable to Diagnostic Criteria of PTSD)

Symptoms	Chechnya	Afghanistan	West Africa
Nervousness/jumpiness ($p < 0.01$)	*22*	20	6
Irritable/exitable ($p < 0.01$)	*17*	6	2
Alert/watchful ($p < 0.01$)	*11*	1	2
Sleep disturbance ($p < 0.05$)	*26*	20	13
Loss of interest/missing vitality ($p < 0.05$)	*12*	9	2
Thin-skinned/tetchy ($p < 0.05$)	*6*	3	0
Nightmares (n.s.)	19	*24*	15
Perpetual thoughts about war/trauma experience (n.s.)	10	*18*	12
Fearfulness (n.s.)	9	*10*	6
Problems concentrating (n.s.)	*9*	7	2
Restlessness/unease (n.s.)	5	*8*	2
Avoiding places, activities, or people (n.s.)	*7*	4	1
Withdrawal from family/friends (n.s.)	2	*5*	4
Flashbacks (n.s.)	2	*6*	1
Forgetfulness (n.s.)	4	*5*	0

remarkable: Chechens spoke out loudly and with quite a fair amount of emotion while Afghans were soft-spoken and gentle. What they had in common was considering withdrawal from other people as breach of manners. A Chechen woman said she felt ashamed because she could not stand the company of other people and preferred to stay home and a man from Afghanistan said he perceived himself as chicken-hearted because "only a coward would avoid social contacts."

West Africans reported fewer symptoms than the two other groups and also seemed to be more robust and stable.

(4) Factors that can be considered as culture-specific reaction after traumatic experience: Interestingly, a number of symptoms were mentioned only by West African participants. Although we scanned the interviews closely for similar statements by Afghans or Chechens, we did not find comparable remarks about emotions or sensations in the other groups. We will report details about body sensations characteristic for West African people in a forthcoming publication (Renner et al., 2007).

The characteristic symptoms reported spontaneously by African participants were "thinking too much" (six times), "occupied brain, brain not working" (three times), "thinking you go crazy" (twice), "blood is running" (two times), and "heart flies off" (once).

The remaining somatic symptoms as well as the signs of depression expressed by the participants and considered culture-specific are shown in Table 8.

Heart troubles were mentioned mainly by Chechens and conceived as life threatening by some ("When my heart starts to burn and sting, I have the impression I am going to die any minute"), whereas others formulated their physical strain in a double sense: "My heart is one single sore spot" or "It's a scortching feeling inside my chest, as if my heart was on fire." Asked if they actually meant a broken heart rather than physical pain, a man from Chechnya said that he meant both his grief and sorrow and his real pains. Headaches too were primarily reported by Chechens but the amount of suffering varied greatly, ranging from "unbearable constant pain" to "throbbing in the head" or "headaches, when I think of home."

Astoundingly Chechens did not refer to hopelessness at all. These remarks nearly always came from Afghans, some of whom had been granted asylum and still felt depressed and hopeless. A middle-aged Afghan man said "One always says – hope dies last – for me it's different, I'm safe, I'm alive but I still have no hope left, hope just died and it never came back."

Specific somatic symptoms like pins and needles, a feeling of pressure on the chest or in the head or sensing a lump in the throat were expressed mainly by Chechens – whereupon it is worth mentioning that the major part of those who talked about such symptoms said that these feelings were restricted to one side of the body (mostly the left side).

Table 8. Culture-Specific Symptoms

Symptoms	Chechnya	Afghanistan	West Africa
Heart troubles (pain, pangs, scorching feeling) ($p < 0.01$)	*10*	1	2
Headaches ($p < 0.01$)	*17*	3	4
Hopelessness ($p < 0.01$)	0	*11*	3
Want of confidence in other people ($p < 0.01$)	*8*	1	1
Sexual disorder ($p < 0.01$)	*6*	0	0
Feeling of pression (chest, head) ($p < 0.01$)	*6*	0	0
Pins and needles (hands, arms, legs) ($p < 0.01$)	*5*	0	0
Feeling depressed or sad (n.s.)	*8*	*8*	3
Aggressiveness (n.s.)	*9*	2	0
General pains (n.s.)	3	*6*	4
Trembling hands (body) (n.s.)	4	*5*	1
Shortness of breath (n.s.)	*3*	2	1
Physical weakness (n.s.)	*3*	1	1
Feeling of heat/congestions (n.s.)	*2*	1	*2*
Lack of appetite (n.s.)	1	*3*	0
Grinding one's teeth (n.s.)	*2*	1	0
Dizziness (n.s.)	*2*	1	0
Stomach ache (n.s.)	*1*	*1*	0
Lump in your throat (n.s.)	*2*	0	0
Feeling cold (n.s.)	0	*1*	0
Symptoms characteristic for Africa (see text)	0	0	*14*

Afghans were more impaired by general pain (also very often limited to the right or left side of the body) or an overall sad mood, although also some of the Chechen men felt depressed by their situation – especially in regard to their inability to take better care of their families. Afghan and Chechen women were more distressed by homesickness, loneliness, and the separation from their friends, families, and homes.

Aggressive comportment was sometimes described in a very vivid way: "I often feel explosive and can only calm myself down by breaking something apart," "Sometimes I have this irrepressable anger, I have to get up and leave every time it happens," and "I'm quarrelsome and aggressive, one wrong sentence and I'm up in arms" were some of the depictions given by Chechens. They did not seem to feel uncomfortable about their behavior though, some even said that a Chechen had to fortify his emotions by a dash of aggression.

The West African participants were inconspicuous in respect to most symptoms but mentioned culture-specific problems like "thinking too much," not only on their own behalf but also when describing the condition of relatives back home. A West African who seemed very worried about his mother said that he had the impression she was "thinking too much" and that this had made her fall ill.

(5) Which are the traumatic events most frequently mentioned and conceived as particularly agonizing from a personal or a cultural point of view and does culture influence the person's perception of severity? Listed in Table 9 are the traumatic events most frequently mentioned by the participants. As could be expected, the loss of a close relative (sometimes even the loss of several relatives or of the entire family) was named by the participants as the most harassing experience in their lives. The stories told were sometimes heartbreaking – even to listen to. Chechen women had often lost their husbands, brothers, or fathers and the circumstances frequently had similarities. Many men had been abducted or arrested and were found dead in the streets shortly after. In some cases, the body had even been deposited in front of the family's doorstep. Shelling or shooting had taken its toll and many participants had lost their relatives in warfare. The issue of abduction did not turn up in the two other groups. Afghans had mostly lost their relatives in warfare or by those persons being involved in fights themselves. One man had lost his four brothers on a single day, his father dying of a heart attack at the breaking of this news. The majority of West Africans reported losing their family members in riots, armed assaults, or tribal fights.

Very often, i.e., in 81 cases (54%), the participants associated the traumatic events with political reasons. Chechens and Afghans had a lot in common in this respect – the former bond with Russia had evoked troublesome events under subsequent political changes in the leaderships. Having studied or worked in Moscow or having relatives living in Russia had led to surveillance, arrest, abduction, torture, rape, or even murder in both Afghanistan and Chechnya. Fights between opposed groups and political

Table 9. Trauma Events

Events	Chechnya	Afghanistan	West Africa
Loss of close relative (n.s.)	*28*	*28*	20
Events related to political reasons (n.s.)	26	26	*29*
Events related to religious or gender-specific reasons ($p < 0.01$)	21	*33*	19
Loss of remote kin ($p < 0.05$)	*13*	11	4
Relatives missing (e.g. abducted, arrested) (n.s.)	3	*6*	4
Forced or in danger of being forced to enter combat (n.s.)	2	*5*	2

parties and being with the wrong side proved to be life threatening for many participants. West Africans also assigned many of the traumatic events to political situations in their respective home countries. A common reason was the animosities between rivaling political parties. Fights over oil and destruction of property by the oil companies in the Niger delta and political involvement in those fights led to riots and arrests. The support of oppositional groups or pressure to join a certain political party often led to terrible acts of revenge like, e.g., setting houses on fire or killing friends or relatives. His brother's involvement in a coup led to pressure, arrest, and torture of a man from Gambia and another man's father was jailed and his brother stabbed in court for involving actively in politics. Fights between French- and English-speaking groups in Cameroon were named as cause in some cases and the Biafran freedom movement was quoted in others.

Although the reported traumatic events did not differ from sufferings and hardship found in other studies, it was remarkable to find out that many participants were more tormented by the lack of knowledge and interest in this part of their story that they had often experienced with authorities or other dialog partners than by the traumatic event itself. Many spent time and effort in the interview to emphasize their political affiliation and some even perceived the traumatic experience as a consequence worth while bearing.

Religious or gender-specific reasons for the participants' ordeal were also brought up frequently. Afghan women were affected mainly by the Taliban regime and a bashed nose or broken arm were considered terrible – but nothing in comparison to losing a child because of not being allowed to see a doctor or being confined to the house for months. An Afghan woman said she still felt happy every time she left the house on her own, even if it was just to shop around the corner and many participants were overwhelmed with grief about the situation of female relatives and friends back home. Two women reported about their ordeal after refusing a proposed marriage – in one case, the woman already had been married and her husband was nearly beaten to death when he declined the proposal to divorce her (they already had three children at that time), the other did not want to get married to a Taliban fighter – 30 years older than her and well known for his aggressive and violent nature. Her father was attacked and beaten and her whole family got under pressure in the weeks that followed. A Chechen was nearly killed by a family who did not want him to court their daughter and an Afghan man was shot in the leg because he was made responsible for women singing and dancing (segregated from the men of course) at a wedding ceremony.

Chechen women felt less discriminated by their gender, although those who reported rape or sexual abuse of course suffered seriously – especially because additionally they were so terribly frightened someone could find out about it – but they were stricken by the way they had been treated by

Russian troops on one side and Chechen rebels on the other. A Chechen woman (who was raped as "ransom" after her child had been abducted) said that it was all the worse because it had been Chechens.

Religious reasons were also mentioned – such as being Sunni or Shii Muslim or of Christian or Muslim faith. West Africans told hair-raising stories of ritual killings or being pressed to take the father's place who "worshipped the gods" or was "head of an oracle." This domain as well turned out to be very strainful for some of the participants – to be persecuted and find your life endangered because, e.g., you refuse to "steal" baby boys for ritual killings from a delivery ward is beyond comprehension to most of us. One participant's wife had been murdered because she had misused pages of the Koran to clear up some mess on the floor – being illiterate she had just grabbed the next book available because her parents-in-law were at the doorstep and she was afraid to be considered untidy. A neighbor saw the dirty pages in the rubbish bin and she was shot a few hours later.

The loss of a remote kin seemed to aggrieve people from collectivistic, non-Western cultures very much. Especially Chechens were sometimes heartstricken by the loss of quite remote relatives if these persons belonged to the same clan.

Although the abduction of persons is said to be typical for Chechnya, only few Chechens had relatives missing – many though told us that they either had been abducted themselves and gone free after a ransom had been paid or that the person in question had been found dead. The ones concerned missing by relatives were a woman whose husband had been arrested and never came back but whose body had not been found either although she was forced to pay ransom, another woman who had been raped (while five months pregnant) and whose husband and brother had been abducted by the rebels because they wanted to keep them from harming her, and a man whose wife had vanished while she was shopping. He never found out what happened to her and fled the country with his four children shortly after. Afghans had often "lost" their relatives on their flight although they also told stories of relatives who never came back home. West Africans reported that their relatives had "fled in another direction and never been seen again" or that they had gone to some political demonstration and vanished from there. The West Africans and Afghans still seemed to be hopeful that their relatives were still alive, whereas the Chechens did not believe that there was any chance of their missing family members being safe somewhere.

Only a couple of participants mentioned that they had been forced to enter combat or that this request had been made to them and we got the overall impression that combat was something others took part in and that they felt awkward talking about it.

Statements suggesting that traumatic experience had led to positive change in terms of, e.g., an increased sense of spirituality, personal growth, or feeling stronger after the crisis were not made by any of the participants.

In order to summarize the qualitative data in a clearly arranged way, we computed a discriminant analysis. We coded each symptom, coping strategy, etc., as stated in Tables 5–9, by "1" when it was present and by "0" when it was absent in a single case. Only those 32 variables, whose group means differed on the 1% level of significance, were entered into the analysis. Subsequently, we entered these dichotomous data as independents into a discriminant analysis, while country of origin was the dependent variable. Although some statisticians advocate that independent variables in discriminant analysis should be interval scaled, others concede that conclusions drawn from discriminant analysis are not affected by the use of dichotomous variables (Garson, 2005). Klecka (1980) pointed out that in this discriminant analysis the violation of assumptions "was not very harmful" (p. 62), as long as a high number of cases were classified correctly.

The eigenvalues of the discriminant functions were 1.693 and 1.472 and explained 53.5% and 46.5% of the variance, respectively. The canonical correlation of function 1 was 0.793, while for function 2 it was 0.772. For funtion 1 through 2, Wilk's lambda was 0.105 ($p < 0.000$), while for function 2 it was 0.405 ($p < 0.000$).

Table 10 gives the canonical discriminant function coefficients. As can be seen from Table 10, function 1 stresses feelings of tension or pressure in

Table 10. Canonical Discriminant Function Coefficients (Qualitative Data)

	Function 1	Function 2
Relief by asylum being granted[a]	0.04	1.16
Socializing/meeting with people[a]	1.03	0.14
Language course[a]	1.19	0.20
Vocational training or schooling (own or children's)[a]	–0.34	1.00
Family reunion[a]	–1.38	0.98
Keeping in touch with family at home[a]	1.23	0.01
Religion[a]	0.20	–1.47
Any kind of exercise[a]	–1.10	1.09
Worrying about relatives and friends back home[b]	–0.67	0.91
No occupation[b]	–0.80	–1.00
Conversations about home country[b]	–0.75	1.45
Irritable/excitable[c]	1.62	0.49
Feeling of pression (chest, head)[d]	1.99	0.23
Events related to religious or gender specific reasons[e]	–0.62	0.45

[a]Factors considered helpful in coping with trauma.
[b]Factors considered unhelpful and strainful.
[c]Spontaneously stated symptoms (assignable to PTSD).
[d]Culture-specific symptoms.
[e]Trauma events.

the body going along with being easily irritated, while meeting people, learning German, and getting in contact with one's relatives left back home are considered helpful; as far as function 1 is concerned, there is little concern for reuniting the family or finding an occupation. Conversations about one's home country are not considered strainful. As can be seen from Fig. 2, function 1 differentiates people of Chechnya from those of Afghanistan, with the former achieving higher values on the function and the latter lower ones. Function 2 is characterized by a preoccupation with vocational training, family reunion, physical exercise, conversations about one's home country, and expecting relief from being granted asylum, while having no occupation and religious issues are considered less important. As Fig. 2 shows, Afghan and Chechnyan people achieved high values on this function, while West African participants achieved low ones.

Overall, 87.3% of the individuals were classified correctly by the discriminant functions. The details of the classification results can be seen from Table 11.

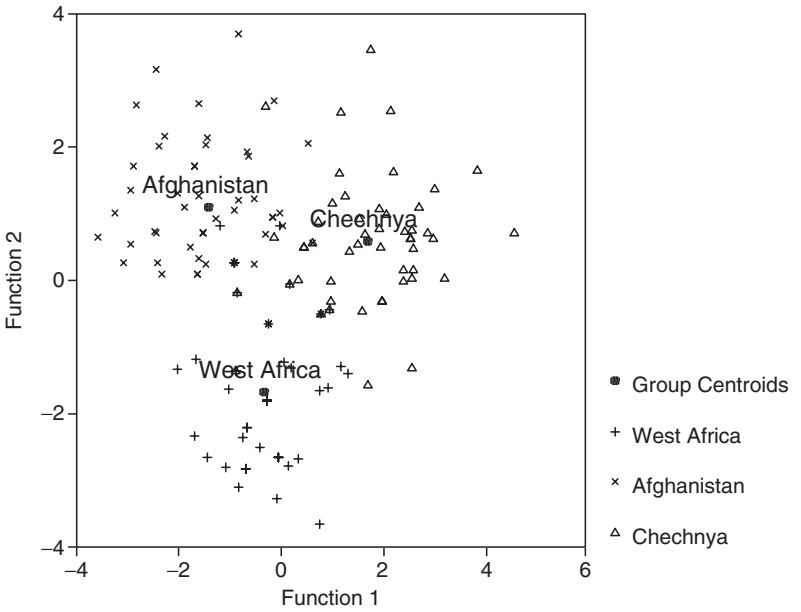

Figure 2. Canonical discriminant functions with individual scores and group centroids (qualitative data)

Table 11. Classification Results (Qualitative Data)

	Predicted Group Membership			
Actual Group Membership	**Chechnya**	**Afghanistan**	**West Africa**	**Total**
Chechnya	45 (90%)	3 (6%)	2 (4%)	50
Afghanistan	3 (6%)	45 (90%)	2 (4%)	50
West Africa	3 (6%)	6 (12%)	41 (82%)	50

DISCUSSION

We have shown that people from Chechnya, Afghanistan, and West Africa can be differentiated successfully with respect to posttraumatic symptomatology and to moderating factors as well as to coping mechanisms. By quantitative and qualitative methods, we found that all these factors, being to a considerable extent the result of cultural influences, vary systematically between the three cultures.

The quantitative results of the discriminant analysis converge with our experience in psychotherapy, according to which Chechens often suffer from feelings of suspiciousness, fearing conspiracy against them, especially by their own compatriots, thus fostering feelings of helplessness, which in turn promote somatic symptoms like feeling "sick in the stomach." It should be noted that male Chechens have been socialized in a belligerent culture, where showing emotions would be considered cowardly and effeminate. Thus, negative feelings are not shown openly, but find their somatic expression in symptoms of the digestive system. Afghan and West African people, on the other hand, tend to express their feelings of depression and anxiety without reservation.

With respect to the second discriminant function derived from the quantitative results, it is quite clear that people from Afghanistan, as opposed to West Africans, show less avoidant behavior, but tend to complain about faintness and tiredness as well as of feeling "jumpy." We have shown previously (Renner et al., 2006) that people from Muslim societies tend to show far less avoidant behavior than Westerners. This can be explained by the fact that, according to their religion, Muslims attribute all their life events to the will of Allah. Thus, taking for granted that their lives are predetermined, Muslims only rarely try to change their fate by avoiding activities, places, or thoughts. In this respect they also differ grossly from West Africans, who, in our sample, were almost exclusively Christians and who reported distinct symptoms of avoidance. This is consistent with the fact that Christianity emphasizes the importance of free will.

With respect to the first discriminant functions derived from the qualitative findings, the results again are in line with our therapeutic experience: Chechens described themselves as being easily irritated and as finding contacts to their extended families, left back home, important and helpful. According to their socialization emphasizing toughness and self-assertion – and vendetta rather than feeling depressed – in contrast to Afghans, Chechens less frequently describe it as strainful to think about their home country and about their relatives and friends left back home. Under living conditions of asylum seekers and refugees, with an extremely restricted freedom of action, the high level of assertion, and sometimes aggression, of course goes along with feelings of pression in the body. Chechens are well known to place a high value on learning their host country's language, to socialize with others, and to keep in touch with their relatives left back home by frequent telephone conversations. As most Chechens live in Austria together with their nuclear families, not surprisingly, they normally are not concerned with issues of family reunion. In these respects, Chechens differ markedly from Afghans, who tend to behave in a more introverted and cautious way and who are characterized by a typical Asian type of modesty and courtesy.

With respect to the second discriminant function derived from the qualitative data, which discriminates Afghans and Chechens on the one hand, and West Africans on the other, again in accordance with our everyday experience, we have found that West Africans place a very high value on Christian religiosity as a coping mechanism, while they find it extremely strainful to be without an occupation and to be forced to stay idle. As compared to Afghans and Chechens, West Africans reported a lower degree of stress when talking about their home countries, and, mostly being single, they were less concerned about their children's or relatives' vocational training or schooling. They also reported to be less irritable than participants from Afghanistan and Chechnya, which may reflect the easygoing nature resulting from the African kind of socialization, even after the experience of traumatic stress and in the light of an extremely insecure future. The finding that West Africans typically do not expect relief from being granted asylum may result from the regrettable fact that they are granted asylum by the Austrian authorities only in extremely rare cases (Department of the Interior, 2004).

The differential findings characterizing the three ethnic groups converge with each other and are consistent with our therapeutic experience. Still, as we did not start from hypotheses derived from theory, the present research is exploratory by nature and replication studies are encouraged before the detailed findings can be generalized. As we outlined above, a sample as representative as possible for asylum seekers and refugees from Chechnya, Afghanistan, and West Africa in Austria was selected. Still, the composition of refugee populations may vary systematically between one

country and another. Thus, replication studies with Chechens, Afghans, and West Africans who have fled to other parts of the world would be of special interest.

In spite of these caveats with respect to generalizing the specific findings reported, far more importantly, we found that posttraumatic symptomatology varies grossly between the three ethnic groups considered. There is no such thing as a cross-culturally valid posttraumatic syndrome. Not only are Western categories like the diagnostic criteria of DSM-IV-TR insufficient in non-Western parts of the world, not surprisingly, among non-Western people, tremendous differences must be taken into account with respect to symptomatology, but also concerning possible coping mechanisms and moderating factors that are based on culture-specific factors.

Thus, for people from non-Western cultures, there is an urgent need for culture-specific diagnostic instruments. Renner et al. (2006) have shown that psychometric instruments can be selected successfully on the basis of their culture-specific reliability and validity and, in accordance with the findings presented here, they have found that different instruments are valid in different cultures. Another option worth considering is developing new psychometric instruments for specific populations. (Renner et al. (2007) described a step toward this goal on the basis of body sensations reported by West African refugees and asylum seekers.)

Qualitative methods, if implemented correctly, are less biased by the preconceptions of Western medicine and clinical psychology than psychometric instruments are. By the use of open questions there is space for spontaneous reports about culture-specific symptoms not known before by the interviewer. Still, in order to understand and evaluate the symptoms reported adequately, also in the case of qualitative methods, a sound knowledge of culture-specific symptomatology is important.

Having culture-sensitive, reliable, and valid diagnostic instruments at hand is of extreme importance, because otherwise, e.g., by applying the diagnostic criteria of PTSD to non-Western patients, the frequency of cases of traumatization would be grossly underestimated. The sequelae are manifold. One consequence may be that therapeutic interventions are erroneously denied to patients who do not fulfill diagnostic criteria. Even worse, in some countries, the presence of posttraumatic symptomatology can positively influence the decision of being granted asylum. Thus, if posttraumatic symptomatology is underdiagnosed, in the worst case, this may lead to asylum being denied to a trauma survivor on the basis of the false diagnosis, with deportation resulting. In the light of these dire circumstances, we explicitly recommend that for purposes of medical or psychological certification only empirically tested, culturally reliable and valid, psychometric instruments should be employed and that these instruments should be combined with extensive diagnostic interviews

conducted by experts knowledgable about the respective culture and the expressions of traumatic stress that are specific for this culture.

We have also shown that culture-specific ways of coping with trauma exist. This raises the question whether conventional "Western" approaches of psychotherapy as well as pharmacotherapy can be sensibly transported to non-Western cultures. Interventions must be "culturally congruent" (de Jong, 2004, p. 171), taking into account the different evaluation of grief as well as important religious differences between cultures. Therapy must take into consideration not only different diagnostic (Eisenbruch, 1992) and cultural (Kirmayer, 1989) backgrounds but also ethnic identity and specific practices (Jablensky et al., 1994), culture-related expectancies (McIvor & Turner, 1995), illness metaphors (Coker, 2004), as well as the existence of culture-specific symptoms and meanings of symptoms (Chakraborty, 1991). Referring to torture victims from non-Western cultures, McIvor and Turner emphasized

> A reductionist medical model cannot fully encompass the complexity of the torture concept. Significant social and political sequelae, affecting survivors, families and whole communities, need to be considered [. . .]. Only a minority will actually reach the door of the health professional. The majority become survivors without treatment [. . .]. Community, political and religious groups probably provide the majority of support and treatment. (McIvor & Turner, 1995, p. 709; cf. Mollica, 2004).

Thus, not surprisingly, refugees and asylum seekers frequently are reluctant to use psychotherapy offered by practitioners of their host country, deny to be suffering from a medical or psychological disorder, or are afraid to speak about their symptoms openly. They may be embarrassed by showing emotions and they may tend to express psychological problems only in terms of physical symptoms (Brody, 1994; de Jong, 2002). Additional problems can arise from the use of interpreters (Westermeyer, 1990).

From these considerations, it becomes quite clear that conventional psychotherapy conducted by Westerners with the help of interpreters is not the only method of choice for traumatized asylum seekers and refugees. Culture-sensitive treatment approaches, activating resources, encouraging self-management and empowerment, and making use of traditional systems of support should be taken into account, thus minimizing dependency and feelings of helplessness (de Jong, 2002; Jablensky et al., 1994; Mollica, 2004). Brody (1994) argued along the same lines stating that "the most stable receiving mechanism may be the ethnic enclave, the community of migrants already transplanted into the host community" (p. 59).

It should also be noted that non-Western cultures tend to be group-oriented. Thus group interventions can be expected to be more adequate for them than individual ones (Jaranson, Martin, & Ekblad, 2005). This is

especially true for women who are often isolated at their homes, being restrained by their culture from seeking contacts outside (Lipson, 1991). In accordance with general knowledge, our therapeutic experience has shown that, in Muslim cultures, current concerns of everyday life are predominantly discussed in same-sex groups, women exchanging with women, and men with men (cf. Patai, 1973, for social roles of men and women in the Muslim world). A culture-sensitive approach to coping with trauma should take this into account and offer gender-homogenous interventions.

Eisenbruch, de Jong, and van de Put (2004) have introduced a culture-sensitive nine-step program conducted by indigenous paraprofessionals and practiced successfully by the Transcultural Psychosocial Organization (TPO), for example, in Northern Uganda and Cambodia. De Jong (2002) gave additional examples of the TPO approach, including traditional healing techniques as well as spiritual issues, e.g., in Sri Lanka, Nepal, Tibet, Congo, and the Middle East. In Australia, by the Service for the Treatment and Rehabilitation of Torture and Trauma Survivors (STARTTS), highly effective, community-based interventions have been developed (Families in Cultural Transitions, FICT, as well as different kinds of support groups) and designed to facilitate the process of settlement, to aleviate traumatic symptoms, to enhance psychological well-being, and to help with practical issues of everyday life (Aroche & Coello, 2004; STARTTS, 2005). On the basis of positive experiences with survivors of war in Nicaragua (Métraux & Fleury, 1995), Meier and Perren-Klingler (2002) and Perren-Klingler (2001) have installed a community-based program in Switzerland, designed to instigate self-help activities among refugees from former Yugoslavia.

Although culture-sensitive, community-based interventions are still scarce, there is growing empirical evidence showing their effectiveness. For example, J. T. V. M. de Jong (Personal Communication, 7 February 2005) reported satisfactory effect sizes of 0.8 – 1.2 for indigenous counselors in post-war areas. Accordingly, in a forthcoming publication, Renner and Peltzer (in preparation) will report that culture sensitive peer-groups offered to Chechen refugees and asylum seekers in Austria achieved average effect sizes which equaled those reported by de Jong.

Just like culture-sensitive assessment procedures, culturally congruent interventions are urgently needed. In the light of some promising steps toward implementing such programs in various parts of the world, there is a high potential toward developing them further and toward installing them on a large scale basis.

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Part III

Trauma and Cultural Adaptation

Chapter 12

The Cross-Cultural Assessment of Dissociation

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Dissociation is a human capacity that can fulfill an adaptive or maladaptive function in specific circumstances, and which appears to be particularly recruited as a response to trauma in most cultural settings around the world. Although much of the initial work on dissociation was done in Europe and the United States, recent expansion of research on this topic in other cultural regions has led to welcome progress toward a more global understanding of dissociation. This progress is reflected in a greater ethno-cultural diversity of populations under study, expansion of the known phenomenology of dissociation and thus the conceptualization of the construct, creation of new assessment instruments, and renewed debate over existing diagnostic categories. This chapter reviews current understandings of the phenomenology and classification of dissociation from a cross-cultural perspective, including its relationship to trauma, with a focus on current assessment methodologies. These topics are illustrated with recent dissociation research from two non-US, non-European cultural settings, Puerto Rico and Turkey.

DEFINITIONS OF DISSOCIATION

Modern definitions of dissociation have been under debate for over 120 years (Ellenberger, 1970). Most current work on the construct is based on an understanding of consciousness, identity, personality, perception, and awareness of bodily sensations as the emergent sum of a system of modules that are constantly interacting at various levels to produce a sense of

unity (Hilgard, 1977; Woody & Bowers, 1994). Under normal circumstances, the integration of these modules occurs relatively seamlessly, operating as a continuous, cohesive entity (Putnam, 1997). In the case of dissociation, however, distinct units of these larger systems disengage from one another until they are no longer functionally integrated; the result is what Spiegel and Cardeña (1991:366) have called "disintegrated experiences."

Our understanding of dissociative processes has been constantly evolving. Some definitions of dissociation are theoretical (Krippner, 1997), others are diagnostic (WHO, 1992; APA, 1994), and yet others are philosophical (Braude, 1991). Cardeña (1994) usefully summarized contemporary understandings of dissociation as a broad "domain" that includes at least three types of definitions. Firstly, there are definitions that emphasize the disconnection of mental systems, identities, behaviors, and perceptions from the usually integrated stream of consciousness so that they become relatively inaccessible to ordinary awareness. Secondly, there are definitions that underscore the disengagement of the experiencing self from the environment and from various mental or bodily processes and functions. Finally, there are definitions that focus on the functional aspect of dissociation, as a defense mechanism that is triggered to safeguard the individual's psychological integrity from painful stimuli, particularly traumatic exposure. The first two types of definitions are descriptive in nature, whereas the third is closely tied to particular theories about the internal mechanisms of the mind.

SOMATOFORM DISSOCIATION

An important current debate on the boundaries of the definition of dissociation involves the status of somatic presentations of dissociative experience (Kihlstrom, 1992; Laria & Lewis-Fernández, 2001; Nemiah, 1991; Nijenhuis, Spinhoven, van Dyck, van der Hart, & Vanderlinden, 1998a). Nineteenth-century work on dissociation by Charcot, Janet, Freud, and others encompassed both psychological and somatic presentations under the general category of hysteria (Ellenberger, 1970). Research over the last decades, however, has focused mostly on "mental" phenomena, such as memories, feelings, attitudes, and identity states that are excluded from consciousness and inaccessible to voluntary recall. More recently, under the rubric of somatoform dissociation (Nijenhuis, Spinhoven, van Dyck, van der Hart, & Vanderlinden, 1996), there has been renewed interest in the somatic components of dissociation. These components can be categorized as "negative" phenomena – involving *loss* of control of parts of the body and its functions (e.g., analgesia, nonorganic sensory loss) – or "positive" phenomena – involving *intrusion* of medically unexplained

physical symptoms (e.g., pain, convulsions) (Nijenhuis, 1999; van der Hart, Nijenhuis, Steele, & Brown, 2004).

Contemporary research from diverse cultural settings supports the view that a strict demarcation between somatic and psychological aspects of dissociation may be artificial. The two types of dissociative experience usually coexist, with patients diagnosed on the basis of psychological forms of dissociation also scoring high on measures of somatoform dissociation (Nijenhuis et al., 1996; Nijenhuis, Spinhoven, van Dyck, van der Hart, & Vanderlinden, 1997; Sar, Akyuz, Kundakci, Kiziltan, & Dogan, 2004). This association is particularly salient in persons exposed to trauma, especially childhood sexual and physical abuse (Nijenhuis et al., 1998a; Sar et al., 2004) Conversely, patients with medically unexplained somatoform symptoms likewise attain high scores on measures of psychological dissociation (Nijenhuis et al., 1998a; Pribor, Yutzy, Dean, & Wetzel, 1993; Walker, Gelfand, Gelfand, Koss, & Katon, 1995). Similar to findings for psychological dissociation in diverse cultural regions, scores for somatoform dissociation increased linearly with adverse childhood experiences in a general population study in Finland (Maaranen et al., 2004). The dissociative disorders correlated highly with somatization disorder and conversion disorder (CD) in research in Canada, the US, and Turkey (Ross, Heber, Norton, & Anderson, 1989; Sar, Akyuz, & Dogan, 2007; Saxe et al., 1994; Tezcan et al., 2003). A recent review marshaled evidence to support the interpretation of psychogenic seizures as a manifestation of a primarily somatoform type of dissociative disorder (Bowman, 2006).

A renewed understanding of dissociation as encompassing somatic and psychological phenomena is particularly important for cross-cultural research and clinical practice, since it facilitates a more comprehensive understanding of diverse presentations of dissociative experience around the world. However, it is important to note that dissociative aspects of somatization represent only a subgroup of all somatization experience. Somatization constitutes a nearly ubiquitous idiom of distress for experiencing and expressing multiple forms of psychosomatic pathology, which cannot all be reduced to a dissociative origin (Kirmayer, 1996).

DISSOCIATION AND PSYCHOSIS

Another debate over the boundaries of the dissociation construct involves the relationship between dissociation and psychosis. Dissociative and psychotic symptoms share in common several phenomenological features (particularly auditory hallucinations and delusions of control), are both associated with trauma, and show a marked overlap at dimensional and categorical (diagnostic) levels of assessment (Haugen & Castillo, 1999; Kilcommons & Morrison, 2005; Moskowitz, Barker-Collo, & Ellson, 2005;

Mueser, Rosenberg, Goodman, & Trumbetta, 2002). In particular, psychoticism and schizotypy, trait dimensions predictive of psychotic symptoms, show an almost 50% shared variance with trait measures of dissociativity across numerous studies and diverse scales (Moskowitz et al., 2005). Allen and colleagues suggest that trauma-induced dissociation may predispose individuals to psychosis by undermining their grounding in the outer world, thereby hampering reality-testing, while at the same time weakening the role of internal anchors such as the sense of connection to one's body and a sense of self or identity (Allen, Coyne, & Console, 1997).

Unlike US diagnostic practice, which tends to sharply demarcate between dissociative and psychotic presentations, European and Turkish diagnosticians frequently utilize categories of "psychogenic," "hysterical", or "dissociative" psychosis. These are used to label acute presentations of psychosis in response to severe environmental stress, sometimes in persons with good premorbid functioning (Sar & Öztürk, in press; Spiegel & Spiegel, 1978; van der Hart et al., 2004). Turkish psychiatrists consider dissociative psychosis (DP) qualitatively distinct from schizophrenia and other "endogenous" psychoses and refer to it as "pseudopsychosis" or "pseudopsychotic dissociation" (Öztürk & Gogüs, 1973). In Turkey, these acute crises may occur in persons with underlying dissociative pathology as well as in persons without this vulnerability. Presentations of "DP" are characterized, among other symptoms, by visual and auditory hallucinations; child-like, disorganized, or grossly unusual behavior; temporarily impaired reality testing; affective instability; acute disorientation to person, place, and time; somatoform dissociative phenomena, such as pseudoseizures; and altered states of consciousness (Sar & Öztürk, in press; Tutkun, Yargic, & Sar, 1996). The diagnosis of DP is very prevalent in Turkish inpatient units, with rates ranging from 0.5% to 5.8% of admissions depending on the availability of an emergency department in the admitting hospital (Özpoyraz, Ugur, Erturk, Evlice, & Unal, 1995; Sar, 1983). Elevated rates of auditory and visual hallucinations among US Hispanics in community and primary care studies (Olfson et al., 2002; Vega, Sribney, Miskimen, Escobar, & Aguilar-Gaxiola, 2006) have also been linked to dissociative idioms of distress in this population (Olfson et al., 2002), and may constitute instances of "dissociative hallucinosis."

Psychotic disorders with acute onset and brief duration, usually in response to severe stress, show a higher prevalence in the developing world than in industrialized societies (Susser, Varma, Malhotra, Conover, & Amador, 1995). Research on the relationship between dissociation and psychosis may help clarify this heterogeneous diagnostic category and contribute to the further development of our nosological systems (Susser, Fennig, Jandorf, Amador, & Bromet, 1995).

RELATIONSHIP BETWEEN TRAUMA AND DISSOCIATION

Perhaps the most consistent finding in dissociation research around the world is the prominence of dissociation as a response to traumatic exposure. Compared to unexposed persons, those who have suffered traumatic events score higher on trait and state measures of dissociativity, and have higher rates of dissociative disorders (Dalenberg & Palesh, 2004; Maaranen et al., 2004; Martínez-Taboas, Canino, Wang, García, & Bravo, 2006; Svedin, Nilsson, & Lindell, 2004). A meta-analysis of the relationship between Dissociative Experiences Scale (DES) scores and traumatic exposure found effect sizes of 0.42 for sexual abuse, 0.42 for physical abuse, and 0.58 for either form of abuse or their combination. The effect size for the relationship between DES score and posttraumatic stress disorder (PTSD) onset over 12 studies (combined N = 1,099) was Cohen's d = 0.75, indicating a high correlation between dissociativity and the pathological sequelae of trauma (van Ijzendoorn & Schuengel, 1996). In addition, greater severity of traumatic exposure is related to a higher risk of subsequent dissociative pathology (Martínez-Taboas et al., 2006; Ogawa, Stoufe, Weinfield, Carlson, & Egeland, 1997).

This association between traumatic exposure and dissociative symptoms and disorders has been confirmed in many cultural settings, in both clinical and community samples. These include studies with populations from the following national origins: United States (Chu & Dill, 1990; van Ijzendoorn & Schuengel, 1996), Canadian (Collin-Véniza & Hébert, 2005), Western European (Dorahy, Lewis, Millar, & Gee, 2003; Maaranen et al., 2004; Svedin et al., 2004; Vanderlinden, van Dyck, Vandereycken, & Vertommen, 1993), Turkish (Akyüz, Dogan, Sar, Yargic, & Tutkun, 1999; Sar, Unal, Öztürk, 2007), Russian (Dalenberg & Palesh, 2004), Puerto Rican (Martínez-Taboas et al., 2006), Israeli (Domínguez, Cohen, & Brom, 2004), Australian (Irwin, 1996), New Zealander (Mulder, Beautrais, Joyce, & Fergusson, 1998), Bhutanese (van Ommeren et al., 2001), and Cambodian (Carlson & Rosser-Hogan, 1991).

Traumatic exposure that takes place during childhood, especially in the form of sexual and physical abuse, has been specifically associated with severe and chronic dissociative pathology, including the development of Dissociative Identity Disorder (DID) (Putnam, 1989, 2006). This association may be due to higher dissociative capacity during childhood which becomes pathologically fixed as a result of traumatic exposure in this age range, as well as to the interference of dissociative coping with the natural integration of discrete behavioral states over the course of development (Putnam, 1997).

At the same time, the cross-cultural record is beginning to document variation in the particular forms of trauma that are most associated with dissociation. This variation may stem from cultural differences at any of several stages involved in the experiencing of traumatic events, including awareness and interpretation of the event, the nature of the distress response, the primary locus of experience (i.e., somatic or psychological), the symptomatological behavioral response, and the ensuing social interaction (Laria and Lewis-Fernández, 2001). For example, a large community study in New Zealand ($N = 1{,}028$) found that only childhood physical abuse and not childhood sexual abuse was directly related to subsequent dissociative symptoms. The effect of childhood sexual abuse was indirect, mediated through current psychiatric disorder and exposure to physical abuse (Mulder et al., 1998). In Turkey, by contrast, exposure to emotional neglect may be more predictive of dissociative pathology than either physical or sexual abuse (Akyüz et al., 1999); a similar pattern has also been reported in India (Adityanjee, Raju, & Khandelwal, 1989). Further research is needed to disentangle the specific contribution of cultural differences from other factors, including methodological variation across studies.

Trauma itself may increase a person's capacity to dissociate. Evidence for this comes from a study of preschool children in upstate New York (Macfie, Cicchetti, & Toth, 2001). The children who suffered sexual or physical abuse developed higher dissociativity over time compared to their nonabused peers. Nevertheless, most researchers consider the association of trauma and dissociation to stem from the defensive function of dissociativity. This human capacity appears to be recruited as a coping mechanism in response to overwhelming traumatic events that threaten a person's ability to integrate the experience into normal consciousness (van der Kolk, 1987). This coping reaction may be adaptive at the moment of traumatization, but appears to be associated with a higher risk of dissociative and other trauma-related pathology over the course of the person's life (van der Kolk & Fisler, 1995).

In particular, dissociative symptoms experienced during or immediately after a traumatic event – known as peritraumatic dissociation (PD) – may be specifically associated with subsequent trauma-related pathology. Most of this research has been conducted on the relationship between PD and heightened risk for PTSD and increased PTSD symptom severity. A recent meta-analysis found that PD may have the highest effect size ($r = 0.35$) of all studied predictors for the subsequent development of PTSD (Ozer, Best, Lipsey, & Weiss, 2003). A relationship between PD and PTSD has been found among combat veterans, emergency services personnel exposed to critical incidents, victims of natural disasters, rape survivors, victims of motor vehicle crashes, and physical trauma survivors (Bryant & Harvey, 2000; Marmar, Weiss, Metzler, Ronfeldt, & Foreman, 1996;

Marmar et al., 1994; Marshall & Schell, 2002). Although most of this work has been conducted in North America, research in other settings such as Israel (Shalev, Peri, Canetti, & Schreiber, 1996) has tended to confirm the association. Recent studies, however, suggest that the relationship between PD and PTSD may be confounded by other factors, such as baseline PTSD symptom severity and persistent, rather than peritraumatic, dissociation (Marshall & Schell, 2002; Briere, Scott, & Weathers, 2005). Further prospective research is needed to disentangle these factors. The Peritraumatic Dissociative Experiences Questionnaire is the mostly widely adopted measure of PD (Marmar, Weiss, & Metzler, 1997).

While dissociation is intimately related to trauma, it is also evident that the association between trauma and dissociation is multifactorial rather than uncomplicated (Putnam, 2006). Many forms of dissociation around the world are normal rather than pathological (see section "Normal and Pathological Dissociation"), indicating that dissociation fulfills functions other than the expression of trauma-related distress. Moreover, a large proportion of persons exposed to traumatic events never develop dissociative symptoms. Only 8% of trauma-exposed participants in a community-based study in the US (N = 618) developed significant dissociative symptoms on the Multiscale Dissociative Inventory (Briere, 2006). In a multisite sample of anxiety disorder patients in New England (N = 387), participants with trauma exposure but without PTSD did not differ in DES scores from those never exposed to trauma (Warshaw et al., 1993), suggesting that factors in addition to exposure are associated with both dissociativity and the onset of PTSD. A study of Puerto Rican psychiatric outpatients found no specific relationship between frequency of *ataque de nervios*, a Hispanic idiom of distress, and childhood trauma, despite a strong relationship between *ataque* frequency and dissociativity (Lewis-Fernández et al., 2002). It is possible that dissociative pathology represents a confluence of the effect of traumatic exposure and other dissociation risk factors, such as affective dysregulation, family pathology, or insecure parent–child attachment (Briere; Öztürk & Sar, 2005; Merckelbach & Muris, 2001). Cultural theorists also note the contribution of socio-cultural factors to the facilitation or inhibition of dissociation, such as meaning networks that modulate the predisposition to dissociative experience (i.e., relationship with the world of spirits) and the "boundedness" or socio/egocentricity of the self (Castillo, 1997; Lewis-Fernández, 1994).

NORMAL AND PATHOLOGICAL DISSOCIATION

A feature of dissociative experience that complicates the assessment of this construct is that a large proportion of dissociative phenomena around the world are completely normal and nonpathological (Bourguignon,

1973). The normality and normativity of much of dissociation experience may interfere with assessment particularly in cultural contexts different from the one where the assessment instrument was created, since the "exoticism" of the experience may be confused for pathology. Examples of normal dissociation include out-of-body experiences, meditative states, automatisms in daily life, and hypnotic and cognitive absorption (Butler, 2006; Cardeña, 1994; Steinberg, 1995). Anthropological research has shown that many religious trances and possession experiences around the world are normal dissociative phenomena. These states do not lead to distress or impairment, arise in willing subjects in appropriate and usually religious contexts, and are often experienced as beneficial (Castillo, 1997; Golub, 1995; Goodman, 1988; Lambek, 1981; Lewis-Fernández, 1994).

In assessing a dissociative state, therefore, even one associated with traumatic exposure, it is critical to determine the extent to which it truly represents a pathological experience. Key in this respect is the degree to which the state is associated with distress and impairment, and also the degree to which it is atypical or non-normative for the cultural group in question. This implies that the assessment must take into account features of the socio-cultural context, particularly the influence of the ascribed explanatory models for the experience, which include its interpretation, perceived causation, expected consequences, and relationship to established practices, often of a religious or supernatural nature (Kleinman 1980; Lewis-Fernández, 1994; Martínez-Taboas, 1991, 1999, 2005a). In some cultures, dissociative experiences occurring during the practice of spirit mediumship do not usually impair the medium. On the contrary, such experiences can be interpreted as "a call to heal" (Krippner, 1989) or as the possession of a precious gift, and are culturally normative. Depending on the phenomenology, context, and interpretation of the experience, possession states can be completely normal expressions of religious fervor, distressing but transient symptoms of interpersonal or social conflict, or pathological afflictions causing intense fear, anguish, and impairment (Freed and Freed, 1990; Gaw, Ding, Levine, & Gaw, 1998; Goodman, 1988; Lewis-Fernández, 1992). In order to understand to what extent specific dissociative experiences are normal or pathological it is crucial to assess their social construction and the plurality of cultural meanings associated with them (Martínez-Taboas, 2005; Somer, 2006).

CROSS-CULTURAL PHENOMENOLOGY

Meanings and attributions are thus an integral part rather than an epiphenomenal aspect of dissociative presentations and help to shape the local phenomenology of dissociation around the world. The global sum of all

these local phenomenologies shows a catalog of differences as well as similarities. The phenomenological range of dissociative identity disturbances, for example, includes DID-type presentations as noted in DSM-IV, pathological possession trance states as noted in ICD-10, as well as their co-occurrence in the same cultural region. DID tends to be characterized by the persistent presence of numerous split-off aspects of personal identity, known as "alters," which are patterned after successive stages in individual development or distinct ego functions (e.g., a "protector" personality). Possession syndromes, on the other hand, are usually understood as the temporary displacement of the sufferer's identity by one or two supernatural agents, typically the spirit of a known person already dead or a culturally accepted spirit, demon, god, or mythical figure. Whereas DID alters have a purely individual and nontransmissible reality for the sufferer, possessing entities tend to display a collective existence. The same spirit, for example, may possess different family members down the generations, or different villagers in the same generation (Freed and Freed, 1990).

In westernizing societies such as India it is possible to observe both DID and possession syndrome types of presentation. A case series reported by Adityanjee and colleagues was characterized by DID-type presentations of dual personality in which the alter claimed a higher social standing than the usual personality. This was communicated by relegating his/her relatives and friends to the status of servants, speaking in English rather than Hindi, and preferring Western sports, clothes, and food (Adityanjee et al., 1989). These features suggest the incorporation of decades of British domination and US influence into the characteristics of the alters. However, DID remains unusual in India, with most cases of dissociative identity pathology taking the form of a possession syndrome (Saxena & Prasad, 1989).

At the current stage of research, we have not exhausted the characterization of the range of dissociative presentations, much less compared local phenomenologies to arrive at a global understanding of pathophysiological mechanisms. Most studies to date have focused on the general correlation between dissociation and trauma, the relative dissociative capacity of subgroups of psychiatric patients, and the characterization of DID-type presentations in various regional and clinical settings. When diagnostic studies are undertaken in non-US, non-European societies, they reveal both the applicability of existing diagnostic categories as well as their limitations. Sagduyu, Rezaki, Kaplan, Özgen, and Gürsoy-Rezaki (1997) have demonstrated the relevance of ICD-10 dissociative disorder categories for Turkey (see section "Turkey"), in particular the very high prevalence of conversion disorder (27.2% one-month; 48.2% lifetime). DSM-IV, however, does not consider CD a dissociative diagnosis. The limitations of the US manual in Turkey are further evidenced by the finding

of Dissociative Disorder NOS (8.3%) as by far the most prevalent DSM-IV diagnosis, showing a nearly eightfold higher prevalence than DID (Sar et al., in press). Moreover, neither the DSM nor the ICD provided diagnostic inclusion for the elevated rate of DP in Turkish psychiatric inpatient units. In India, two related investigations, by Saxena and Prasad (1989) and Das and Saxena (1991), examined empirically the applicability of DSM-III, DSM-III-R, and ICD-10 to local cases of dissociative pathology. Of more than 4,000 outpatients reviewed in both studies, 104 were diagnosed with a dissociative disorder. However, only 5–10% of these received one of the four specified dissociative disorder diagnoses in DSM-III or DSM-III-R, revealing the limitations of these nosologies in the Indian context. By contrast, specified diagnoses in ICD-10 covered 85.5% of presentations in the one study where this classification system was addressed (Das & Saxena, 1991). Of 42 patients, 74% had dissociative convulsions, 9.5% trance and possession disorder, and 2% dissociative movement disorder; none of these categories are included in DSM-IV.

When communities are polled for locally defined dissociative states, rather than from the a priori vantage point of psychiatrically identified presentations, the results often show the existence of alternate constructions of dissociative pathology. Possession trance states, in particular, show great diversity and prevalence in many developing societies, such as Uganda and rural India (Carstairs & Kapur, 1976; Freed & Freed, 1990; Van Duijl, Cardeña, & de Jong, 2005). The prevalence of possession syndrome in rural India has been estimated at 0.97% (over 6 months) –3.5% (over 1 year), depending on the region, the sample, and the method of assessment (Lewis-Fernández, 1994). Out of a substantial variety of possibilities, the specific characteristics of the possessing agent and the person's behavior during the possessed state are signs of great importance for indigenous diagnostics and treatment. Animal possession, for example, is prominent in Uganda, and usually attributed locally to the result of defensive witchcraft after a theft (Van Duijl et al., 2005). By contrast, in Hispanic Caribbean communities, dissociative pathology may take the form of acute paroxysms of loss of control and affective dysregulation known as *ataques de nervios* (attacks of nerves; see "Puerto Rico"). The lifetime prevalence of these states has been reported as 10.2% in a representative community study in Puerto Rico and 52–55% in Puerto Rican psychiatric outpatients both in Puerto Rico and the northeastern US (Lewis-Fernández, Guarnaccia, Patel, Lizardi, & Díaz, 2005). Other conditions worldwide that have been associated with a dissociative etiology include *amok* and *latah* in Malayo-Indonesia, "falling out" and "blacking out" in Bahamas and the southern US, and *indisposition* in Haiti, among others (Simons & Hughes, 1985).

The global diversity of dissociative phenomenologies raises the question of the comprehensiveness of the existing psychiatric nosologies.

The two main diagnostic systems, ICD-10 and DSM-IV, differ in terms of the definition and the specified categories of dissociation. With regard to definitions, both nosological systems include psychological types of dissociation, such as consciousness, memory, and identity, as well as mixed psychological/somatoform functions such as "perception of the environment" (APA:477). Only ICD-10, however, adds "control of bodily movements" to the list of dissociative functions (WHO:151). DSM separates out these conversion syndromes into a somatoform disorders section, which has no stated relationship to dissociation. In terms of the dissociative categories themselves, ICD-10 contains several specified disorders that are not included in DSM-IV, particularly in terms of acute and chronic somatic presentations and pathological trance and possession states. ICD, in turn, underemphasizes more chronic dissociative disorders, particularly DID. In addition, both nosological systems leave out the intersection with psychosis, either in the form of a "DP" syndrome (as seen in Turkey) or of recurrent dissociative perceptual distortions, such as dissociative hallucinosis (as seen in US Hispanics). Finally, neither nosology has incorporated a method for translating locally described and labeled ("emic") presentations, which are typically heterogeneous from a professional perspective, into their universalistic ("etic") classification systems (Lewis-Fernández, 1992). The DSM-IV Cultural Formulation constitutes a start in this direction, but needs further development and greater integration into the mainstream use of the manual.

The preceding sections have raised some of the issues involved in the assessment of dissociative phenomena at a global level. We now turn to a review of specific instruments and diagnostic interviews currently available for this purpose. This is followed by an illustration of the benefits and shortcomings of their use in two non-US, non-European cultural settings, Puerto Rico and Turkey.

GENERAL ASSESSMENT ISSUES

Like other psychiatric and psychological constructs, dissociative phenomena can be evaluated with a variety of assessment instruments. The most frequently used measures consist of diagnostic interviews and self-report scales.

Diagnostic Interviews

The Structured Clinical Interview for the DSM-IV Dissociative Disorders (SCID-D) is a semistructured, clinician-administered instrument following the general SCID framework (First, Spitzer, Gibbon, & Williams, 1998) that was developed to evaluate the presence and severity of the five

dissociative disorders in DSM-III-R, and subsequently, DSM-IV (Steinberg, 1995). SCID-D bases its assessment on the evaluation of five dimensions of dissociation which are considered distinct but related features of dissociative pathology: depersonalization, derealization, amnesia, identity alteration, and identity confusion. In studies in the US and the Netherlands among psychiatric inpatients and outpatients, inter-rater reliability, test–retest reliability, and discriminant validity from other psychiatric disorders have been good to excellent (Boon & Draijer, 1991; Bowman & Markand, 1996; Friedl & Draijer, 2000; Steinberg, Cicchetti, Buchanan, Rakfeldt, & Rounsaville, 1994). Research in Germany (Gast, Rodewald, Nickel, & Emrich, 2001) and Turkey (Sar et al., 2003) has also shown good psychometric properties in psychiatric samples.

The Dissociative Disorder Interview Schedule (DDIS) is a more structured interview also designed to diagnose DSM-based dissociative pathology (Ross et al. 1989). Unlike the semistructured SCID-D, which permits some flexibility in wording and further elucidation of items, the DDIS is administered exactly as written, in an attempt at greater standardization. This 132-item interview assesses the core symptoms of the five DSM-IV dissociative disorders as well as Borderline Personality Disorder (BPD), somatization disorder, and major depressive disorder. It also obtains descriptions of childhood sexual and physical abuse. In studies conducted in North America, the DDIS has a reliability of 0.68 and a kappa of 0.96 for clinician agreement on the diagnosis of DID, with a false positive rate of 1% in nondissociative clinical samples (Ross, 1997). The major DDIS symptom clusters (secondary features of DID, Schneiderian symptoms, BPD criteria, and extrasensory experiences) correlate well with overall DES score (Spearman correlations = 0.67–0.78), indicating good convergent validity. The DDIS has been used in several international investigations of dissociative disorders, such as in Turkey with psychiatric inpatients (Tutkun et al., 1998) and with a general population sample (Akyüz et al., 1999; Sar et al., in press) and in a psychiatric inpatient sample in Switzerland (Modestin, Ebner, Junghan, & Erni, 1996). In Turkish studies, the DDIS demonstrates high sensitivity and specificity for the dissociative disorders when compared with individuals with epilepsy, schizophrenia, and panic disorder (Sar, Yargic, & Tutkun, 1996; Yargic, Sar, Tutkun, & Alyanak, 1998).

Although both the SCID-D and the DDIS have been useful in the detection and diagnosis of dissociative disorders, from a cross-cultural perspective both instruments have inherent limitations. First, their strict adherence to DSM-IV dissociative criteria makes for good reliability scores, but necessarily results in limited sensitivity to non-DSM phenomena. Both interviews overemphasize alterations of consciousness, identity, and memory, but underemphasize other local manifestations of dissociation, such as trance and possession states, DP, dissociative hallucinosis, or

culturally specific presentations (e.g., *ataque de nervios*, *amok*). Somatoform aspects of dissociation, moreover, are tapped in the DDIS but not the SCID-D. Second, the structured format of the DDIS may make it more difficult to clarify ambiguous dissociative experiences cross-culturally; this is less of an issue with the semistructured SCID-D, which permits additional questions for clarification. Finally, both interviews may overestimate the pathology of normal or transiently distressing dissociative states, such as those occurring in spiritual or religious practices, depending on the familiarity of the interviewer with these experiences. In sum, the SCID-D and the DDIS are useful instruments for diagnosing dissociative disorders, but need to be expanded to take into account the full range of local dissociative manifestations.

Self-Report Instruments

The most widely used self-report measure of dissociation is the DES (Bernstein & Putnam, 1986), a 28-item instrument that assesses a variety of lifetime (or "trait") dissociative experiences on scale of 0–100, anchored at both ends as "never" and "always." It evaluates the frequency of amnesic experiences, gaps in awareness, depersonalization, derealization, and imaginative involvement. The DES has been found to have a one-factor structure on replicated studies, suggesting that the entire scale measures a single construct (van Ijzendoorn & Schuengel, 1996). The DES has excellent convergent validity with other dissociation measures (combined $r = 0.67$ across measures), internal consistency ($\alpha = 0.93$ over 16 studies), test–retest reliability ($r = 0.84$–0.93 over 2–8 weeks), and 1-year stability ($r = 0.78$) in studies conducted mostly in North America and Western Europe (van Ijzendoorn & Schuengel, 1996). It also has good discriminant validity. A multicenter study in the US ($N = 1{,}051$) of general psychiatric inpatients found that a DES cutoff score of 30 had a sensitivity of 74% and a specificity of 80% for severe dissociative disorders (Carlson et al., 1993). More recently, taxonometric analysis has identified a latent class variable in the DES that is indicative of more pathological forms of dissociation (Waller, Putnam, & Carlson, 1996; Waller & Ross, 1997). A DES-T subscale has been created and used in epidemiological research to distinguish these severe dissociative symptoms from more normal dissociative experiences.

From a cross-cultural perspective, a limitation of the DES is its close relationship to the DSM definition and categories of dissociation. This is likely to enhance its convergent validity relative to other instruments patterned in the same way, such as the SCID-D and the DDIS. However, this same characteristic is likely to exclude other expressions of dissociative pathology. Somatoform dissociation, for example, is not tapped by the DES, nor are other phenomenologies, such as possession states. To the

degree that all of these aspects of dissociation are correlated, however, dimensional scales such as the DES may be able to identify high dissociators, even if their main form of dissociative expression (e.g., somatoform symptoms) is not directly tapped by the scale.

The Adolescent Dissociative Experiences Scale (ADES) measures a range of dissociative experiences in youth aged 12–18 (Armstrong, Putnam, Carlson, Libero, & Smith, 1997; Smith & Carlson, 1996). This 30-item self-report instrument screens for four areas associated with dissociative disorders in adolescents: dissociative amnesia, passive influences, depersonalization/derealization, and absorption/imaginative involvement. The ADES has excellent reliability in a clinical sample of adolescents aged 12–17, including internal consistency and test–retest reliability over a 2-week period (Smith & Carlson, 1996). More recently, Farrington, Waller, Smerden, and Faupel (2001) investigated the psychometric properties of the ADES in a sample of 768 secondary school students. They reported an internal consistency of 0.94 and a split-half reliability of 0.90. The ADES has been used by researchers in Turkey (Zoroglu, Sar, Tüzün, Tutkun, & Savas, 2002) and Puerto Rico (Martínez-Taboas et al., 2006). The Puerto Rico study utilized an eight-item version patterned after the DES-T items that comprise the pathological dissociation taxon obtained from latent class analysis of the full DES (Waller et al., 1996). As described in later sections of this chapter, in both Puerto Rico and Turkey ADES scores are associated with victimization or traumatic experiences in youths and, in Turkey, with the presence of dissociative disorder. The psychometric properties in both studies have ranged from good to excellent.

The most commonly used instrument for assessing dissociation in children is the Child Dissociative Checklist (CDC; Putnam, Helmers, & Trickett, 1993; Putnam & Peterson, 1994). The CDC is a 20-item screening instrument designed for children aged 5–12 that allows the parent or the parent surrogate to record dissociative experiences observed in the child within the past 12 months on a three-point scale. The scale yields a summation score, with a result of 12 or more indicative of a possible dissociative disorder. The validity and reliability in US samples have been established by various investigators, with Cronbach $\alpha > 0.80$ (Malinosky-Rummell & Hoier, 1991; Putnam et al., 1993). The CDC has been translated into Spanish and Turkish and used in research with clinical populations in Puerto Rico (Reyes-Pérez, Martínez-Taboas, & Ledesma, 2005) and Turkey (Zoroglu, Sar, Tüzün, Tutkun, & Savas 2002).

The CDC and the ADES have good psychometric properties in North American samples, but so far there is little evidence of their validity and reliability in other cultural regions, with Turkey and Puerto Rico being notable exceptions. As with the DES, their sensitivity to non-DSM forms of dissociation is unknown.

We will briefly mention other self-report scales that have been used in diverse cultural settings. The Dissociation Questionnaire (DIS-Q) is a 63-item scale developed in the Netherlands (Vanderlinden, van Dyck, Vandereycken, Vertommen, & Verkes, 1993). It has a stable four-factor structure (amnesia, absorption, identity fragmentation, and loss of control) that explains 77% of the variance. The DIS-Q has excellent internal consistency (Cronbach $\alpha = 0.96$) and in a number of investigations in the Netherlands has discriminated well between nondissociative (general psychiatric patients and nonclinical participants) and dissociative patients. The DIS-Q has also been shown to be a valid and reliable instrument in Turkey (Sar et al., 1998).

The Somatoform Dissociation Questionnaire was also developed in the Netherlands by Nijenhuis and colleagues to measure somatic manifestations of dissociation. The 20-item version has excellent internal consistency (Cronbach $\alpha = 0.93$) and discriminant validity (Nijenhuis et al., 1996; Nijenhuis, Spinhoven, van Dyck, van der Hart, & Vanderlinden, 1998b). A five-item version functions as a screening instrument for dissociative disorders. In Dutch samples, it has excellent sensitivity (94%), specificity (96–98%), and (assuming a 10% prevalence of dissociative disorders among psychiatric inpatients) good positive predictive value (72–84%) and negative predictive value (99%) (Nijenhuis et al., 1997; Nijenhuis et al., 1998b). The Turkish version of the SDQ-20 also has excellent psychometric properties (Sar, Kundakci, Ziziltan, Bakim, & Bozkurt, 2000).

Other self-report scales have been developed to assess dissociative phenomena, but their empirical status is limited in cross-cultural settings other than the US. The Questionnaire of Experiences of Dissociation (QED) is a 26-item self-report screening instrument for the dissociative disorders (Riley, 1988). The QED was used in Puerto Rico (Francia-Martínez, Roca de Torres, Alvarado, Martínez-Taboas, & Sayers, 2003) with psychiatric inpatients, with adequate internal consistency ($\alpha = 0.79$) and convergent validity with the DES ($r = 0.69$). In that study, mean QED score differed significantly between patients with no history of abuse and those with a history of severe abuse. Another recent instrument is the Multidimensional Inventory of Dissociation (Dell, 2006; Somer & Dell, 2005) which has 168 dissociation items and 50 validity items. The MID assesses 14 major facets of dissociation, 23 specific dissociative symptoms, and has 5 validity scales. Its psychometric properties appear robust, including in an Israeli version (Somer & Dell, 2005). In fact, it outperformed the Hebrew version of the DES (H-DES) by identifying an additional 17% of the variance in weighted trauma scores.

We now turn to a review of research conducted on the assessment of dissociation first in Puerto Rico and Puerto Rican communities in the US and then in Turkey.

PUERTO RICO AND PUERTO RICAN COMMUNITIES IN THE US

Most of the research on dissociative phenomena reported with Latin American populations has been conducted in Puerto Rico or among Puerto Rican communities in the US. Notable exceptions include the work with mostly Mexican American samples by Zatzick, Marmar, Weiss, and Metzler (1984) and Marshall and Orlando (2002). Zatzick's group found no significant differences in peritraumatic and general dissociative symptoms between Latino, white, and African American US veterans of the Vietnam war after controlling for the effects of war zone stress exposure. By contrast, Marshall and Orlando found a negative association between acculturation and peritraumatic dissociation among young adult Latino survivors of community violence in Los Angeles after adjusting for trauma-related and other clinical variables. These apparently contradictory findings require further elucidation with larger Latino samples from diverse national groups.

Translation and Adaptation of Dissociation Measures

The Spanish translation of the DES used in Puerto Rico has been found to have robust psychometric properties. Its internal consistency in an undergraduate population is excellent (Cronbach α= 0.93), and factor analysis confirmed the one-factor solution found in US studies (Martínez-Taboas & Bernal, 2000). This translation also demonstrated adequate sensitivity and specificity as a screening instrument for dissociative disorders (Martínez-Taboas, 1995a). It has shown good convergent validity with other dissociative instruments, such as the QED (r = 0.69) and the dissociation subscale of the Trauma Symptom Inventory (r = 0.65) (Briere, 1995). In four different investigations, the Spanish version of the DES has shown adequate discriminant validity by distinguishing persons with a history of trauma from those without traumatic exposure (Martínez-Taboas, 2005).

The psychometric properties of the Spanish translation of the ADES-8 were investigated in a representative sample of 459 medically indigent adolescents, aged 11–17, who received mental health services in Puerto Rico. The translation of the DES-8 into Spanish focused on its semantic, content, technical, and criterion equivalence (Matías-Carrelo et al., 2003). State-of-the-art translation techniques were employed, including forward translation, review by bilingual committee, and subsequent back-translation (Martínez-Taboas et al., 2004). The ADES-8 demonstrated satisfactory internal consistency (α = 0.77) and test–retest reliability (r = 0.78). It also showed the expected pattern of convergent validity with variables hypothesized to be closely related to dissociative disorder, such as mental health-related impairment, psychiatric comorbidity, and a range of

traumatic and victimization experiences. Logistic regression revealed that a cutoff score of 3 on the ADES-8 best discriminated the group with pathological dissociation based on the convergent validity variables (Martínez-Taboas et al., 2004).

In order to tap local expressions of potentially dissociative experiences that are not contemplated by the DES, Lewis-Fernández and colleagues developed the Special Perceptions Scale (SPS), a 32-item scale scored on the same 0–100 format as the DES (Lewis-Fernández, 2003). Items were chosen by a panel of clinical investigators experienced in forms of dissociative experience typical in the Hispanic Caribbean. These include the following experiences while the person is alone: "hearing one's name," "seeing shadows/glimpses (*celajes*)," and "feeling the presence of someone nearby." Internal consistency of the SPS in a sample of Puerto Rican outpatients in New England ($N = 40$) was excellent ($\alpha = 0.93$). Data is currently being gathered from psychiatric outpatients on the convergent validity of the SPS with DES scores and a measure of traumatic exposure. Preliminary results indicate a range of high correlations between the most frequent SPS items and DES scores ($r = 0.60$–0.86), depending on patients' ethnicity and language status.

Research with Psychiatric Populations

Martínez-Taboas (1995a) initiated the study of dissociation in Puerto Rico with a validation of the Spanish translation of the DES. Scores on this instrument obtained from DID ($n = 16$) and panic disorder ($n = 15$) outpatients diagnosed clinically using DSM-III-R criteria were compared to a normal undergraduate control group ($n = 46$). The DES adequately distinguished DID patients from the other two groups. Mean DES scores were 17.4, 22.6, and 60.3, respectively. The results are consistent with reports from different societies of higher DES scores in dissociative disorder patients than other psychiatric populations. Similar to previous research, a cutoff score of 35 was associated with excellent discriminant validity: all 16 DID patients scored above this cutoff, compared to 13% of panic patients and none of the controls.

Francia-Martínez et al. (2003) assessed the frequency of self-reported victimization and childhood sexual abuse in 100 psychiatric inpatients in Puerto Rico and their relationship to trait dissociation, using the DES and the QED (Riley, 1988). The findings confirmed the association between dissociativity and victimization experiences in this Puerto Rican sample. The mean DES scores for the three categories of victimization were: none = 26.8, mild = 29.4, and severe = 37.8. A similar pattern was observed with the QED: 11.4, 14.2, and 15.1, respectively. DES scores in patients with history of childhood sexual abuse were significantly higher than those in patients with no history of abuse ($t = 2.3$, $p < 0.05$).

Reyes-Pérez et al. (2005) conducted a validation study of the Spanish translation of the CDC among psychiatric outpatients aged 6–12 years. Thirty-one children with documented abuse histories (97% sexual abuse) were compared to 30 children with attention deficit-hyperactive disorder (ADHD) with no history of abusive experiences, and 33 normal controls. CDC scores showed the expected relationship with abuse history: controls = 2.9, ADHD patients = 7.4, and abused group = 12.0. CDC scores in the abused group were significantly higher than in the other two groups ($p < 0.05$; Scheffe post-hoc test). The recommended cutoff score of 12 to indicate pathological dissociation demarcated the groups well: 55% of children in the abused group scored higher than this value, compared to 17% of children with ADHD and none of the controls. Likewise, the cutoff suggestive of a diagnosable dissociative disorder (18) fully distinguished the abused group (23% of participants) from the other two groups (0 participants). These results in Puerto Rico are very similar to research conducted in Turkey with the CDC, providing initial evidence of the cross-cultural validity of this instrument (Zoroglu, Tüzün, et al., 2002).

Lewis-Fernández and colleagues assessed the relationship between dissociative symptoms and disorders, childhood trauma exposure, and *ataque de nervios*. *Ataque* is a locally defined Hispanic syndrome characterized by acute paroxysms of affective dysregulation and loss of control that usually occur in response to stressful interpersonal experiences (Guarnaccia, Canino, Rubio-Stipec, & Bravo, 1993). Previous case reports and phenomenological research noting its dissociative features (Guarnaccia, Rivera, Franco, & Neighbors, 1996; Lewis-Fernández, 1994) had raised the possibility that *ataque de nervios* could be understood as a culturally patterned dissociative reaction to stress arising in persons predisposed by childhood exposure to trauma (Schechter et al., 2000). This hypothesis was tested (Lewis-Fernández et al., 2002) in a sample of female Puerto Rican psychiatric outpatients in New England ($N = 29$) by examining the association between lifetime frequency of *ataque*, DES score, SCID-D screener status, Traumatic Antecedents Questionnaire (TAQ) score (Herman, Perry, & Van der Kolk, 1989), and SCID-diagnosed PTSD. Frequency of *ataque* was found to be significantly and positively associated with DES score and SCID-D symptoms and disorder. Although a diagnosis of PTSD was 2 ½ times more likely among persons with frequent *ataques* than those without, sample size limitations resulted in a nonsignificant association. However, total TAQ score, as well as measures of individual traumatic exposures (i.e., physical abuse, sexual abuse), showed no association with *ataque* frequency, dissociative symptoms, or PTSD rates. Contrary to the expected relationship, these findings indicate that childhood trauma *per se* was not associated with *ataque* frequency, dissociation, or PTSD. Rather, traumatic exposure was uniformly high across cohorts (Herman et al.), suggesting that, in this sample, factors in

addition to childhood trauma accounted for these conditions. This contradicts previous findings with a different clinical population and trauma scale that showed an association between *ataque* and childhood trauma (Schechter et al., 2000), but is consistent with a multifactorial model of dissociation, *ataque*, and PTSD (van Ijzendoorn & Schuengel, 1996).

Additional evidence of the relationship between *ataque de nervios* and dissociativity comes from the association between *ataque* and the perceptual distortions tapped by the SPS described earlier. Lewis-Fernández and colleagues assessed the prevalence of these idioms and of self-reported *ataque de nervios* in a sample of 81 consecutive psychiatric referrals from rural Puerto Rico primary care clinics (Lewis-Fernández et al., 2005). The rate of seeing shadows/glimpses (*celajes*) was 70.4%, that of "hearing one's name" was 76.5%, and that of *ataque* was 58.7%. Seeing *celajes* and hearing one's name when alone were each significantly more likely among patients reporting *ataque* than among those without this syndrome ($p \leq 0.05$). Given the dissociative character of these perceptual idioms evidenced by their correlation with DES scores reported above, the association of these idioms with *ataque* is further evidence of a relationship between *ataque* and the dissociative scales that was found in the New England patient sample.

Community Studies of Dissociation and Related Conditions

No epidemiological studies have been conducted in Puerto Rico to assess the prevalence of the dissociative disorders. However, in an Island-wide household probability study of youth aged 11–17 (N = 891), Martínez-Taboas et al. (2006) assessed the prevalence of pathological dissociative symptoms using the ADES-8 and their relationship to different types of victimization experience. As expected, most adolescents in Puerto Rico (53%) did not indicate any symptoms of pathological dissociation. The prevalence of pathological dissociation was 4.9%, based on the previously established cutoff score (3) by the same research team (Martínez-Taboas et al., 2004). Confirming an association between pathological dissociation and abusive experience, nearly all (98%) participants who scored above cutoff indicated a history of some type of victimization, compared to 54% of participants with an ADES-8 score <3 ($p < 0.001$). There was a linear relationship between severity of abuse and ADES-8 score for each of the victimization experiences studied. In addition, youth who scored above cutoff were more likely than those below cutoff to have experienced more than one type of victimization (77% vs. 27%; $\chi^2 = 31.6$, $p < 0.001$). Bivariate logistic regression indicated that all five types of victimization experience (emotional abuse, physical abuse, neglect, sexual abuse, and exposure to violence) were significantly associated with ADES-8 score. However, multivariate logistic regression revealed that only physical abuse and

exposure to violence were independently associated with pathological dissociation. Contrary to other international studies, sexual abuse was not identified as a predictor variable in the multivariate analysis. A possible explanation is that the reported prevalence of sexual abuse was low in this community sample (7.1%), and nearly all who did report this form of abuse indicated that it occurred infrequently. Possible explanations for these findings include the protective role of a Latino family-centered orientation ("*familismo*"; Sabogal, Marín, Otero-Sabogal, VanOss-Marín, & Pérez-Stable, 1987), as well as cultural barriers to the identification and reporting of sexual abuse.

The prevalence of *ataque de nervios* has been studied in two Island-wide community-based studies. A study of adults (N = 912) found a weighted prevalence of 10.4% for *ataques* that fulfilled instrument criteria for a true psychological syndrome (i.e., distress and impairment, help-seeking, and no relationship to alcohol or drugs; Guarnaccia et al., 1993). *Ataque* was more prevalent in women over 45, without a high school education, who were previously married (separated, widowed, and divorced) and out of the labor force or unemployed. A community-based, representative study of children and adolescents aged 4–17 (N = 1,886) found a prevalence of *ataque* of 8.9% (Guarnaccia, Martínez, Ramírez, & Canino, 2005). In that study, *ataque* was associated with female gender, age ≥ 15, and low income. Both studies found that *ataque de nervios* is heterogeneous from a psychiatric perspective, showing a relationship with several psychiatric diagnoses, including anxiety and depressive disorders, but neither study assessed directly for the presence of dissociative pathology. Given research with Puerto Rican psychiatric outpatients that suggests an association between *ataque* frequency and higher dissociative pathology, this association should be tested in community studies that directly assess for dissociative experience.

Studies with Undergraduates

Martínez-Taboas and Bernal (2000) studied the relationship between the DES, the Beck Depression Inventory (BDI), and exposure to abusive experiences among undergraduates at a university in Puerto Rico (N = 198). Participants who experienced some form of abuse had significantly higher DES scores than those who denied this exposure (11.9 vs. 22.4, $p < 0.01$). DES score was moderately correlated with childhood sexual abuse (Pearson's $r = 0.35$, $p < 0.01$). By contrast, BDI scores were not correlated with this exposure.

Case Studies

Two case studies (Martínez-Taboas, 1995b, 1999) suggest that in Puerto Rico the phenomenology of dissociative disorders is influenced by beliefs

in *espiritismo* (spiritism). *Espiritismo* is a philosophical and folk healing practice widespread in Latin America that espouses the immortality of the soul and the ongoing relationship and contact between the living and the spirits of the dead. The patients in the two case studies demonstrated unusual manifestation of dissociation, including possession by living and dead persons seeking revenge for past misdeeds carried out by the patient. Other than their *espiritista* identity, however, these spirits resembled punishing alters typically seen in DID presentations, suggesting a cultural variant of DID rather than a culturally distinct syndrome. The application of culturally sensitive psychotherapeutic techniques proved useful in the treatment of these cases.

Summary

Martínez-Taboas (2005) reviewed over 12 empirical studies on dissociation conducted in Puerto Rico and concluded that there was sufficient initial evidence to support the validity and reliability of three scales for use in Puerto Rican samples, the DES, the ADES-8, and the CDC, including the application of their previously recommended cutoff scores. These studies support the validity of etic instruments for tapping important forms of dissociation in Puerto Rican communities. Moreover, work in Puerto Rico provides empirical support for the relationship between traumatic/victimization experiences and dissociative reactions, adding to the growing international literature on this topic. Among Puerto Rican populations, the association between trauma and dissociation has been found in community, clinical, and undergraduate samples and among children, adolescents, and adults. Contrary to much of the work in North America, however, but similar to the findings in New Zealand (Mulder et al., 1998), sexual abuse was not independently associated with dissociative pathology, suggesting cross-cultural variability in the specific forms of traumatic exposure that predispose to dissociative disorders.

At the same time, research with Puerto Rican clinical and community samples in the Island and the US provides evidence of the prevalence of other presentations of dissociative pathology that take a less universalistic form. Combining standard modes of assessment with a more anthropological approach permits greater clarification of these local phenomenologies, such as *ataque de nervios* and perceptual (hallucinatory) distortions. Further research is necessary to continue to assess the influence of local factors on dissociative presentations in Puerto Rican communities.

TURKEY

Unlike any other country outside North America, Turkey has conducted widespread research on dissociative disorders using standardized assessment measures. Turkish research thus provides an opportunity to

compare findings from North American research with local expressions of dissociative pathology using mostly "etic" methodologies. Dissociation research in Turkey has been carried out mainly in university-affiliated psychiatry departments located in general hospitals, where these activities could be integrated into residency training and Ph.D. programs. The Clinical Psychotherapy Unit and its Dissociative Disorders Program (both founded by Vedat Sar in 1993 and 1994, respectively) of the Istanbul University Faculty of Medicine has served as the main organizing and training center and source of information for collaborative research on dissociative disorders in Turkey for more than a decade.

Translation of Dissociation Measures

The Turkish translation of the DES was found to have very good test–retest (0.78) and split-half reliability (0.74–0.89), internal consistency ($\alpha = 0.91$), and construct validity when compared to other psychiatric patients and normal controls (Yargic, Tutkun, & Sar, 1995). In clinical samples, the Turkish translation of the DDIS has excellent reliability ($\kappa = 0.80$), sensitivity (95%), and specificity (98.3%) for the diagnosis of DID, when compared with patients with epilepsy, schizophrenia, and panic disorder (Yargic et al., 1998). The Turkish version of the SCID-D was investigated in a sample of 40 patients with complex dissociative disorder (DID or DDNOS) and 40 clinical and nonclinical controls, yielding 100% agreement for the presence/absence of a dissociative disorder (Kundakci, Sar, Kiziltan, Yargic, & Tutkun, 1998). Inter-rater reliability of the interview was evaluated by four psychiatrists using 10 videotaped interviews of patients with either dissociative disorder or other psychiatric diagnoses. The sole discrepancy between raters was observed on the type of dissociative disorder in one patient who was assessed as having either DID or DDNOS.

A Turkish translation of the DIS-Q differentiated complex dissociative disorder from other psychiatric disorders (Sar et al., 1998). A cutoff score of 2.5 was associated with very good sensitivity (85%) and specificity (83%). In dissociative disorder patients, the DIS-Q has a test–retest reliability of 0.74 over 41 days. The Turkish version of the SDQ-20 also has an excellent 1-month test–retest reliability of 0.95 (Sar, Kundakci, et al., 2000). A cutoff point of 35 on the SDQ-20 yielded a sensitivity of 84% and a specificity of 87% for complex dissociative disorders compared with other psychiatric diagnoses (anxiety disorders, schizophrenia, major depression, and bipolar mood disorder in remission) and nonclinical controls in a Turkish clinical sample.

The internal consistency and test–retest reliability of the Turkish versions of the ADES and the Child Dissociation Checklist (CDC) are also

very good (Zoroglu, Sar, et al.; Zoroglu, Tüzün, et al., 2002). The mean CDC score for dissociative patients was 24.9, with 89% of dissociative patients having a score of 12 or above. CDC score differentiated dissociative children (with either DID or DDNOS) from patients with ADHD, mood disorder, anxiety disorder, and normal controls.

Research in Clinical Settings

As in most countries, research on dissociation in Turkey started with clinically based studies. In one of the first studies, Sar et al. (1996) assessed 35 consecutive patients who met DSM-IV criteria for DID in a dissociative disorders program of a university-affiliated psychiatric clinic. They utilized the Turkish versions of the DES and the DDIS. Consistent with other international research studies, the mean DES score of 49.1 was above the cutoff point of 30 and the DDIS showed that dissociative patients presented a clinical configuration very similar to that reported in Canada, the Netherlands, and the United States. In addition, 89% of dissociative disorder patients were found to have a traumatic or abusive background.

Tutkun et al. (1998) studied the relationship between DES scores and DDIS diagnoses in consecutive psychiatric inpatients at a university clinic (N = 166). Patients scoring >30 and those who scored <10 were interviewed with the DDIS by a blinded clinician. Of 21 patients with a DES score >30, 17 (81%) received a dissociative disorder diagnosis according to the DDIS. By contrast, none of the 19 patients with a DES score <10 received a DDIS diagnosis of dissociative disorder. Sensitivity and specificity were 100% and 83%, respectively. This argues for the reliability and validity of the DES as a screening tool and of the DDIS as a diagnostic tool in Turkey.

Table 1 reports several prevalence studies in Turkey, including clinical settings. The clinical prevalence of dissociative disorders ranges from 10.2% in psychiatric inpatients to 17.2% in detoxified substance abusers, with psychiatric outpatients showing an intermediate prevalence. By far the highest prevalence, however, is in patients accessing the psychiatry emergency department: 34.9% of all patients in this setting received a diagnosis of dissociative disorder, including 14% with DID (Sar, Koyuncu, et al., 2007). This extremely elevated prevalence constitutes a veritable epidemic of dissociative pathology in emergency settings, and may be due to the frequency of transient dissociative crises superimposed onto more chronic and complex dissociative disorders. These crises are characterized by acute presentations of traumatic flashbacks, conversion symptoms, suicidal ideation, hallucinations, and anxiety symptoms which lead the patient to search for immediate intervention (Sar, Koyuncu, et al., 2007). Some of these patients would likely qualify for a diagnosis of DP (see below and Tutkun et al., 1996).

Table 1. Summary of Dissociative Disorder Prevalence Studies in Turkey

Study	Inclusion Rate	Number of Subjects	Diagnostic Instrument	Cutoff on Dissociative Experiences Scale	Rate of Dissociative Identity Disorder	Rate of Dissociative Disorder	Dissociative Experiences Scale Score		
							Mean	SD	> DES[a]
General population									
Akyüz et al. (1999)	Rep. sample (three phase)	994	DDIS[b]	17	0.4%[c]	1.7%[c]	6.7	6.1	6.2%
Sar, Akyuz, et al. (2007)	Rep. sample (women)	628	DDIS[b]	–	1.1%	18.3%	–	–	–
Psychiatric inpatients									
Tutkun et al. (1998)	63.6%	166	DDIS[b]	30	5.4%[c]	10.2%[c]	17.8	14.9	14.5%
Psychiatric outpatients									
Sar, Tutkun, Alyanak, Bakim and Baral (2000)	81.5%	150	DDIS[b]	30	2.0%[c]	12.0%[c]	15.3	14.0	15.3%
Sar et al. (2003)	79.5%	240	SCID-D[d]	25	2.5%	13.8%	20.0	18.9	27.9%
Psychiatric emergency ward									
Sar, Koyuncu, et al. (2007)	44.3%	43	SCID-D[d]	25	14.0%	34.9%	23.4	19.3	39.5%
Detoxified inpatients with chemical dependency									
Karadag et al. (2005)	94.7%	215	SCID-D[d]	30	2.8%	17.2%	24.5	17.5	36.7%

[a]Percentage of patients with Dissociative Experiences Scale score above cut-off point.
[b]Dissociative disorders interview schedule.
[c]Clinically confirmed diagnosis.
[d]Structured clinical interview for dissociative disorders.

Interestingly, perhaps one of the most prominent cultural differences between Turkish dissociative disorder patients and those in Western Europe is in terms of their Borderline Personality Disorder symptoms (Sar et al., 1996). Turkish dissociative disorder patients report intense anger and lack of control of this emotion, chronic feelings of emptiness and boredom, efforts to avoid abandonment, and intense but unstable relationships more frequently than Dutch patients. In turn, Dutch patients report frequent mood swings, physically self-damaging acts, identity confusion, and impulsive and unpredictable behavior more frequently than Turkish patients. These differences may stem from different cultural factors affecting symptom presentation (e.g., overall lifestyle, drug abuse, family relationships) or from distinct etiologies of dissociative disorders in Dutch and Turkish patients. Turkish patients may develop dissociative disorders and certain borderline characteristics as a result of emotional neglect and developmental attachment difficulties, rather than as a result of abuse and direct trauma as seen in Dutch and other European samples. Possibly, the BPD construct may not be stable across cultures. This has important consequences for culturally sensitive psychotherapy, since it is likely to matter whether borderline patients are approached as having a severe (almost pre-psychotic) personality disorder or a disorder based on trauma-related dissociation as a central mechanism.

In two representative studies assessing the association between dissociation and borderline pathology, 64% and 72.5% of participants who met DSM-IV diagnostic criteria for BPD in Turkish clinical and nonclinical settings also met criteria for an axis I dissociative disorder (Sar, Akyuz, Kugu, Öztürk, & Ertem-Vehid, 2006; Sar et al., 2003). Dissociative disorder diagnoses were based on SCID-D data administered by interviewers blind to the BPD diagnosis and on independent self-report data. The overly high prevalence rate for BPD (8.5%) found in another study with an otherwise highly functional Turkish college population (Sar et al., 2006) in fact suggests that dissociative disorders may manifest as "borderline phenomena" among young people in Turkey. The authors concluded that this high prevalence of borderline phenomena may be related to a mix of traumatic exposure and attachment difficulties that is reactivated following separation from their family of origin and which results in maladaptive adjustment to the college environment. Interestingly, in multivariate analysis, borderline phenomena were related to both childhood emotional and sexual abuse and physical neglect whereas dissociative phenomena were only related to childhood emotional neglect. However, both phenomena overlapped for most participants.

Turkish researchers also documented significant brain perfusion changes in patients with DID as compared to healthy volunteers. Findings focused on the bilateral orbitofrontal area, a region highly sensitive to developmental traumas and the locus of executive functions. Perfusion

deficits in this area in dissociative patients were replicated in two studies using an HMPAO-SPECT scanning protocol (Sar, Unal, Kiziltan, Kundakci, & Öztürk, 2001; Sar et al., in press). Two later studies using SPECT and SEP in patients with conversion disorder (somatoform dissociation) also led to findings suggesting transmission deficits in subcortical areas (Yazici & Kostakoglu, 1998; Yazici, Demirci, Demir, & Ertugrul, 2004).

Studies of Community Prevalence of Dissociative Disorders

Most epidemiological research does not assess for the prevalence of dissociative disorders. Nevertheless, Turkish researchers managed to conduct two studies of community-based prevalence in Sivas City, a town in central Turkey with limited industrialization, conservative attitudes, high unemployment, low income, and limited access to formal education (Table 1). The first study (Akyüz et al., 1999) assessed the prevalence of DID using a three-stage design. In the first stage, the DES was administered (by reading aloud) to 994 participants in 500 homes in Sivas City. The second stage focused on DDIS assessments of participants with DES scores >17. Unfortunately, of 62 participants with scores above this cutoff, only 32 (52%) were available for DDIS interview. They were compared with 32 controls with a DES score <10 by a blinded interviewer. Seventeen participants (1.7% of the original sample) received a dissociative disorder diagnosis on the DDIS. The third wave attempted to recruit all 17 participants with a DDIS dissociative disorder diagnosis in the second wave for an in-depth clinical interview. The response rate for this third wave was 47% ($n = 8$). These eight participants with DDIS diagnoses were compared to eight participants without dissociative disorder on DDIS. Clinical interview re-diagnosed DID in four of five participants who had received a DDNOS diagnosis on the DDIS. The remaining DDNOS diagnosis was confirmed. Of the three participants with dissociative amnesia on DDIS, dissociative amnesia was confirmed in one, CD was diagnosed in another, and the remaining participant was found to have high hypnotizability but no clinical diagnosis. These rates represent a minimum estimate of prevalence of dissociative disorders because of the large proportion of participants who were unavailable for full diagnostic interviews in the second and third stages. Thus, the minimum prevalence of DID among the general population in this study was 0.4%.

A second community survey of the female population of Sivas City was conducted in 500 homes (Sar, Akyuz et al., 2007). In order not to repeat past difficulties with retention in a multistage design, the DDIS was administered to all participants in a single visit. This study thus provides more robust lifetime prevalence rates of DSM-IV dissociative disorders. The prevalence of all dissociative disorders was an elevated 18.3%.

The most prevalent dissociative disorder according to DSM-IV criteria was DDNOS (8.3%). Dissociative amnesia was diagnosed in 7.3% of participants, DID in 1.1%, and depersonalization disorder in 1.4%. The prevalence of dissociative fugue as a solitary symptom was very low (0.2%) and observed usually as part of a more complex dissociative disorder (i.e., DID or DDNOS). In the DDNOS group, the prevalence of dissociative trance disorder was 0.6%, 1.1% had derealization without depersonalization, 4.1% had distinct personality states but did not fit all criteria for DID, and 2.4% had indirect cues for hidden distinct personality states (auditory hallucinations or complex behavior for which they were amnesic). The prevalence of dissociative disorders in this study is remarkable, particularly the prevalence of dissociative amnesia and DDNOS, and calls for additional research.

In the first study, although 65.6% of participants with dissociative disorder reported some form of abuse, only 6.3% reported sexual abuse and 28.1% reported physical abuse. On the other hand, emotional neglect was strongly associated with the presence of a dissociative disorder (56.3% of the dissociative group vs. 18.8% of nondissociative controls; $p < 0.005$). In the second study, all types of childhood abuse and neglect were more frequent in participants with a dissociative disorder in bivariate analyses. In multivariate regression, however, only sexual and emotional abuse and physical neglect in childhood (e.g., early cessation of education among girls) predicted a dissociative disorder diagnosis. These studies support the view that although other forms of trauma also play a role in the etiology of dissociative disorders in Turkey, childhood neglect is a major risk factor for dissociative disorders in this population.

Research on first-degree relatives of dissociative disorder patients reveals no cases of clear-cut dissociative disorders or BPD (Öztürk & Sar, 2005). This led investigators to propose that families of dissociative disorder index patients may mimic normal families, but be characterized by hidden trauma-related dysfunctionality (e.g., affect dysregulation). Members of these "apparently normal" families without overt dissociative disorders report frequent mood fluctuations, intense anger and inability to control this emotion, identity confusion, transient dissociative episodes, and paranoid ideas to a larger extent than members of normal family controls. All of these features except elevated anger were correlated with members' own childhood traumatic exposure. The authors concluded that the "apparently normal" family in Turkey is an agent of transgenerational trauma.

Dissociative Somatic Symptoms (Conversion Disorder)

Conversion symptoms and CD are extremely frequent in Turkey. Among outpatients in a primary care clinic in a semirural area, the prevalence of conversion symptoms in the preceding month was 27.2% and the lifetime

prevalence was 48.2% (Sagduyu et al., 1997). Suggesting a high rate of psychiatric comorbidity, conversion symptoms were more frequent in patients with an ICD-10 diagnosis of major depression, generalized anxiety disorder, and neurasthenia. One-year follow-up of CD outpatients, most with nonepileptic seizures, found that nearly 9 in 10 patients with CD (89.5%) still met SCID-I criteria for a psychiatric disorder other than CD (Sar et al., 2004). Using Turkish versions of the SCID-D, DIS-Q, and SDQ-20 as well as the Childhood Trauma Questionnaire (Bernstein et al., 1994) the same study revealed that 47.4% of CD patients who had been hospitalized for a conversion symptom met lifetime criteria for a dissociative disorder. Compared to CD patients without a dissociative disorder comorbidity, those who also met criteria for a dissociative disorder had more comorbid psychiatric disorders, childhood traumas, suicide attempts, and self-mutilative behaviors.

In a similar study, Tezcan et al. (2003) assessed the frequency of dissociative disorder among inpatients with CD in a university clinic in Eastern Turkey. Over a period of 24 months, 59 consecutively admitted adult CD patients were screened with the DES. Patients who scored above 30 were compared with those who scored below 10. All patients were then blindly interviewed utilizing the SCID-D. Results indicated that 31% of those with a DES score >30 received a diagnosis of dissociative disorder. Interestingly, 100% of the dissociative patients reported sexual abuse or emotional neglect during childhood or adolescence. The disproportionate elevation of these traumatic exposures compared to the general population rates may be due to a higher hospitalization rate among dissociative disorder patients with multiple and severe traumatic exposure (e.g., sexual abuse) (Karadag et al., 2005). Patients who suffered only childhood neglect may remain in outpatient services.

Sar, Kundakci et al. (2000a) found that medically unexplained somatic symptoms, including conversion symptoms, can differentiate complex dissociative patients from other psychiatric diagnostic groups. These dissociative somatic symptoms are usually of a pseudoneurological type and affect sensorimotor functions. Interestingly, there was no difference in somatic complaints between Turkish and Dutch dissociative patients, but nonepileptic seizures were seen more frequently in the Turkish patient group. In fact, nonepileptic seizure is the most frequent conversion symptom in clinical settings in Turkey (Sar & Sar, 1990).

Dissociation in Childhood and Adolescence

Turkish researchers have also studied adolescent and childhood dissociative profiles. Five child cases of DID had features similar to those reported in North America (Zoroglu, Yargic, Tutkun, Öztürk, & Sar, 1996). The

ADES could differentiate adolescents with dissociative diagnoses from nonclinical participants and from those with Attention Deficit Hyperactivity Disorder, anxiety disorders, and mood disorders (Zoroglu, Sar, et al., 2002). Results with the CDC have also established excellent reliability and validity in distinguishing dissociative children from other diagnostic groups (Zoroglu, Tüzün et al., 2002). In their study on a high school population, Zoroglu et al. (2003) reported inter-relationships between dissociation, suicide attempts, self-mutilative behavior, and childhood abuse and neglect. In a study on substance users (Karadag et al., 2005), 64.9% of patients with dissociative disorder reported that their dissociative experiences started prior to their substance use. The mean age of onset for the dissociative experiences was 15.6, or a mean of 3.6 years prior to the onset of substance use. Dissociative disorder in adolescence appears to be a risk factor for substance use in Turkey.

Dissociative Psychosis

DP presentations in Turkey are very common, affecting 0.5%–5.8% of inpatient admissions (Sar, 1983; Özpoyraz et al. 1995). These frequently constitute acute crises superimposed on a more chronic and complex dissociative disorder (Tutkun et al., 1996). However, DP can also occur in patients without this underlying condition. Typically, DP presentations are temporally related to an event or circumstance that has been profoundly upsetting. Common precipitants in female patients include romantic breakups or disturbed marriages, and oppressive conditions at home, sometimes from the demands of extended families sharing the same household. Male patients are seen more frequent in military and forensic settings. Although most of the patients originate from lower socioeconomic levels, DP may occur in all social classes. At present, no instruments have been specifically developed to assess DP presentations.

In addition to the DP symptoms mentioned earlier in this chapter, Turkish DP patients may also report trance and possession states, mystical experiences, aggression against self or others, fainting fits, fugue states, and excessive religious behavior (e.g., praying). Affectivity is usually not altered; if altered it is usually in the direction of volatility rather than flatness. Thought disorders, when they do occur, are generally circumscribed and transient. Disorientation, amnesia, and discontinued thought flow due to rapid dissociative personality switches may be misdiagnosed as an organic mental disorder (Sar & Öztürk, in press).

The very frequent presentation of DP in psychiatry emergency departments may be the result of barriers to the expression of trauma-related pathology, including the unavailability of trauma-specific treatment interventions and of regular, nonemergency psychiatric care. The best intervention consists of hospitalization and inpatient supportive

intervention. Once hospitalized, the condition typically begins to remit in a few days without neuroleptic treatment. The full episode in DP usually lasts 1–3 weeks. The process typically recedes as suddenly and dramatically as it began, leaving practically no residue, and, occasionally, amnesia for the episode (Sar & Öztürk, in press; Tutkun et al., 1996).

Summary

As was the case in Puerto Rico, standard assessments of dissociation developed in North America and Western Europe were able to cover a large proportion of the spectrum of dissociative phenomena seen in Turkey. Turkish research provides sufficient evidence to support the overall reliability and validity of the major self-report and diagnostic dissociation measures in the international literature. At the same time, the extensive research in this non-US, non-European society reveals what appear to be specific regional differences in the etiology, presentation, prevalence, and comorbidity of dissociative pathology. These differences include a greater role for emotional neglect than other traumatic exposures in the etiology of dissociative pathology; the extremely high prevalence of dissociative disorders in psychiatric emergency departments and of conversion pathology and dissociative disorders in the general population; the distinct phenomenology and elevated prevalence of the acute crises that combine dissociation and psychotic symptoms ("DP"); and the distinct phenomenology and elevated prevalence of BPD comorbid with dissociativity. These findings require additional research both in Turkey and in other societies.

CONCLUSION

This review of the cross-cultural assessment of dissociation summarized available data on the extent to which the global diversity of dissociative phenomena are tapped by existing measures and classifications. To a large degree, the work in Turkey and in Puerto Rican communities lends support to the usefulness of standard international assessments in cross-cultural research on dissociation. In nearly every instance, measures developed in one setting still had adequate psychometric properties in another cultural region. This was true even for very locally patterned syndromes, such as *ataque de nervios* among Puerto Ricans, which was usefully investigated with Spanish translations of the DES and the SCID-D screener. At the same time, however, it is clear that in order to fully characterize the dissociative nature of certain forms of pathology new measures need to be developed. Examples include the lack of adequate instruments for assessing DP in Turkey and dissociative hallucinosis

among Latino communities (addressed in part by ongoing work on the SPS). As usual, a mix of etic and emic approaches may yield a more complete picture.

This review also lends support to the centrality of trauma as a risk factor for dissociative pathology. This association was confirmed by research in both cultural regions reviewed. Nevertheless, most cross-cultural work on this topic has been conducted in clinical settings and needs confirmation in population-based studies. Research in Turkey among the general female population, and in Puerto Rico among a representative sample of adolescents, contribute important findings in this regard. It is worth noting that the balance of the Turkish and Puerto Rican research points to cross-cultural variation in the centrality of the type of trauma most connected to subsequent dissociative pathology. Whereas both childhood sexual and physical abuse have been implicated in most US and European research, the Turkish and Puerto Rican studies suggest a larger role for emotional neglect and attachment difficulties in childhood (in Turkey) and physical but not sexual abuse (in Puerto Rico). These findings support the complex and multifactorial nature of the relationship between trauma and dissociation.

Support is also provided by the available data for the cross-cultural diversity of dissociative phenomenologies and prevalence rates. The characteristics of *ataque de nervios*, dissociative hallucinosis, DP, and diverse forms of CD and borderline personality phenomena all point to the need for expansion of the existing nosological systems. As research moves out from clinics in major urban centers to community settings in all sectors of society, the diversity of dissociative phenomenologies may be expected to increase as a result of the inclusion of more traditional ways of expressing distress and of a broader range of transient but impairing illness forms. The extremely high rates in Turkey of dissociative disorders in the small town context argue strongly for the need to conduct research in a diversity of settings within each society.

The cross-cultural similarities and differences in dissociative pathology noted in the reviewed research support a reassessment of the existing nosological categories. ICD-10 and DSM-IV have complementary blind spots when it comes to the dissociative disorders, overemphasizing in turn acute presentations or chronic disorders. DSM-IV in particular is lacking several important dissociative phenomenologies, including somatoform dissociation and trance and possession states. This latter category, interestingly, was not found to be prevalent in the epidemiological research conducted in Turkey. It constitutes a very important illness presentation in other settings, however, notably India and Africa, and would have been more central to this review if these cultural regions had been included. Finally, both nosological systems lack categories for classifying phenomenologies that bridge psychotic and dissociative states.

The diversity of forms noted in the reviewed research documents the plasticity of dissociative presentations. At the same time, the successful application of etic assessment instruments also underlines their fundamental inter-relationship.

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Chapter 13

Mass Psychological Trauma and PTSD: Epidemic or Cultural Illusion?

Derrick Silove, Zachary Steel, and Adrian Bauman

INTRODUCTION

In recent years, leading medical journals have published a series of commentaries (Bracken, 2001; Bracken, Giller, & Summerfield, 1995; Summerfield, 1998; Van Ommeren, Saxena, & Saraceno, 2005) challenging the notion that mass trauma exerts an adverse effect on the mental health of populations from non-Western cultures. The diagnostic category, posttraumatic stress disorder (PTSD), has attracted particular criticism, the key issue being the nosologic validity of that diagnosis when applied across cultures (Summerfield, 1999, 2001; Terheggen, Stroebe, & Kleber, 2001). The controversy about PTSD is not only of theoretical importance but also has practical implications in an age in which health expenditure is increasingly tied to evidence that a disorder contributes to the global burden of disease. If, as is argued, PTSD is not a legitimate disorder in many postconflict settings, particularly those in the developing world, then policy makers may be justified in ignoring the category in planning mental health responses for populations exposed to humanitarian and other disasters; the implication being that there is no reason to differentiate between the mental health needs of low-income countries exposed to mass violence and those who suffer only from the problems of underdevelopment (Summerfield, 2005). Hence, the stakes are high since there is a risk that if the critique of PTSD is mistaken (or even partially so), then survivors of trauma, often members of the most vulnerable groups (refugees, asylum seekers, and populations living in conflict-affected, low-income countries), may be further disadvantaged by a failure

to provide appropriate special care for their mental health needs (Silove, 2005; Silove & Ekblad, 2002).

Specialist mental health services for refugee and other displaced populations exposed to torture and trauma are now well established in the major recipient countries (Reid, Silove, & Tarn, 1990; Weine et al., 2003) and there is a small but growing body of evidence indicating that interventions can address posttraumatic psychiatric symptoms (Griffith et al., 2005; Neuner, Schauer, Klaschik, Karunakara, & Elbert, 2004; Tennant & Silove, 2005). It is imperative that deliberations about the transcultural relevance of PTSD draws on evidence relating to the impact of symptoms and the capacity of treatment (whether western or indigenously based) to help.

The present contribution will review the arguments mounted by the contemporary trauma critique, offering some provisional responses that aim to address the concerns raised. A summary of the main elements of the trauma critique is provided in Table 1 with our own provisional responses to each assertion indicated in the second column. Rather than exploring each critique in the abstract, we will draw on a concrete case example, a study we have completed among Vietnamese living in Sydney, Australia, to illustrate some key points.

Table 1. Critique of trauma and PTSD

	Pragmatic response
1. A culture-bound construct Psychological trauma is a western concept derived from culture-bound theories of the genesis of psychopathology. PTSD was "created" for historical and political reasons, particularly to legitimize the suffering of Vietnam veterans returning to the USA	The timing of the inclusion of PTSD in the Diagnostic and Statistical Manual III may have been prompted by historical and political factors in the USA. Nevertheless, symptoms of PTSD have been described over the millennia. The category has been retained over successive revisions of the DSM and has been included in ICD-10. It appears to have clinical utility
2. Trauma memories are normal Memories of trauma are normal and need to be understood within a collective historical, political, and human rights context. Trauma memories are meaningful and important to survivor communities, serving to mourn losses, learn from the past, strive for justice, and maintain a cultural legacy of a society's history	Although legitimate observations, it cannot thereby be concluded that trauma and PTSD are irrelevant to mental health. Distinctions need to be made between the context-appropriate, collective memory of past persecution and the unbidden, uncontrollable, and intrusive trauma imagery that is experienced by the survivor as alien, unwanted, and disabling

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Table 1. (cont.)

	Pragmatic response
3. Indigenous concepts of stress do not specify symptoms of PTSD Other cultures do not recognize or have a term to describe PTSD – they have their own constructs and attributions in relation to mental disorder. Traditional non-Western cultures tend to express their mental distress in somatic symptoms and these problems could be overlooked if there is a singular focus on PTSD	These are important cross-cultural concerns that require continued collaborative exploration. Nevertheless, PTSD-like symptoms associated with high levels of functional impairment have been identified extensively across cultures exposed to mass trauma. There is also some evidence to suggest that symptoms of PTSD are identified as part of indigenously identified syndromes, for example in Africa. More work is needed to define the respective domains of psychic suffering defined by PTSD and by indigenous concepts, the extent to which they overlap, and whether they vary across cultures
4. No scientific validity PTSD has little construct validity and no biological markers have been discovered that clearly identify cases. There is substantial overlap of symptoms with other disorders such as anxiety and depression	This is partially true but these characteristics are not unique to PTSD. Psychiatric nosology is in its early stages with most disorders still being identified solely by their mental expressions. Psychiatric classifications change over time and the inclusion, exclusion, or modification of categories often depends as much on consensus among experts as on scientific evidence. Greater attention is needed to cultural variation in symptoms in future formulations of all disorders. Comorbidity is substantial for PTSD but again this is common for other categories of mental disorder
5. The "symptoms" of PTSD are normative reactions to life threat and should not be labeled as illness	Distinguishing between normative psychobiological survival responses and PTSD as an illness category is important and has not received adequate attention. Some epidemiological studies report very high rates of "PTSD" in the midst of situations of warfare or soon after disasters – most of these reactions may be normative and short-lived, not requiring either diagnosis or specific mental health treatment. Nevertheless, a substantive body of evidence demonstrates that a small proportion of survivors of trauma continue to experience highly disabling symptoms of PTSD for considerable periods of time
6. In the transcultural setting, when survivors of mass trauma are asked to identify their needs, they rarely mention mental problems (let alone PTSD), instead highlighting social and material needs	It is not surprising that populations exposed to disaster will give priority to their physical, family, and social needs – this does not mean that they do not have psychological needs

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Table 1. (cont.)

	Pragmatic response
7. Demand characteristics are responsible for high rates of PTSD elicited by questionnaires: respondents attempt to shape their responses to match the expectations of the interviewers	Demand characteristics are potential confounds in any survey whether ethnographic, social, or psychiatric. Most members of trauma-affected populations nevertheless report low levels of PTSD symptoms
8. The preoccupation with trauma and PTSD creates a culture of victimization which itself leads to maladaptive behavior	A legitimate issue of concern particularly in Western societies where there is a preoccupation with compensation. Legalizing the problem of PTSD has many pitfalls, with the adversarial process of litigation potentially exacerbating and intensifying symptoms. On the other hand, persons with PTSD as with many other forms of mental illness have low levels of help-seeking behavior so that problems of over-identification need to be balanced against problems of under-identification
9. Psychological debriefing for trauma is potentially harmful	There is growing evidence that mass psychological debriefing for survivors of trauma is neither feasible nor helpful. The call for mass counseling following major disasters is unwarranted and impractical in culturally diverse societies in the developing world
10. In conflict-affected countries in the developing world, there are many other health and mental health priorities that could be obscured by a focus on trauma and PTSD	There are two aspects to this concern. First, there are *other* responses to trauma, some of which may need attention (severe complicated grief, overwhelming anger and disabling, chronic depression, severe anxiety, somatizing disorders). In addition, in low-income disaster-affected countries, there is an urgent need to attend to the core group of persons with untreated psychosis, bipolar disorder, and epilepsy, who may be at great survival risk. It is important that there is a coordinated approach to prioritizing the distribution of limited resources in meeting the wide array of mental health needs in such settings. However, this should not be based on the neglect of posttraumatic psychiatric conditions
11. Treatments for PTSD do not work and/or there is no evidence of the efficacy of western treatments across cultures	There is growing evidence that both psychopharmacological and psychotherapeutic interventions can assist PTSD sufferers at least in western contexts. There is less evidence for efficacy of treatments across cultures, particularly nonspecific counseling, but early data suggest that

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Table 1. (cont.)

	Pragmatic response
	specific psychological interventions based on narrative-exposure models are effective (Griffith et al., 2005; Neuner et al., 2004). It is possible to adapt these approaches to make them culturally sensitive
12. Importing notions such as PTSD and "experts" in trauma counseling into culturally diverse communities can undermine indigenous healing mechanisms and the confidence of local systems to mobilize traditional problem-solving approaches	This is an important concern for humanitarian programs in general. A distinction needs to be made between offering help to whole populations as opposed to those severely disabled by mental problems. More evidence is needed to show that traditional healing and other approaches assist in resolving the more severe traumatic stress reactions. When specialist services for refugee trauma are provided in host countries, refugee survivors from most cultures attend in substantial numbers
13. Focusing on trauma and PTSD creates the illusion of an individual, clinical remedy for a complex, community-wide set of problems. Social reconstruction if well planned and executed will facilitate natural recovery from trauma reactions. Clinically-based trauma treatment programs may deflect attention from more salient and important priorities	There is a complex interaction between individual and community needs and creating a dichotomy between these two domains is unlikely to be productive. Community recovery strategies that restore supportive institutions are likely to allow the majority with mild to moderate stress reactions to recover but there will always be a residual group needing clinical interventions. There is an additional concern that some social processes, such as participation in truth and reconciliation commissions may make some of these reactions worse. Hence, a more complex multilevel model is needed to understand the variety of needs among survivor populations

VIETNAMESE REFUGEES AS A CASE EXAMPLE

Past studies have indicated that Vietnamese refugees resettled in Western countries show low levels of utilization of mental health services, particularly for nonpsychotic disorders (McDonald & Steel, 1997; Phan, 2000; Steel et al., 2006). That pattern of help-seeking raises important questions about the way the Vietnamese deal with the aftermath of mass trauma particularly as some members of the community were exposed to war, political persecution, perilous flight experiences by boat, long-term internment in re-education camps or in refugee detention centers, and difficulties in gaining access to countries of resettlement (Hauff & Vaglum, 1994; Kroll et al., 1989; Mollica, McInnes, Pham, et al., 1998).

The help-seeking behavior of Vietnamese refugees could be offered as evidence in support of the trauma critique insofar as it suggests, albeit by inference, that the community draws on its own strengths and cultural traditions to overcome any residual difficulties caused by past exposure to mass violence and displacement. The contrary hypothesis is that those in need of psychiatric assistance are not reaching services because of a confluence of adverse factors, including low cultural recognition of conditions such as PTSD (by sufferers, their families, and/or primary care physicians), a tendency to somatize symptoms, avoidance of help-seeking because of a culture of stoicism and/or stigma related to revealing mental illness, and/or access difficulties such as the availability and cultural receptivity of mainstream services (McDonald & Steel, 1997; Phan; Silove et al., 1997). A key underlying issue, however, is the possibility that the Vietnamese conceptualize and express their suffering in ways that are not detected or else are misunderstood by mainstream clinicians (Beiser & Fleming, 1986; Chung & Singer, 1995; Lin, Ihle, & Tazuma, 1985).

VIETNAMESE REFUGEES AND THE TRAUMA MODEL

The magnitude of the exodus from Vietnam, Cambodia, and Laos after the Communist victories in South East Asia brought to world attention refugee issues in general and spurred mental health professionals from several Western countries to devise new approaches to offer mental health assistance to survivors of trauma. As noted by Mollica and Lavelle (1988), prior to the mass resettlement of Southeast Asian refugees to Western countries, the primary interest of medical anthropologists and cross-cultural psychiatrists working with immigrant groups was on issues of resettlement, acculturation, and assimilation. The arrival of large numbers of Southeast Asian refugees corresponded to the period preceding and following the introduction of the category of PTSD into DSM-III (American Psychiatric Association, 1980). Hence, to a large extent, the Southeast Asian refugees formed the first displaced group to be investigated applying the new trauma paradigm. The early studies among displaced Vietnamese refugees are noteworthy for the absence of a focus on the effects of trauma. (Kinzie, Tran, Breckenridge, & Bloom, 1980; Mattson & Dinh-Ky, 1978; Rahe, Looney, Ward, Tung, & Liu, 1978). Subsequently, Kinzie et al. (1990) as well as other researchers (Kroll et al., 1989; Mollica, Wyshak, & Lavelle, 1987) argued that a substantial number of Vietnamese patients assessed in this early period did report symptoms of what later was described as PTSD (that is, after the introduction of that category in DSM-III). In their 1990 clinical report, Kinzie and colleagues argued that the introduction of PTSD was an advance in that it helped clinicians to "unify an often confusing and changing symptom pattern characterized

by affective instability and marked reactivity to minimal stress" (p. 917). A key question with the passage of time, however, is whether a shift toward highlighting the role of trauma and the category of PTSD contributed to an overall understanding of the mental health of the Vietnamese. In particular, how are issues of culture and trauma reconciled in forging a broader framework for conceptualizing the psychiatric problems of that group?

CULTURAL INFLUENCES ON MENTAL HEALTH AMONG THE VIETNAMESE

Transcultural psychiatry recognizes that conceptual, semantic, and contextual factors all influence the expression and understanding of mental distress in a particular culture and these factors all appear to be pertinent to the mental health of the Vietnamese (Phan & Silove, 1999). Phan and Silove have outlined the historical roots of psychiatric nosology in the Vietnamese culture and the eclectic influences that have shaped indigenous understandings of mental distress in that group. Traditional Vietnamese texts give emphasis to a holistic perspective on health in which mind and body are inseparably connected, a principle that characterizes medical thinking throughout East Asia. Tensions between Yin and Yang disrupt bodily functions in a way that leads to abnormal psychological reactions. Weakness of the nervous system is a general attribution incorporating a wide range of abnormal psychological phenomena that would be distributed across several western nosologic categories, ranging from the bizarre behavior of psychosis to states of worry typical of anxiety. At the same time, several key emotional domains (fear, anxiety, depression, shock) are similar to those identified in western psychology.

Traditional Vietnamese health practices are eclectic being based primarily on Chinese medicine but also drawing on theories of cosmology, metaphysics, and supernatural belief systems. In addition, a wide range of religions and faiths (Buddhism, Confucianism, folk beliefs, Christianity) exert an influence on healing practices. Healing traditions include cosmological readings that divine the astronomical causes of illness, witchcraft (*phuy thuy*), spiritual blessing, and sorcery. Drawing on these models, therapeutic interventions may include prescribing herbs, advice about diet, performing healing rituals, directions about repositioning graves of ancestors, suggesting the relocation of furniture or making of other physical modifications to the abode, prayer, and encouraging change in interpersonal behavior, for example, paying more attention to hospitable acts. The overarching aim is to harmonize mind, body, and social context so that the individual can integrate more fully into the family, society, the wider environment, and the cosmos.

DEVELOPING AN INDIGENOUS MEASURE OF MENTAL DISTRESS: THE PHAN VIETNAMESE PSYCHIATRIC SCALE (PVPS)

Based on a review of cultural beliefs about mental distress, our team (Phan, Steel, & Silove, 2004) developed an indigenously derived measure of anxiety, depression, and somatization for the Vietnamese community. The initial pool of items was generated by reference to Vietnamese medical texts and these were supplemented by idioms of distress obtained from an ethnographic survey of the refugee population in Sydney, Australia. The pool of items was organized into five thematic categories, three of which clearly related to depression (26 items), anxiety (13 items), and somatisation (14 items). Internal consistency estimates ranged from 0.87 to 0.95 for the three scales, and test–retest reliability coefficients over four days ranged from 0.81 to 0.89. The construct validity of the scales was supported by confirmatory factor and mutitrait–multimethod analyses. The criterion validity of the measure (and case thresholds), were established by comparing PVPS scores with diagnoses obtained from psychiatrists, structured interviews, and naturalist healers. Respondents also were asked to rate the cultural sensitivity of the PVPS in comparison to other standard measures that previously had been translated into Vietnamese. There was a clear trend for respondents to rate the PVPS as superior in relation to several indices, including the capacity of the instrument to assess accurately their feelings and the extent to which the scales provided useful information to clinicians.

It is noteworthy that no specific dimension emerged that corresponded directly with a diagnosis of PTSD. While there were a number of symptoms within the PVPS that could be seen as reflecting key symptoms of PTSD, they did not form a coherent dimensional structure. To some extent the finding is not surprising given that aim of the ethnographic and psychometric approaches adopted were to develop a broad-based measure of psychological distress among the Vietnamese rather than to distinguish between specific psychiatric sub categories. Nevertheless, the findings do suggest that the experiences associated with the construct of PTSD are not well defined or uniquely identified within Vietnamese illness models.

The Epidemiologic Study

The study methodology and results have been described in full previously (Steel et al., 2005; Steel, Silove, Phan, & Bauman, 2002) and will be summarized herein. Between June 1999 and May 2000, we applied a multistage probability sampling approach to recruit a representative sample of Vietnamese refugees residing in Sydney, Australia. A probability proportional-to-size cluster method identified 44 census tracts in which

population densities for that ethnic group ranged from 2 to 45%. The combined areas included 41,487 (75%) of the Vietnamese population in the state of New South Wales. Screening of 6,224 dwellings identified 1,413 residences housing at least one Vietnamese person. A single Vietnamese aged 18 years or older from each household was randomly selected for interview. The final sample included 1,161 persons (response rate=82%). Trained bilingual, Vietnamese interviewers visiting each household completed the protocol in Vietnamese (98.6%) or in English (1.4%), depending on the preference of participants.

A parallel, nation-wide epidemiologic study undertaken around the same time, provided comparative data on the general Australian population (Henderson, Andrews, & Hall, 2000). The survey involved a multistage probability sample of 13,624 private dwellings across Australia. Interviews were conducted with 10,641 persons randomly selected from each household (response rate = 78%). For the present study, the 7,961 persons born in Australia (hereafter "Australians") were extracted. Both samples were weighted by the sampling probability and post-stratification age and sex distributions of the relevant source populations.

Survey Instruments. Both surveys applied the Composite International Diagnostic Interview (UM CIDI 2.1), a lay administered structured interview widely employed in international epidemiological studies (Andrews & Peters, 1998). Interviewers entered CIDI responses directly into a computer, recording 12-month ICD-10 rates of high prevalence disorders, namely anxiety disorders (panic disorder, agoraphobia, social phobia, generalized anxiety disorder, obsessive–compulsive disorder, and PTSD), mood disorders (depression, dysthymia, mania, hypomania, and bipolar disorder), and substance use disorders (alcohol and substance use/abuse and dependence). The Vietnamese survey also incorporated the PVPS.

Both surveys included the Medical Outcomes Study Short Form 12 (SF-12) (Gandek et al., 1998; Salyers, Bosworth, Swanson, Lamb-Pagone, & Osher, 2000) yielding scores for physical (PCS) and mental (MCS) functioning. In addition, two standard questions assessed the number of disability days arising from a reduced capacity to work and to carry out normal duties because of ill-health (Kessler, Chiu, Demler, & Walters, 2005). The study recorded contact with health care providers, for general or mental health, in the previous 12 months. Service providers included primary care physicians, mental health practitioners (psychiatrist, psychologist, social worker, welfare worker, drug and alcohol counselor, other counselor, or a public community mental health team), and, in the Vietnamese sample, a traditional healer (usually a Chinese doctor).

Lifetime exposure to trauma was assessed according to the ten broad categories of the CIDI PTSD module, with a residual category for "other

traumatic events." Since the Vietnamese are a war-affected and displaced population, we deemed it important to incorporate a full range of their relevant traumatic experiences. The CIDI trauma events schedule was expanded, therefore, to include an additional 14 experiences derived from the Harvard Trauma Questionnaire (Mollica et al., 1992) designed specifically for use among Southeast Asian refugees. In order to allow comparability between the two datasets for the present analysis, the additional 14 HTQ trauma events were mapped onto the 10 CIDI categories.

The English-language measures were translated into Vietnamese using established translation and blind-back translation methods (Bracken & Barona, 1991). An independent Vietnamese mental health specialist reviewed the original and translated versions to identify any minor inaccuracies that were then reconciled by a panel of seven bilingual health care interpreters. The Human Research Ethics Committee of The Flinders University of South Australia approved the study.

Key Findings

Applying ICD criteria, 6.9% or approximately 1 in 15 Vietnamese adults had experienced an anxiety, mood, or substance abuse disorder in the 12 months prior to assessment. This figure compares with a prevalence of 18.6% for Australians (1 in 5 adults), three times the rate reported by the Vietnamese. Lower rates among the Vietnamese were evident across the broad domains of anxiety, depression, and substance abuse.

How important was trauma to overall mental health among Vietnamese refugees, 11 years after resettlement?

A complex but revealing pattern emerged when the impact of trauma was analyzed for the Vietnamese population compared with the Australian-born group. Vietnamese reported higher exposure to direct combat, life threatening accidents, torture or being terrorized, violence to others, and other stressful events not covered by the CIDI screen. In contrast, Australians had higher exposure to natural disasters, witnessing killing or injury, rape and sexual molestation. Australians and Vietnamese reported a similar rate of exposure to one or two traumas, but a higher proportion of the Vietnamese reported exposure to 3+ categories. A retrospective analysis showed that soon after exposure to trauma, Vietnamese manifested very high levels of trauma-related emotional distress (using the combined indices of anxiety, depression, and drug and alcohol abuse). Over the course of resettlement, however, there was a consistent decrease in levels of trauma-related distress. After 10 years of resettlement, Vietnamese with 1–2 major traumas had the same prevalence of mental disorders as compatriots who had escaped without exposure to trauma. Nevertheless, overall, trauma remained the most powerful predictor of mental disorder in the Vietnamese 11 years after resettlement with exposure to 3+ traumas

being associated with an eightfold risk of mental disorder (compared to a fourfold risk in Australians). Hence, the picture that emerged suggested that in refugees exposed to lesser levels of trauma, consequent mental distress tends to abate over a prolonged period of time in stable settings. Nevertheless, for a minority with high levels of trauma exposure, risk of persisting mental distress remains high, accounting for a substantial amount of the mental health burden in that community.

HOW IMPORTANT IS PTSD?

Within the low overall prevalence of mental disorder among the Vietnamese, PTSD emerged as the most prevalent disorder overall (3.5%), being present in 50% of those with any diagnosis. In comparison, among Australians, although the rate of PTSD was the same, that diagnosis was present in only 19% of those with a psychiatric disorder. Rates of trauma and PTSD were highest among older Vietnamese, reflecting the greater level of exposure to combat and war traumas in that age band (the group who were young adults during the war in the home country). PTSD was associated with substantial levels of disability in Vietnamese, equal in magnitude to Australians as measured by the number of days of impaired role functioning. Patterns of disability differed across the two populations, however, with Vietnamese with PTSD emphasizing physical and Australians mental dysfunction.

HEALTH SERVICE UTILIZATION FOR PTSD

All Australians and Vietnamese reported high rates of consultations with family physicians. Consultation rates for Vietnamese with PTSD showed a complex trend. Although that group had a 30-fold increase in mental health consultations with GPs compared to their nonpsychiatrically ill compatriots, only 10% of Vietnamese with PTSD (compared to 30% of Australians with that diagnosis) sought specialist psychological help. Vietnamese with PTSD rarely consulted traditional healers for mental health problems.

CULTURAL DIMENSIONS AND SOMATIZATION AMONG VIETNAMESE REFUGEES

An important question was whether the indigenous measure yielded a different prevalence of mental disorder among Vietnamese compared to the ICD-10 system. Although there was substantial overlap between the

two measures, the PVPS identified additional cases, increasing the overall prevalence by approximately 30%. The major component of the PVPS that contributed to that difference was the somatization scale. The ICD-10 category of neurasthenia accounted for only a small percentage of these cases, suggesting that the PVPS indigenous dimension of somatization identified a construct that was largely independent of western diagnostic categories.

DISABILITY AND HEALTH SERVICE UTILIZATION PREDICTED BY THE PVPS

Vietnamese identified by the PVPS alone had higher levels of mental disability than those identified only by the CIDI (although those identified by both measures were most disabled). Compared to CIDI-only cases, those identified by the PVPS showed the same, high level of consultations with primary care physicians. Compared to CIDI cases, PVPS cases consulted less for specific mental health problems, both in relation to primary care physicians and specialist mental health services. PVPS cases did show relatively higher rates of consultation with traditional healers for mental health-related problems, but the percentage seeking such help was low.

DISCUSSION

The Vietnamese study summarized here offers some advances in resolving key areas of controversy relating to the relevance of trauma in generating mental disorders across cultures. The study found that the construct of PTSD as operationalized in the western diagnostic instrument received a high level of endorsement, being present in half of all psychiatric disorders identified by the CIDI. The findings provide further evidence in support of a strong body of data indicating that PTSD can be identified across cultures and contexts. The question now is not whether PTSD can be detected internationally, but what are the implications in assigning that diagnosis.

Trauma

Our analysis found that trauma remained an overwhelmingly strong predictor of PTSD (and other common disorders) among Vietnamese, even after 11 years of resettlement (Steel et al., 2002). The dose–response relationship between trauma and PTSD was consistent with the robust relationship established in many other studies of refugees and conflict-affected populations (Karam et al., 2006; Mollica, McInnes, Poole, & Tor, 1998; Mollica et al., 1999; Silove, Steel, McGorry, & Mohan, 1998).

Nevertheless, our findings add support to the few other studies in the field that suggest an attenuation of the effects of trauma over time, particularly in populations that are securely settled in recipient countries (Hinton, Tiet, Tran, & Chesney, 1997; Liebkind, 1996). The Vietnamese are an important case study since that group was afforded a supportive resettlement program in Australia as elsewhere, with virtually all members of the community being offered permanent resettlement on arrival, the possibility of family reunion, access to the full array of public services, and unrestricted educational and employment opportunities. Hence it appears that only the most severely trauma-affected group, now the more senior members of the community, continue to suffer ongoing psychological problems associated with premigration trauma.

When compared with other ethnic groups, these findings suggest that there may be a threshold effect that determines the course of PTSD in refugee populations. Although the civil war in Vietnam had devastating effects on the country, the direct impact was somewhat patchy with some communities being spared from experiences of immediate trauma or being exposed to a limited range of such events. That diversity allowed us to test the effects of a wide range of exposure on the long-term mental health of the population. We postulate that once refugees are resettled in a stable recovery environment, there is a fine balance between the ongoing impact of prior trauma exposure and the passage of time in determining their capacity to recover from mental health problems (Silove & Steel, 2006). The type and quantum of trauma are particularly relevant to refugee populations in which all members have been exposed to a campaign of indiscriminate and gross human rights violations, particularly genocide. A longer-term follow-up study of Cambodians (analogous in method to our Vietnamese study) attests to the persistently high levels of PTSD in that group (Marshall, Schell, Elliott, Berthold, & Chun, 2005). It is possible that the impact of genocide may impose multiple stresses on survivor populations who have lived through such ordeals. Widespread and severe traumatic symptoms coupled with the destruction of the sociocultural fabric of the society (a specific aim of the cultural genocide perpetrated by the Khmer Rouge) may limit the capacity of the group to grasp fully the opportunities that enhance recovery in favorable postmigration environments in resettlement countries.

Culture

The Vietnamese study cautions against simplistic notions of culture in considering the mental health impact of mass trauma. As indicated, PTSD was the most common disorder among Vietnamese and although the category was not identified by the indigenous measure, PTSD as measured by the CIDI was associated with substantial disability. Similarly,

trauma exposure showed a substantial dose–response relationship with all forms of mental illness determined by the western diagnostic instrument and the indigenous measure (Steel et al., 2002). Nevertheless, the fact that most sufferers attributed their symptoms to physical illness may have been responsible, at least in part, for the pattern of health service utilization that emerged. Specifically, Vietnamese with PTSD showed the same high level of consultations with family physicians, but low levels of specific mental health consultations with specialist mental health services.

Although an array of factors such as access, cost, and the cultural receptivity of treating agencies may have played a role in the low referral rate, it seems possible that misunderstandings about the implications of PTSD symptoms by the sufferer, the family, and even by primary care physicians (many of whom are ethnic Vietnamese in Sydney) may retard the process of obtaining appropriate mental health attention for that disorder. Hence the findings do suggest that, far from being irrelevant to mental health, PTSD and associated disability is at risk of neglect in this (and possibly other) refugee populations.

At the same time, the inclusion of the indigenous measure indicated that Western nosologies are inadequate in identifying all relevant forms of psychiatric distress among refugee groups such as the Vietnamese. Compared to the CIDI, the PVPS identified an additional 30% of cases of mental disorder among the Vietnamese, with the somatization scale accounting for most of these cases. The ICD-10 category of neurasthenia failed to account for most of these cases suggesting that ethno-specific measures of somatization are needed in order to assess relevant symptom patterns across cultures (Kirmayer, 1996). There appears to be a pressing need therefore for psychiatric epidemiology to recognize that the application of standard structured interviews may yield misleading results across cultures, potentially under-enumerating symptoms of distress. This observation may be particularly true of East Asian populations where the overall prevalence of mental disorder using international case finding methods appears to be low (Compton et al., 1991; Demyttenaere et al., 2004; Shen et al., 2006; Takeuchi et al., 1998).

The prominence of somatic symptoms in the Vietnamese also suggests the need to understand the holistic concept of health that is fundamental to that culture, a perspective that regards a separation of mind and body as alien (Phan & Silove, 1997; Shen et al., 2006). Hence, engaging patients in a therapeutic alliance requires an explicit recognition that the patient expects the clinician to attend to all aspects of his or her health needs simultaneously. The risk, however, is that the focus will be on physical treatments with which the physician is most comfortable or that assumptions will be made that Asian patients are not receptive to psychological interventions. The task for the western clinician is to sup-

port a holistic perspective that portrays treatments for disorders such as PTSD within that all-inclusive framework.

CONCLUSIONS

This chapter explores the ongoing controversy surrounding the impact of trauma on the mental health of transcultural populations, particularly refugees. We draw on a study of Vietnamese refugees in order to illustrate the complexities of these issues. The data show that trauma and PTSD remain important to the overall mental health of the community 11 years after resettlement in a Western country and that the concentration of trauma-related problems is among the subgroup with the most severe trauma exposure. For those with lesser exposure, traumatic stress symptoms are moderated by the restorative effects of living in a safe and secure environment. The chronically symptomatic subgroup is at risk of neglect, partly because symptoms are attributed to physical ill-health either by the patient or the doctor or both. At the same time, even a thorough psychiatric examination will miss cases if the frame of reference is restricted to the Western nosologic system. A substantial number of cases manifest culturally-based symptoms of distress, particularly of a somatic type. A greater focus is needed therefore on devising assessment tools that more comprehensively integrate Western and ethno-specific concepts of mental disorder (Kirmayer & Young, 1998; Patel & Mann, 1997; Patel, Simunyu, Gwanzura, Lewis, & Mann, 1997; Phan et al., 2004). Seeking a deeper understanding of the underlying conceptions of illness in each culture, by drawing, for example, on the assistance of bicultural counselors, is an important first step in guiding the clinician toward making a culturally informed formulation of symptoms presented by patients and their families. Working toward a shared framework for understanding the lived experience of the patient in any culture is essential to forge a therapeutic alliance, the foundations for ensuring adherence to any specific interventions that are prescribed by the clinician.

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Chapter 14

Assessment of Trauma for Aboriginal People

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Psychological trauma is pervasive for Aboriginal Australians, both in its impact on individuals and their families through the earlier processes of colonisation, and in ongoing ways through disadvantage, experience of violence, illness, injury and premature mortality. Traumatic experiences have impacted on individuals, families and communities and on culture. And these experiences continue. As Ober, Peters, Archer, & Kelly (2000) cogently argue "understandings and responses to acute trauma in Aboriginal settings today" need to be understood "within a framework of collective and cumulative traumatisation over several generations" (p. 242). They also suggest that the adverse social and health indicators experienced by Aboriginal people reflect the cost of "systematic and pervasive traumatisation over several generations" (p. 242), although they acknowledge that these connections are not necessarily accepted by others. This chapter will discuss the assessment of such chronic and pervasive traumatisation as it may have effects over time; the specific traumatisations associated with policies and practices that led to "The Stolen Generation"; the trauma and grief potentially associated with the high levels of premature mortality and morbidity in Aboriginal communities; trauma associated with specific traumatic stressors affecting individuals, such as child abuse, domestic violence, sexual assault, violence and associated injuries and other profound life threat circumstances.

Halloran (2004) has also highlighted the cultural trauma experienced by indigenous Australians, with damage to the sense of strength and identify that occurs at a group and individual level when beliefs, language and culture are lost.

This paper will consider how "assessment" may take place in culturally sensitive ways at both population and personal levels, and so that its outcomes do not further traumatise, and can contribute to positive

developments. Specifically also, clinical issues in such assessment, as they are perceived and viewed by Aboriginal people, are discussed, so that any such "assessment" fulfils requirements of cultural competence, clinical utility and can lead to culturally appropriate healing strategies.

ASSESSING CHRONIC, PERVASIVE AND COLLECTIVE TRAUMA

The recognition of trauma, "psychological injury", associated with the impacts of colonisation, has been relatively recent. It is also clear that many of the policies of colonial governments were delivered under the umbrella of "protecting" native populations who were often perceived as less adequate to determine their own futures than the dominant ruling group. These perceptions were also present for Native American Indians, New Zealand Maori and many other indigenous people and they, too, continue to demonstrate some of the ongoing impacts (Wesley-Esquiremaux & Smolewski, 2004). As well it is suggested that continuing racism and stigma contribute further stressors for Aboriginal people generally and have additional negative impact for those traumatised by past and current disadvantageous social circumstances. Another difficulty in systematically identifying the health and social impacts of such traumatic experiences has been the lack of epidemiologically sound studies or data on Aboriginal Australian populations. There are many reasons for this, which will be outlined below before exploring the developments that are now attesting to the significance of such trauma exposures at population levels.

Firstly, Aboriginal people in Australia are not now and have never been a homogeneous population. It is estimated that, at the time of settlement, there were over 500 autonomous Aboriginal nations, each with its own culture, law and land, as well as language. As Ober et al. (2000) emphasise, there were many different experiences of colonisation, some depending on whether or not the "land" or "country" so central to group and individual identity was seen as of value to the colonisers. Some Aboriginal people living in very isolated communities, relatively inaccessible or arid lands, remained in tribal isolation until well into the twentieth century, and thus held on to land, culture and language so central to their identity and well-being. Nevertheless, for most, the spread of transport and communication, and mining and agricultural industries has encompassed even the most traditionally isolated communities.

The population of Aboriginal people on the Australian continent prior to colonisation is variously estimated, but it is agreed that following white settlement, the impact of introduced diseases such as smallpox, and policies which viewed the land only in terms of its economic value, and

dislocated Aboriginal people from it, as well as the conflict and killing of Aboriginal people, lead to a decimation of this population. Those dispossessed from their lands, even if surviving, were likely to be dispersed to live on the outskirts of towns, or their welfare taken over by agencies who segregated them. Their decline was seen as evidence of racial weakness: that they did not demonstrate "survival" fitness in Darwinian terms. This lead to views that the mixed-race children, who resulted from contact and relationships between settlers and Aboriginal people should be "taken away" and raised in white families or institutions (to be trained as servants or workers) and that the race would thus "gradually die out". This was directly stated in Government policies of the time. The poor physical health of those Aboriginal people remaining was seen as evidence of this, and specific policies lead to formal procedures to place children in places such as "Cootamundra Girls Home", and many others. Children in such circumstances not only suffered the sudden separation when snatched from their families, but were also frequently subject to physical, social, emotional and sexual abuse in these institutions.

These descriptions cover only a small segment of many of the traumatising and dehumanising practices that existed over the period from 1788 (white settlement), but highlight the complex mix of stressors to which so many were exposed. These included psychological trauma in the sense of life threat; violence and abuse; the loss and grief associated with separation which tore apart close family and kinship ties and the ongoing and chronic psychological and social impacts of racism, discrimination, fear, humiliation and loss of culture, land, language, identity. There was a legacy of 200 years of unfinished business (Swan, 1988). These exposures have been difficult to quantify so that their systematic assessment in terms of their impacts on population well-being has only recently been documented in ways that have meaning to Aboriginal people and ways that have been developed in partnership with them.

Such exposures in the past have been added to by current high and ongoing rates of separation of children from parents and families through welfare systems responding to adverse family and child circumstances; through high rates of juvenile incarceration, and by high rates of adult imprisonment, compared to non-Aboriginal populations. Premature mortality adds further to this including impacts from heightened perinatal morbidity and additionally the fact that Aboriginal people have approximately 17 years of life less than non-Aboriginal Australians and have heightened and earlier rates of morbidity from childhood to old age (The Australian Institute of Health and Welfare (AIHW), 2005).

Recent reports on Aboriginal health and social indicators from national data gathered systematically by the Australian Bureau of Statistics (ABS) and by the Australian Institute of Health and Welfare (AIHW) report on such patterns (AIHW, 2005). Even in the twenty-first

century the data are constrained by differential identification of Aboriginality, by different data collections in states and territories of Australia and by social and cultural issues about reporting. However, structures now in place nationally are further supporting the development of such information, including a model for monitoring social/emotional well-being in ways that are acceptable, reliable and valid, for Aboriginal people. This recent report indicates that Aboriginal people were at least twice as likely to have profound or severe limitation to core activities as a result of disability; Aboriginal babies were twice as likely to be of low birth weight. Where perinatal morbidity was identified for Aboriginal babies, it was twice that of non-indigenous babies; the death rate for Aboriginal children, 1–14 years was more than twice that of non-indigenous children of the same ages: Aboriginal people were likely to have experienced at least one significant life stressor in the past 12 months (82%) and nearly a quarter (24%) reported being a victim of physical violence or threat of this. Aboriginal people who had been exposed to such traumatic stressors reported higher rates of poor health and health risk behaviours. Aboriginal people who had been removed from their families as children reported poorer health outcomes that those who did not report they had been so removed, and also higher levels of profound and severe disability, particularly in those 15–34 age group. Ongoing concerns about child abuse and family violence have been highlighted in recent reports (NACCHO, 2006). The importance of recognising and preventing such impacts on social and emotional well-being is central to preventing ongoing trauma induced morbidity (NACCHO, 2006).

Morbidity and mortality rates identified in such population-based data highlight the further traumatic circumstances that are likely to complicate bereavement, grief and mourning for indigenous peoples. For instance, in three States of Australia, 75% of indigenous male deaths and 65% of indigenous female deaths occurred before the age of 65 years, compared to 26% and 16% of non-indigenous males and females, respectively. Injury, including accidents, intentional self-harm and assaults, was the second leading cause of death after diseases of the circulatory system. This highlights both the extent of traumatic exposures and the highly distressing, premature, violent and untimely deaths that are pervasive. For instance, McDermott (2006) makes personal reference to his experience of multiple tragic losses, including closely occurring deaths in his family. All were young and one died from suicide. As well as higher rates of mortality from all causes of death, there were higher rates of multiple causes of death (five or more causes).

Ongoing family dislocations and separations, trauma and loss are indicated by rates of 8–10:1 of Aboriginal compared to non-Aboriginal children being placed under care and protection orders, and the fact that about 40% of 10–17 year olds in juvenile detention centres are Aboriginal. Family

violence, assault, sexual assault, neighbourhood conflict and lack of feelings of safety and other problems were frequent in many communities, with three quarters of indigenous peoples reporting one or more such problems.

Psychological stress was reported to affect almost 50% of those over 15. One of the most telling amongst social indicators is that almost a quarter (24%) of indigenous adults reported being a victim of physical or threatened violence in the last 12 months. These rates were particularly high amongst those men and women who had been incarcerated at sometime in the previous 5 years. And indigenous adults were 11 times more likely than non-indigenous to be incarcerated and younger. The third author, while assessing Aboriginal people in correctional settings, has noted that substance abuse, depression and anxiety symptoms have often been precipitated by multiple traumatic levels, both long term and recent. Thus severe, chronic and ongoing stressor exposures continue, as well as high rates of traumatic stressors that are such as could lead to traumatic stress syndromes in these populations.

RESEARCHING POPULATION DATA ON TRAUMA: ASSESSING PSYCHOLOGICALLY TRAUMATIC EXPOSURES AND IMPACTS

While research at a population level has provided data on PTSD both through systematic interviews and questionnaires, the assessment processes have used a variety of measures of traumatic exposures; and traumatic stress reactions, as well as assessing PTSD and other major mental health consequences, and the behavioural and social outcomes of such exposures. Studies with populations affected by a single incident, for instance the terrorist attack of September 11, 2001 showed impacts which were intense initially, but decreased over time, which had a dose–response relationship to the event in terms of closeness to the site, and other health and behavioural impacts (Neria, 2006). Even so people had many different experiences "close-up", including exposure to gruesome deaths, personal life threat, near escapes, loss of love ones, colleagues, work and so forth. Social disruptions were profound and stressors of the aftermath were multiple. Measuring such exposures was complex. Culture influenced experience and response even in this typically western city. Measures of reactions, distress, behavioural changes, social change, were studied, with diverse researchers and instruments. It is also clear that some effects are prolonged, some delayed and others secondary to this experience.

This indicates clearly the complexity and diversity of research and knowledge building in this field – even when it is in relation to a single disaster.

In terms of the complexity of Aboriginal experiences, measuring of both acute and chronic pervasive traumatic exposures and their impacts in ways that are culturally sensitive, is a major achievement of the Western Australian Aboriginal Child Health Study (Zubrick et al., 2005). This methodologically sophisticated study of Aboriginal Child Health was developed in partnership with Aboriginal communities who are the data custodians. Of particular relevance to this chapter is the assessment of social and emotional well-being; of stressful "traumatic" life exposures and their correlations. This study measures the impact of a child being cared for by a carer who had been "taken away" from family as a child. The systematic measure for well-being (Mental Health) was the Strengths and Difficulties Questionnaire (Goodman, 1997) modified with Aboriginal people and tested, plus a measure of stressful life exposures and experience of carers (see Table 1).

Children and young people who had experienced seven or more life event stressors in the preceding years were 5 $^1/_2$ times more likely than those with less than two exposures, to have clinically significant emotional, behavioural and mental health problems. Those whose primary

Table 1. Exposures

Stressful life experiences

Primary carers were asked: Have any of these things happened in your family in the past 12 months?

a. A close family member had a serious medical problem (illness or accident) and was in hospital
b. A close family member was badly hurt or sick
c. A close family member was arrested or in gaol/prison
d. Your child/children were involved in or upset by family arguments
e. A parent/caregiver lost his/her job or became unemployed
f. A close family member had an alcohol or drug problem
g. Your family did not have enough money to buy food, for bus fares or to pay bills
h. A close family member has a physical handicap
i. An important family member passed away
j. Parents or carers left because of family split-up
k. You have felt too crowded where you lived
l. Your child/children had to take care of others in the family
m. Your child/children have been in a foster home
n. Your child/children were badly scared by other people's behaviour
o. Other (please specify)

Western Australian Aboriginal Child Health Survey.
The Social & Emotional Well-being of Aboriginal Children and Young People, Vol. 2, p. 599.

carer had been "taken away" as a child were twice as more likely to have high levels of clinically significant emotional and behavioural problems, and alcohol and drug problems. These and other critical findings show how easily the vulnerabilities of childhood may arise in associations with such stressors 24% Aboriginal children, compared to 15% of non-Aboriginal children aged 4–17 were at high risk of clinically significant emotional and behavioural problems including the impact of such trauma in childhood. Furthermore, such childhood experiences increasingly contribute to the trajectory of vulnerabilities in adult life, setting up cycles of traumatisation, victimisation and further traumatic events.

THEMES IN ASSESSMENT OF TRAUMA AT THE CLINICAL LEVEL

There are core questions that will require much further research to provide a strong conceptual framework for understanding psychological trauma in diverse cultural contexts. Wilson (2005) has identified these. They include, for instance consideration of whether the experience of psychological trauma is the same in all cultures; are traumatic experiences universal or does culture with its cognitive–affective belief system processes filter such experiences? Are emotional reactions or behavioural responses to deal with psychological trauma influenced by culture? Are the psychological mechanisms the same across all cultures, and if they are, are they interpreted differently in different cultural contexts? Are there specific culture-bound syndromes in response to psychological trauma?

As Wilson indicates there are not as yet any systematic answers to such questions across cultural settings. He suggests that themes of mythology dealing with death, entering into the "abyss" of trauma, and the subsequent journey beyond, may be informative for understanding acute trauma but are less obviously so for complex, collective and chronic endemic trauma experience. Examining the assumptions that underlie healing cultures that involve rituals, psychological, physical and other "treatments", for instance the Native American Sweat Lodge ritual for warriors, may provide some indications. Critically however, there are no standardised assessment protocols to address such issues. Further complicating this picture is the merging of trauma and grief in many conceptualisations, although these reflect different, but often coalescing, stressor exposures. Rituals of grief, mythologies and culturally defined behaviours, are very prominent in relation to grief and bereavement in most cultures, and frequently reflect some universal themes. These include for the bereaved the requirements for grieving and mourning, reflecting psychosocial adaptive processes, and those centring about the deceased, the

disposal of the remains and the changes that follow for all. The elements of time, adaptive processes and different patterns of expression of distress, are all relevant.

In examining these issues for indigenous populations and for Australian Aboriginal people such questions also apply, but are as yet unanswered. Nevertheless, as Wilson (2005) has conceptualised, the idea of the "Trauma Archetype" is a useful core on which to build. This hypothesises "a prototypical stress response pattern present in all human cultures, universal in its effects and manifest in overt behavioural patterns and intrapsychic processes". (p. 35) These altered states, physiological, psychological and social reactions, are expressed in the "Trauma Complex". This model, the Trauma Archetype, involves the experience of threat to psychological and physical well-being, the confrontation with death, the "Abyss" and return from it, and this archetype energises post-traumatic response, recovery, healing, growth, as well as diverse meaning attributions. While this chapter will encompass such understandings, it will chiefly reflect them in terms of what is known about trauma and grief for Aboriginal Australian peoples, and the assumptions that can be used to inform assessment of their pervasive endemic experience of trauma, their courage, resilience and what they require for healing journeys.

These issues will be explored in three major ways: firstly there are the *sensitivities, knowledge, skills and competencies required to engage with diverse Aboriginal people in ways that are culturally appropriate*. These diversities included urban, rural and remote and isolated populations; it includes diverse tribal, kinship and communities; and there are diverse historical and contemporary experiences across the spectrum of human challenges and achievements.

Secondly there is the need to *understand in the Aboriginal context the trauma archetype; the trauma complex, the traumatic exposures, reactions, interplay with grief and other stressors*, as well as the *diverse impacts*. And, as will be outlined below, there is the need understand the historical nature of trauma and loss, to be able to assess this and its impacts for individuals families, kinship networks and communities. This of necessity involves the recognition of complex as well as collective trauma, and acute. This will require the recognition of the many "faces" of trauma and grief – from infancy to old age; of the shame, secrets and stigma so often involved; and of the behavioural, social and cultural patterns that may be associated – such as family violence, suicide, poor physical health, substance abuse and antisocial activities.

Thirdly, assessment needs, here as elsewhere, to involve the *assessment and* exploration of *biological, psychosocial, social, cultural and spiritual factors* that may *contribute* to onset, course and outcomes associated with traumatic experiences. There is the need to assess vulnerabilities that may contribute further to morbidity, mortality, disability so that these may be

addressed in any healing strategies, or with more formalised interventions. As well it is essential that *strengths* of individual, family, community and culture are included for the assessment processes for they will be critical for recovery, for building resilience. And all of these themes must be encompassed in ways *informed by Aboriginal concepts*, such as holistic understandings of health and social and emotional well-being.

Engagement and Assessment

There is much to suggest that Aboriginal people in Australia confront many barriers in accessing care, that they may not do so until their needs become more extreme, and when they do get care it may be very basic and not well-tuned to their culture or their complex condition. Westerman, a senior Aboriginal psychologist has developed valuable guidelines that provide a framework for engagement with Aboriginal clients in the Northern Territory (Westerman, 2004). As she states, there is a "lack of empirically grounded conceptual frameworks that have proven their efficiency with indigenous peoples" (p. 1). Furthermore, most clinicians wish to be culturally sensitive in their actions but may not have an operational framework to help them to achieve this. Engagement involves, she suggests two constructs: those relating to the cultural appropriateness of the processes; and as well those relating to the quality of the relationship between clinician and client.

Culturally Appropriate Processes

This requires a recognition of both one's own culturally determined beliefs, values and behaviours and cultural awareness, knowledge and respect with regard to Aboriginal cultures, so that the person is not judged against western models. There is a need for acknowledgement of the holistic conceptualisation of health, the relation to land, genealogy and kinship, and the quite specific "country", tribal and family issues of the community or region. Physical, social, emotional, mental, spiritual, land and culture variables may all contribute to the holistic health or general unwellness of the person. Engagement and assessment will need to be attuned to these variables; as well as how problems or symptoms are perceived by the Aboriginal community within Aboriginal cultural paradigm. Problems may also be attributed to external causes, particularly in traditional communities.

How the *clinician is "introduced"*, and by whom, for instance another Aboriginal person who is trusted, how they identify their role and what they can offer, will all help engagement. The clinician may be "vouched for" by other members of the indigenous community which will be important for a non-Aboriginal practitioner. Cultural consultants may

also be engaged by clinicians, but these will be a need to be sensitive to requirements such as belonging to the right level or group, to be gender appropriate if there is "men's business" or "women's business" to be discussed, and perhaps in traditional settings, be of the correct tribal processes or language group. In essence any cultural consultant should be one perceived as helpful and acceptable to the client.

Communication styles which are tuned to Aboriginal ways are seen as more effective. Styles should be those which "focus on the narrative, which are open-ended, and positively phrased", (Westerman, 2004, p. 3) and jargon should be avoided. This is discussed further in Sheldon's work with those living in isolated remote communities of Central Australia.

Qualities of the Relationship

This relationship needs to ensure that cultural disparities between clinician and client are recognised, and wherever possible are not too great. A higher level of cultural awareness is helpful and especially so when it is able to take into account local themes, historical contexts. Westerman also suggests that ongoing cultural supervision can be helpful to the clinician working in such settings.

As with all client/clinician relationships, respect, recognition of "the person's strength and goodness of spirit" (p. 5) will help engagement, as will the genuineness, empathy and warmth that are central to all such interchanges, indigenous and non-indigenous. Acknowledgement of spirituality as a positive strength is important to both engagement and care (Samson, Lloyd, Petchkovsky, & Wiremu, 2005). Spirituality encompasses the meaning of life; connectedness; transcendence; values and beliefs and "becoming" (Samson et al.). It is suggested that spirituality can provide a sense of hope and strength generally, and specifically in the face of adversity, so is very relevant for the engagement with, and assessment of, those who have experienced trauma.

Westerman's coverage of these issues is helpful, although it is also true that there is a great diversity amongst Aboriginal people. Nevertheless cultural issues will be relevant for engagement and assessment in all contexts. The same themes flow through: family, connectedness, land, country, kinship, culture, spirituality; sadly too the themes of trauma, loss and adversity are universal.

Diversity of Histories and Contexts

Further observations relevant to engagement and assessment are provided from the work of Mark Sheldon, a young non-indigenous Australian psychiatrist who worked with very remote communities in Central Australia, before his own premature death Sheldon (2005). Sheldon crossed the desert

areas of Central Australia to provide assessment and psychiatric care to those living in these isolated communities and outstations. He spoke of "the palpable feeling of spirituality connected with the ancient landscape" (pxi). He noted the *great diversity of personal histories*: his contacts ranged from the nomads with little contact with white society to others who had had tertiary education, to those who had travelled overseas; to members of the "stolen generation" who had returned to find their origins; to those influenced by missionaries or to those whose lives were bound to pastoral industries.

He emphasised the diversity of each community with its *own mix of such influences*, as well as tribal and "skin" related contexts and disconnection from lands. He identified the knowledge of these histories as important to engagement and work with community members in their own communities. Sheldon also recognised the cultural belief systems and traditions that were still so strong including: traditional kinship networks; ceremonial "business" and "sorry business" (grieving rituals); gender roles that were complementary in creative power and sustenance of people and land; hunting and collecting "bush tucker" and of course healers, "bush medicine" and sacred places (Sheldon pxiii 2005). Sheldon also followed on work of others in understanding emotions and their expression in these cultural contexts, and in using the language, including words of these cultures to identify the different affects (e.g., Morice, 1978, 1986). Sheldon also identified the need for culturally appropriate cognitive assessment tools for such settings, but in the absence of valid measures, he evolved his own mental state assessment processes, including the observations of family and others.

Collaborations and Engagement

The work of the psychiatrist in such settings required *collaboration with other professionals* such as Remote Area Mental Health nurse, Aboriginal Health and Mental Health Workers and traditional healers (Ng-unghari). Collaboration was essential for effective assessment, as was flexibility. Assessments were carried out in many different physical settings, including most often the home where extended family and kin would gather. He found that Western notions of privacy may not apply in the same way and that such "family" assessment could be most helpful in understanding the nature of the problems. Such themes may be relevant to assessment in non-traditional settings, but whether or not privacy or family-based assessment considerations are required, will need to be sensitively evaluated. For instance if family violence is the central issue this is more complex, or there may be a shame or secrets requiring sensitive exploration. The trauma may be seen as requiring different solutions, involving individual, family or community.

Sensitivity and Trust

In working with Aboriginal people in such settings the clinician took a *low-key*, non-*threatening approach*. Shyness, shame, might be influential factors, and it was considered important not to intrude on the personal space, not to have too direct an eye contact and to tune this to the level of comfort of the client. Time is also important; the clinician needing to move at the clients pace, to be unhurried. And there needed to be a careful introduction to the clinician's role, what he or she would offer.

Credibility is critical, and as Sheldon suggests "credibility is earnt by your acceptance of Aboriginality, willingness to learn Aboriginal ways, and humility" (p. 21). The development of the relationship is the critical first step, and "to show who you are not, just what you are". At the beginning of any history taking process it was suggested that it was important to talk clearly and wait for a considered response. This could involve more revealing openness from the clinician and respectful engagement with the various family members, including sensitive acknowledgement of the status of elders and recognition of gender-related concerns. Story telling processes could help to weave through the assessment process in such traditional settings. Patience through such interview processes was seen vital.

There are a number of *particularly sensitive areas*. Bereavement, or "sorry business", is one powerful theme, with attendance at funerals, rituals for grief and mourning. For many Aboriginal people it is not considered appropriate to mention the name of the dead person, or to ask directly about them. Ceremonial business, such as initiation or "men's" or "women's business", may be surrounded by taboos indicating sanctions to curtail behaviours.

Sheldon emphasised how important it was to be sensitive *to whatever might cause shame* or *embarrassment* for the person. Such emotions could become a barrier, making it important for the clinician to clarify if the assessment process could progress. This may be a particular challenge with assessing experiences of trauma and violence. The person and family may be shamed by what has happened. Self-esteem may already be poor and self-attributions may add to a sense of inferiority, humiliation and further powerlessness or anger. Emotion and mood are important indictors but may be represented by different concepts, for instance "weak spirit", or crying may not have been sanctioned, so that it may appear that people are not grieving or sad.

This, like other assessment processes requires engagement which will lead to a level of *trust* that is such that the client, the family will be able to tell their story, to *gradually begin their narrative* within a biopsychosocial framework. This narrative will be one strand of the experience and when shared empathetically may be the beginning of healing. But, as will be

discussed below, there may be many manifestations of trauma and grief that will need to be encompassed in this assessment process. Biological, physical, social, spiritual, functional and other domains of influence and impact may need to be explored. Nevertheless, as Atkinson so powerfully identified, *the sharing of the story, the learning together* is vital, so that "courage, resilience and resonance can enable us to survive and grow from painful experiences" (Atkinson, 2006).

Trauma Manifestations: The Trauma Complex for Aboriginal People

There is recognition in reports such as those from the Aboriginal Healing Foundation in Canada (Wesley-Esquiremaux & Smolewski, 2004) of the importance of concepts such as complex and collective trauma when considering the many adversities that indigenous people have faced in Canada, North America and Australia, as well as elsewhere.

Trauma and Grief

In their overview of their study and other research relevant to this field, they suggest that there was "unremitting trauma and post-traumatic effects" (piii) which in the case of the American context was responsible for "rendering indigenous people physically, spiritually, emotionally and psychically traumatised by deep and unresolved grief" (piii) (Wesley-Esquiremaux & Smolewski 2004). They see this as also relating to Australian Aboriginal people – furthermore they go on to develop a model which sees the trauma as reflecting Herman's complex or endemic PTSD (Herman, 1997) which they see as resulting from "historic trauma transmission" (HTT). They also suggest that the historic experience has created a "nucleus of unresolved grief" that has continued to affect successive generations. Through the progressive impacts of colonisation, with the traumatic exposures and losses highlighted above, as well as the ongoing stressors of these and other sources, they suggest that the "cumulative waves of trauma and grief have not been resolved", and that they "have become deeply embedded in the collective memory of Aboriginal people" (piii).

Culturally Endemic Trauma

Of particular significance are the concepts of the trauma becoming "culturally endemic" over successive generations. As such it may not present as a specific identified individual disorder. Herman's model of complex PTSD with multiple clusters of symptoms or reactions is seen as a useful framework. For instance, the clusters in Herman's (1997) model include:

criteria of alterations in affect regulation with associated persistent dysphoria; chronic suicidal preoccupations; problems with expression of anger; alterations of consciousness, including amnesia, dissociation and reliving experiences; alterations of self-perception including the sense of helplessness, defilement, guilt, shame, self-blame, and of separation and difference from others; alterations in perception of those who have perpetuated trauma with a focus on threat; alterations of relationships with others including distrust, disruption, isolation and withdrawal and alterations in systems of meaning, often with hopelessness and despair. Then any acute, "new" trauma or grief is likely to be imposed on clusters of reactions, including the above, and their social and physical, cultural, spiritual and psychological impacts. These issues are described for Australian Aboriginal people who have faced this high level of historic trauma and loss, as well as current.

Of particular relevance to indigenous peoples affected in this way is how the historic trauma reflects many clusters of traumatic events, with many different areas of impact. It may not be able to be understood, or assessed and diagnosed as a disease in the way, for instance PTSD is diagnosed against diagnostic criteria (DSMIV). Wesley-Esquimaux and Smolewski (2004) hypothesise that "hidden collective memories of this trauma, or a collective non-remembering is passed from generation to generation" (p. 65).

Behavioural Patterns

Various *maladaptive social and behaviour patterns* resulting from the cultural transition, dispossession and oppression and associated trauma and grief are also historically transmitted. Furthermore because of the interconnectedness that is so central to Aboriginal culture the trauma and grief spread, as though by contagion, so that distress is extensive and widespread. In addition the breakdown of culture and social groups through dispossession and dislocation means that those cultural rituals that may have facilitated healing, as they were evolved to do, lost practice and potency. Similarly psychological processes such as learned helplessness, a loss of social control in self-damaging ways; a loss of self-efficacy and loss of social support are all potential mechanisms in the negative cycles associated with such profound traumatic experience. Behaviour patterns of particular significance that may have their origins in traumatisation, include antisocial, abusive and violent cycles; high levels of risk taking; and the use of substances such as alcohol, drugs, petrol with petrol sniffing; and behaviours adverse to looking after the self, to health and well-being (Halloran, 2004). Such behaviours may also be fuelled by social trauma, and traumatised, reinforcing social stereotypes.

Cultural Transmission of Trauma Constellations

Such processes of transmission are hypothesised to occur in number of ways. There may be transmission of traumatic memories; through emotional contagion; or it may be a secondary impact associated with the traumatisation of loved ones; and possibly an interplay of physical, cultural, social-psychological factors; or even perhaps as suggested recently, by "genetic memory codes of a traumatised parent to a child" (Wesley-Esquiremaux & Smolewski, 2004). (p. 73), perhaps reflected in neurochemical processes in the brain. It is also suggested that complex heredity and environment interplay occurs, with multiple domains of effect. It is also likely that "Aboriginal people's narrative of grief and their present reality confirm the past narrative of loss" (p. 74) and that there is as well "a nexus of past loss and present grief" (p. 74). Cultural transmission may occur through story telling, culturally sanctioned behaviours; social domains as may be reflected in individual parenting, family violence and abuse; psychological transmission may be through memory processing. The nature of these processes as well as the "dark nucleus of grief", or the "image of loss", that is transmitted, will need to be understood if the unresolved grief and despair are to be healed. Nevertheless as emphasised by indigenous people they need to regain social, cultural and psychological and spiritual agency, to utilise their strengths, resilience and connectedness, for such healing to occur. They must not only "overcome learned, social helplessness, to reappropriate their internal locus of social control, and to produce their own representations" (p. 82). As well they need to "renegotiate their cultural and political identities, and their historic memories" (p. 82). This may require a public forum where testimony can be given to their experience, their suffering acknowledged, and their strengths celebrated, for instance the "Bringing Them Home" report of the National Inquiry into the Separation of Aboriginal and Torres Strait Islander Children from their Parents (Human Rights and Equal Opportunities Commission, 1997).

Assessing Complex, Collective, Chronic and Acute Trauma with Aboriginal People

It is clear from all that has been reported in the experience of indigenous peoples that themes relevant to assessment of trauma must take place in sensitive and culturally appropriate ways, and as Aboriginal people and their families are "ready". It is also a truth, a requirement, of Australian Aboriginal people that the assessment of their trauma is purposeful, universal, non-stigmatising and does not harm. Adverse cultural stereotypes frequently link violence, substance abuse, abuse and problems with the law to inherent attributes of Aboriginality, rather than the consequences of

social, cultural and historical personal trauma and family experience. The assessment of adverse traumatic experiences and their impacts has only been recently developed and as Wilson and others have highlighted, conceptualisation, assessment and exploration of contributing variables, biological, psychological, cultural and social, is still in early development. And only more recently have spiritual and cultural issues been acknowledged. Western models such as PTSD have been superimposed on many cultural settings and frequently deemed to be inappropriate (e.g., Silove, 1999).

ASSESSMENT STRATEGIES

There are several significant *themes* in the *realities of assessment* of trauma:

(a) The *process of enquiry and exploration of traumatic experiences* should be such as to include the *recognition of suffering and the recognition of strengths*, of resilience. This identification of impact and pain will be the focus for healing, but it is the strengths of indigenous people themselves, recognised and supported, that will be essential for healing. Without this, the burden of the "trauma" and its impact will seem overwhelming for all. The recognition of resilience, of post traumatic growth (e.g. Tedeschi & Cahourn, 2004), has only been relatively recent. Most systematic research assessment protocols focus on pathologies, functional impairments and social and behavioural impacts associated with adverse outcomes. Strengths and resilience have usually been dealt with in separate studies, of which they are the focus, and not integrated into the clinical process.

In research terms the Western Australian Aboriginal Child Health study has explored adversities and their impacts, as well as strengths and difficulties at a population level, building an understanding of the positives, the wellbeing as well as the adversities, the traumatic exposures and their debilitating impacts (Zubrick et al., 2005). Such studies emphasise the value of *assessing both and the ways in which social, cultural, family and spiritual matters all contribute to holistic health* – all health, and some of the contributions of historical impact. A further extension of similar work with adult urban and other Aboriginal Communities in New South Wales – Study of Environment and Aboriginal Resilience on Child Health – (SEARCH) project (Eades, 2004) explores the two themes with a further focus on an in-depth analysis of resilience. Such systematic research will help to provide a better understanding, will inform assessment and set the basis for evaluating population based and other healing strategies to improve health and social outcomes. The Reconciliation movements, the "testimony" of reports such as the Human Rights and Equal Opportunity

Commission or the Stolen Generations (The Bringing them Home Report 1997) and Aboriginal organisations such as Link-Up which provides family tracing and reunion, have built on the basis of recognition of suffering and strengths. Many excellent healing programmes have also been developed by diverse Aboriginal communities to help with such aims, i.e. the recognition of strengths and the resolution of trauma (Peters, 1995).

Assessing trauma related vulnerabilities at a clinical level requires a r*ecognition of likely exposures*, be they related to trauma, grief or other stressors. It needs also to recognise that past exposures and their impacts will leave a background of trauma related phenomena for many Aboriginal people: children, adolescents, adults and older people. There is of necessity, an assumption of historical trauma and loss and transgenerational transmission. The exposures may be assessed in the history taking for individuals or family, and the known history of family experience. A great many, if not most, families are touched by the trauma of the past. Exploration of health and social state in terms of vulnerabilities, and negative health impacts, and particularly patterns associated with complex collective traumatisation as indicated above, may promote some understanding of these many traumatic experiences. However assessment of strengths and resilience is less readily encompassed in the clinical processes which are pathology focused. Specific assessments need to consider coping styles, or response strategies to major adversities, looking for the more resilient components, including the personal and family strengths which people have used to deal with such challenges, and their positive adaptations. Systematic exploration will require culturally informed recognition, for instance the positive values placed on humour, supporting others, looking after family. These and other attributes may reflect resilience, as may the strong interconnectedness, community support and cultural values in the face of trauma (Peters, 1995).

(b) *Narrative, the story, the history of experience* is the other key theme. Aboriginal people have a strong narrative tradition and their stories and healing are accepted intertwining processes. Narrative therapy has been seen as a valuable framework, by Aboriginal people in Australia and incorporated as a model for psychotherapy and counselling; narrative is a strong component of many "healing" programmes dealing with the distress experienced by those of the "Stolen Generations". Furthermore the "story" of experience, of concerns, of feelings, of distress is the core of all clinical history taking and thus familiar to good clinicians. There are the special issues of the "story" for Aboriginal people as the story reflects trauma experiences, trauma reactions and complex trauma pathology. Clinical assessment will need to recognise the syndromes that may reflect historical trauma transmission, pervasive and chronic traumatic experiences and multiple levels of grief, as well as acute phenomena

that may be superimposed. Then there are the requirements for respectful, culturally appropriate engagement which must be the first goal, if a level of trust is to be achieved. And there is also the assessment of emotional state: whether there is "lack" of emotion reflecting numbness, or dissociative reactions, or reactivity, vigilance, restlessness reflecting increased arousal. Emotional reactivity with lack of self-regulation may reflect problems of emotional regulation, reflecting childhood trauma impacts. It is very easy for non-indigenous clinicians to carry out assessment strategies related to culturally framed perceptions – such as "problems with alcohol", "problems with violence" and "problems with behaviour", rather than recognise that such "problems" may be symptoms of traumatisation.

(c) *Clinical assessment for Aboriginal people*, when there *is a need to assess* trauma, needs to sit *within the following* framework

(1) *Culturally sensitive engagement*. The clinician needs to understand broad issues about Aboriginal culture, but be aware that there will be different communities, different land, kinship and continuing factors which may be relevant. Particularly important is the clinicians' awareness of his or her own cultural "spin", "colour", behaviours, beliefs and values so that these do not shape the clinical approach in ways that will be alien and disrespectful to Aboriginal people. Engagement can occur in this context, but will take a period of time, as it requires a level of interpersonal trust, and must be respectful of the time perceptions of Aboriginal people. Spending time with someone is giving of oneself, and is also a potential symbol of respect. Hurried time may not be.

(2) Seeking the *identified "problem"* or "*difficulties*" while recognising, as in any clinical encounter that these may be the issues that are seen as "safe" to present, and that the deeper stories behind them may not be understood as linked, nor seen as relevant, or may be seen as secret, shameful. Accepting the problematic issue presented is the first stage, but looking with the client, the person, to the timing, the life experience of the time of its onset, the memories and feelings it brings to the fore, may all be clues as to whether it is linked to trauma experiences, as it very frequently will be. Questions as to how the person is dealing with the identified problems, what they are finding to be helpful and effective or not, sets a context for identifying effective coping strategies and personal strengths.

(3) To *understand "problems", "illnesses", symptoms and signs and contexts that must be explored*. To assess and diagnose disorders, to provide treatments that are appropriate, requires not only identification of such problems as the person perceives them but also an understanding of the *person's life* and their relevance to it.

The *story of who they are, their family* and *their experiences* can be elicited in ways that are acceptable to the person, a bit at a time, as they are prepared to share what has happened for them and the nature of their lives. The traditional areas of infancy, childhood, adolescence and family life can be queried because they may link to the problems, but this exploration also reveals family and kinship values, sources of support, areas of conflict and the losses and gains of diverse family contexts. Asking about family as a source of understanding with regard to identified concerns makes sense in terms of the interconnectedness of indigenous peoples, as well as acknowledging health issues in the context of family.

(4) While it is possible that *traumatic experiences* may be discussed during this earlier phase of assessment it is also true that they *may be too painful* for the person to touch upon them; or even *so universal* their significance is not realised. Assessment may proceed through *further specific* enquiry such as "Many people who have "problems" like yours, have had some bad or upsetting experiences, that have contributed – have you had anything like that recently – in the past year or so?" "Have there been upsetting experiences affecting you or your family in the past?" This generic query can open into the narrative, the story of the person's experience.

Specific enquiry may also focus on losses, though this may be sensitive because of taboos about mentioning the name of deceased persons in Aboriginal culture.

"Has *anyone* close to you, some one from your *family died recently,* or in the past year or so?" This can then be gently opened into an enquiry about what has happened, which may provide information about traumatic circumstances of death, and closeness of relationships, and may open into a narrative about the person or the experience.

These queries about experiences that are potentially traumatic, or associated with grief and bereavement give opportunities for narrative about *recent trauma*, but should never be forced.

(5) Queries about *historical and past trauma* are more difficult, but could focus on whether parents or grandparents stayed in their country, were "taken away", and the family's experience of this. Again these explorations and narratives may be extremely distressing for Aboriginal people and should only occur at the person's own pace. Take for example an Aboriginal man, had been taken away as a small child, brought up in an institution and told his parents did not want him. Link-up, the non-government Aboriginal organisation traced and found his family.

They had been shown a document which indicated he had died and been told he was dead. With the testimony of the "Stolen Generations" Report, many people became able to both talk of their experiences and many narratives of family history gave evidence to the trauma and loss they had experienced or that their families, grandparents or other extended kin, had suffered.

(6) The *extent of trauma and loss* is not easy to measure. As noted in the statistics at the beginning of this chapter, deaths occur at younger ages, are often sudden and unanticipated, are associated with violence and accidents, and for communities they are frequent. The first author attended more funerals in one 6 week consultancy period with Aboriginal people than she had attended in her life before, and every community had recently experienced tragic deaths of younger people, including violent deaths, motor vehicle accidents, and suicide. "Sorry business" is a constant part of life in indigenous communities. Narratives about funerals, "sorry business", accidents, violence begin to give a picture of the extent, frequency and severity of trauma and loss.

(7) The *impacts of trauma and loss* may become obvious or may be specifically explored. For instance the phenomena and symptom constellations of complex PTSD; problems with alcoholism; drugs; petrol sniffing; injuries; cycles of abuse; including domestic violence and child abuse, depression; sadness; emptiness; despair; emotional liability; hopefulness and hopelessness; fears. The more subtle health manifestations of tiredness and fatigue; sleep difficulties; being on edge; diffuse worries; appetite and nutrition problems; and so forth may reflect more diffuse trauma effects, as may problems with concentration, memory and attention; negative perceptions of the self; relationship problems; a sense of isolation; of feeling different from others; of not being able to function "normally" and not knowing why. Being traumatised may also make it difficult to care for others or oneself. It is very important that the clinical assessment process does not further traumatise or harm the person, that the explorations of the painful experience are dealt with as the person is ready to do so, are not forced. One Aboriginal woman said of the non-Aboriginal psychiatrist she saw professionally – "he did not listen to my story, my healing in my way". She had dissociative experiences which reflected "spirits" to her, spirits guiding her healing. To him they were dissociated or hallucinatory and delusional phenomenon. Clinical and cultural respect can acknowledge such different perceptions and take into account their significance, meaning and value.

CONCLUSION

Trauma archetypes are indeed universal. Nevertheless their expression is powerfully influenced by culture, and by the nature of traumatic exposures. It is very important to assess the extent of these exposures in the populations of Aboriginal people and their contribution to the adverse state of health and wellbeing. Data sources are now progressively building this knowledge. Such data as is available demonstrates the extent of traumatic exposures of complex chronic pervasive traumatisation as well as acute and historical trauma transmission. These findings call for powerful strategies to redress such factors, to build on the strengths of Aboriginal people, of the oldest surviving culture, to prevent and heal.

At a clinical level there is the beginning of a knowledge of these complex trauma constellations, in this cultural and social context. Special sensitivities, respectful cultural engagement which encompasses the enormous diversities across Aboriginal populations, set a background for assessment. And "clinical" assessment needs to recognise both suffering and strengths; and to explore and assess through narrative, and evolving narratives of problems, life, family, history, experience, response, impacts and adaptations. And "assessment" must not harm, but rather be "therapeutic", and contribute to healing processes, alongside the support of social and cultural programmes which have evolved in address such needs. For it is true that . . .

> Our strength is that we have survived. We are strong, or we would not have survived. Our culture is alive, and is central to our strength. The colonisation process of dispossession made us strong. We depend on each other, we understand and support each other. (Human Rights and Mental Illness, Report of the National Inquiry into the Human Rights of people with Mental Illness Volume 2, Human Rights and Equal Opportunity Commission, Australian Government Publishing Service, Canberra 1993)

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Chapter 15

Combined Psychosocial and Pharmacological Treatment of Traumatized Refugees

J. David Kinzie

INTRODUCTION

The cross-cultural treatment of traumatized refugees is complicated and difficult. The cross-cultural issues of language and values expectations of treatment add to the already difficult task of treating PTSD, depression, and other psychiatric disorders among the refugees. Treatment has usually been suggested with psychosocial therapeutic approaches. These have included psychoanalytic approaches (De Wind, 1971; Varvin & Hauff, 1998), behavioral and cognitive approaches (Basoglu, 1998), testimonial therapy (Cienfuegos & Monelli, 1983), and trauma-focused treatment techniques (Drozdek & Wilson, 2004). Research into the effectiveness of these techniques has been few, undoubtedly because of the large problems of psychotherapy outcome studies across both trauma and cultures. A recent report found that after nine months in a psychotherapy program, the torture survivors showed little improvement (Carlsson, Mortensen, & Kastrup, 2005).

On the other hand, there is a small literature on the use of medication in traumatized refugees (in contrast to the large literature on pharmacotherapy in combat veterans and the general populations). Monoamine oxidase inhibitors have been used in Indochinese refugees (DeMartino, Mollica, & Wilk, 1995). Sertraline, paroxetine, and venlafaxine have been used in Bosnian refugees (Smajkic et al., 2001). Clonidine, with or without an antidepressant, has been used to treat Cambodian refugees (Kinzie & Leung, 1989; Kinzie, Sack, & Riley, 1994). Outcome research is difficult not only because of the multiple cultural and traumatic issues involved but also because these are probably ethnic differences in pharmacology

(Lin, Poland, & Nakasaki, 1993). Combined therapy, psychosocial and psychopharmacological, although often used in practice is rarely reported on. A single report using cognitive behavioral therapy (CBT), with and without sertraline, among ten Cambodian women found substantial gains by adding CBT (Otto et al., 2003).

The Intercultural Psychiatric Program at Oregon Health & Science University has treated refugees for 28 years. Most of these have been severely traumatized and almost all have received a combination of psychosocial and pharmacological treatment. The unique aspect of the clinic is that all refugees are seen and managed by a case manager from their own culture who serves as an interpreter, and all have a treating psychiatrist managing their care. The following patient describes much of the issues and treatment approaches to our patients. At this point, he has been seen off and on for 5 years in the clinic.

CASE PRESENTATION

When originally seen, "A" was a 49-year-old East African male who was self-referred, although he has a sister already in the clinic, because of symptoms of irritability, poor concentration, anger, and pain in his head. These have increased in the past year. He says that he has continued with troubled memories of the past.

History of present illness: "A" had severe traumatic experiences in Somalia which obviously has affected his current symptoms. His symptoms have worsened over the last several years. These include very poor sleep of 3 or 4 h a night, nightmares of the events in his home country, getting startled easily, getting angry quickly, blowing up at his children and his wife even when he tries to control his temper. He notices poor memory and concentration, and has lost interest in most activities. He feels very sad when he thinks about his life. He has startled reaction to any noise and additionally has lost appetite and weight. He tries to avoid all memories of the war he experienced, but is unable to do so completely. He does avoid watching violence on television. He has diabetes and is on oral antidiabetic agents but he has not been able to keep to his medical regiment.

Note: It is important to establish the symptom pattern and its duration in taking a history. Also this aids in establishing a relationship.

Past family history: The patient's father was a tailor. The patient was the youngest having three brothers and one sister. He has a fourth grade education and learned to read and write in his own language. He actually worked in a factory making clothing and later he owned his own store and did quite well. He married when he was in his thirties and a civil war broke out a few years later. He was singled out as being a wealthy person. One night, rebels came into his house, broke his arm, and shot him in the other arm.

He was knocked unconscious. When he awoke, he was completely robbed and his father had been killed. His wife was in her father's house, which was also robbed. They eventually were able to leave and walk to another country for refugees. He saw many people dead and dying and he was robbed again. He and his family united in refugee camp where they stayed for 5 years. During the period at the refugee camp there were many traumas like the burning down of his house, multiple robberies and attacks, and getting severely beaten requiring prolonged hospitalization.

Note: The patient's trauma history is clearly the most important understanding of his symptoms; however, it occurs in the context of his total life experience. Clearly the trauma history explains his symptoms. It is important to know that, as in most refugees, there is no single trauma but multiple traumas over a long period of time.

Past medical history: The patient has diabetes and has been inconsistent in his diet and medication. No alcohol or drug use. Blood pressure was normal.

Note: Medical problems are very common among refugees. Diabetes and hypertension are particularly notable. The emotional and psychiatric disorders make treatment of these complicated.

Medical status exam: He is a small, thin man appearing younger than his age, and well oriented to time and place. He is intense and he speaks with pressure speech, stutters occasionally, and seems overwhelmed by events that he has described. He seems a little irritable but was able to control himself. His thoughts were normal and goal directed, and at that time there was no evidence of psychotic symptoms.

Note: Mental status examination is extremely important – both to describe the interaction with the patient and to detail any cognitive and psychotic symptoms.

Diagnosis: The man met the criteria for posttraumatic stress disorder and major depressive disorder and, in addition, he had diabetes and was on antidiabetic agents.

The formulation of the patient's condition needs to be understandable to other clinicians as well as the patient. But perhaps more importantly it is giving feedback to the patient and how we think the symptoms relate to a life.

FORMULATION AND STATEMENT TO THE PATIENT

The patient had multiple symptoms including his father being killed, being robbed, having untreated broken arm, severely beaten in a refugee camp, and the onset of diabetes. A simple statement was made to the patient who seemed, at least in a cognitive level, not to be particularly

aware of the relationship of the events to his symptoms. As usual, in cases like this I give a form of the following: "You had a very difficult life, losing your father, having an arm broken, being robbed many times, and being in a refugee camp for several years. Those events have now left you feeling drained and overwhelmed, and have given you a sense of despair. Your mind is overwhelmed by these events and they keep coming back and haunting you with nighttime dreams and intrusive thoughts in the daytime. Despite your attempts to keep them out of your mind, you have been unable to do so. In addition, you have been very sad and you have depression. These are all occurrences that follow the severe trauma that you have had." The explanation of the relationship of psychosocial events to trauma gives a great deal of education and understanding to the patients.

NEGOTIATING A TREATMENT PLAN

I reviewed the symptoms with the patient: nightmares, intrusive thoughts, startled reaction, depression, and avoidance behavior, and asked him which would be the most helpful to work on first. The patient described nightmares and poor sleep as well as depression as his most pressing symptoms. I, then, made a treatment plan for him telling him we would start on an antidepressant medicine to aid sleep and reduce depression. In this case, I used imipramine 50 mg at night to increase over two weeks to 100 and then 150 mg. Clonidine 0.2 mg at night was prescribed to control nightmares. Our patients are usually given the following additional instructions, information, and requirements.

"1. You are going to get better.
2. You must keep your appointments.
3. You must take the medicine as prescribed. If you have any problems, call your counselor.
4. You cannot kill yourself."

The latter is not because suicide is particularly an issue among our patients; in fact, it is quite rare. This is to emphasize that we take their life quite seriously.

RATIONALE FOR TREATMENT

1. Although medicine is a mainstay of treatment it does require a broad psychosocial approach to be effective. Treatment involves multiple components for refugees. The first is establishing a relationship and trust. This is particularly important with people

who had difficulties with American or other social service systems. The use of a counselor, who is a constant person in their treatment, who speaks their language and knows their culture, is a necessary aspect.

2. Giving education about the illness and the relation of psychosocial events to the symptoms, particularly trauma, provides a general understanding to refugees. Often, it takes away the hidden fear of being "crazy." Providing hope that things will get better has been an essential ingredient in treatment.
3. Medicines are extremely effective in treating many symptoms of PTSD among refugees. Imipramine is a member of the oldest group of antidepressants of tricyclics. It is moderately sedative and can help sleep a great deal. Clonidine is an antihypertension agent that blocks norepinephrine response in the central nervous system. It is helpful with nightmares and hyperarousal. These two medicines as well as others (see later) are very effective in reducing symptoms and providing rapid relief.
4. The patient has had ongoing problems with diabetes control. We then made a referral to a family medicine physician to establish his diabetic status and to draft a simplified medicine regiment the patient could follow. We also encouraged the patient to keep in contact with the counselor with regard to any problem regarding the treatment or other issues that develop in his life. This has been extremely important since patients often have confusing ideas about mediation.

FOLLOW-UP VISITS

On the first follow-up visit two weeks later, the patient looked much better. Although he still appeared quite anxious, he described many difficulties in complying with the medicine regiment and indeed sometimes he was taking it twice as much and sometimes one-half as much as the medicine prescribed. This made it necessary to go over again the medicine as prescribed. He had increased the imipramine on his own and was doing well. That was continued. Clonidine was increased at night time because of ongoing nightmares. He then stabilized for a time with improved symptoms, but at a subsequent visit he said his sleep was not good and he appeared irritable and pressured. Additionally, he described the onset of psychotic symptoms like having hallucinations of people calling his name and someone knocking at the door. Because of the psychotic symptoms, Risperdal 1 mg was added at night. He continued on at this point 150 mg of imipramine and clonidine 0.2 mg twice a day. At the next follow-up visit he clearly appeared much more agitated and pressured. He described events where his son was hit in

a game and had to go to the emergency room with a bowel obstruction. In addition, his wife was diagnosed to be having uncontrolled severe diabetes. The patient appeared very upset, angry, and confused about his wife's illness. In addition, he was pressured by welfare agencies to find a job and work. Because of these, he missed appointments and then was off medicine for 3 weeks. He had much PTSD symptoms with agitation. The medicine was restarted at the previous level.

Note: This is a very common reaction. Ongoing psychosocial problems and stresses will lead to noncompliance of appointments and medication. The patients are often severely overwhelmed, forget their appointments, run out of medicine, and have complete relapse of their symptoms.

The following visit was in November of 2001. He appeared agitated, pressured, and very sad. He had just spent over 2 weeks watching repeated scenes of the 9/11 bombing in New York. It was very confusing to him. He felt like the war had come to him in the United States and he could not forget what had happened in his previous country. He had increased nightmares, poor appetite, and a return of anger which had been in control.

Note: The events of 9/11 graphically portrayed on television have greatly increased the symptoms of most of our patients, practically those from Somalia and Bosnia (Kinzie, Boehnlein, Riley, & Sparr, 2002). Even when they are well controlled with medication, symptoms can be activated by vicarious stress, such as television images.

The patient continued treatment on and off, sometimes missing appointments, sometimes coming in late but generally when taking medicine, he did fairly well with increased sleep, decreased agitation, and decreased nightmares. In fact, he felt that he was doing so well that later he dropped out of treatment for 3 years.

Note: Patients often have difficulty understanding the long-term involvement for severe depression and PTSD. Often as they feel better, they will drop out of treatment. Many times they will return as the symptoms return and as they remember the relief that they had before.

The patient returned after 3 years with identical symptoms as when first seen although they did not seem as severe. He was restarted on imipramine and clonidine. Later when he had more trouble sleeping and had agitation, quetiapine was added. Currently the patient is much more stable with his psychiatric status and his diabetes is under better control.

NONSPECIFIC FACTORS IN PHARMACOLOGICAL TREATMENT

1. The previous case history illustrates the general principles of combined treatment. Medication is extremely helpful in reducing symptoms and relieving suffering. However, it is effective only

when combined with a total treatment program. The main elements are competent mental health counselor from the patient's culture and a treating psychiatrist who can relate easily to the patient and provide understanding and support.

2. Take a complete history and medical status exam to arrive at a diagnosis and establish credibility with the patient that the situation is understood.
3. Make an accurate diagnosis to guide treatment.
4. Provide a statement of the disorder and its probable causes in a way that is understandable to the patient, i.e., provide culturally sensitive patient education.
5. Negotiate a treatment plan with the patient that involves the purpose of medicine, how it is to be taken, possible side effects, and if the patient is illiterate, writing out instructions in his/her own language.
6. Provide hope. The patient should be given hope that they will improve and indeed most do.
7. Make a rapid follow-up visit after the first visit and remember that the patients have difficulty remembering and concentrating. There may be many concerns about side effects that may occur early on.
8. Having the counselor available by phone for personal problems or questions is extremely helpful.
9. Remember the course of the illness involves relief and exacerbation. These may be related to personal ongoing stresses which occur regularly in refugees' lives. This may resolve in noncompliance or forgetting appointments.
10. Psychotic symptoms frequently develop although these are not often the full range of schizophrenic symptoms. Hallucinations and mild paranoia should be taken seriously and treated with antipsychotic medicine.
11. Outside pressures influence, and has an impact on the symptoms of refugees. The television displays of New York twin tower bombing had a profound affect on our patients. Currently scenes from the Iraqi war also give much difficulty for the patients and reactivate their symptoms.
12. Consider dropouts because of rapid relief of symptoms or lack of understanding of the chronic nature of disorders. It is important to contact patients that drop out and also make it easy for them to return to treatment.
13. Although this patient did not have either family education or group socialization experience, these have been very useful in our experience. Clearly the symptoms of nightmares, startled reaction, and irritability affect the families. We often asked that family

members come with the patient's permission to discuss their observations. We may provide family education in terms that the family might understand and perhaps have more empathy for. On many occasions a family member has decided to become a patient as well. We have found specific groups therapy of special type, i.e., socialization has been very helpful (Kinzie et al., 1988). These groups provide social contacts and education about living in the United States, such as raising children, paying rent, getting citizenship papers in a common frame of reference, which are very helpful. The downside has been that many patients have reactivated their memories and refuse to participate. Overall, over time however, the majority of the participants have felt an allegiance to the group as a new family.

14. When patients return to the clinic after dropping out, it is often necessary to start over again with history taking, education, and support.

SPECIFIC INFORMATION ABOUT MEDICATION FOR REFUGEES

A fuller description of psychopharmacological treatment for refugees is given by Kinzie & Friedman (2004) from where this information is summarized. Multiple physiological and biological effects have been documented in traumatized patients. Our understanding of these neurobiological alterations has greatly increased our knowledge of how pharmacological agents are effective in PTSD and other disorders resulting from trauma. Antidepressant medicines have been studied extensively in PTSD patients. Tricyclics antidepressants (such as imipramine), the SSRI such as fluoxetine (Prozac) and sertraline (Zoloft), and another class of medicine including bruproprion (Wellbutrin) have all been found effective in some studies. The adrenergic system has been found to be altered in PTSD and various antiadrenergic agents have been used to treat it. These have included the beta-adrenergic blocker, propranolol; the alpha-2 agonist, clonidine; and the alpha-1 adrenergic blocker, prazosim. All these block norepinephrine in the central nervous system and have been used to treat hypertension.

The atypical antipsychotic agents such as olanzapine and risperidone are useful for treating psychotic symptoms accompanying PTSD and can greatly decrease agitation.

Although studies of medication with refugees are few, much clinical experience had demonstrated similar effectiveness for PTSD symptoms as with Western populations. One primary difference affecting medicine treatments is low rate of alcoholism and drug abuse among Muslim and

Buddhist patients, especially in comparison with American combat veterans. A second difference is a higher rate of noncompliance with refugees (Kinzie, Leung, Boehnlein, & Fleck, 1987). This is due to a variety of factors: not being able to read instructions, fear of side effects, a feeling that Western medicine is too strong, and not understanding the need for long-term treatment. These issues require much in ongoing patient education to overcome the problems. It also requires honest communications between doctor and refugee patients to determine problems and emphasize the benefit of the medicine.

Given the above I will provide a shortened version of pharmacological treatment for severely traumatized refugees, most of whom will have severe symptoms of PTSD and depression.

1. If insomnia is the major problem I suggest imipramine in increasing doses from 50 mg at night to 100 then 150 mg over 2 weeks.
2. If insomnia is not a problem and patient is over 65 or has hypertension, I will use an SSRI usually fluoxetine 20 mg a day. It has a long half-life and unlike many of the SSRI medicines, a dose can be missed without any withdrawal symptoms.
3. I start at the same time clonidine to control nightmares and hyperarousal symptoms. The usual dose is 0.2 mg at night and I encourage the patient to raise the dose until nightmares are controlled. If hypertension has not been treated I will try to treat both with clonidine, sometimes a dose of 0.2 in the morning and 0.4 mg at night. The primary side effect is dry mouth sedation. The latter may limit daytime use.
4. If severe agitation and/or psychosis are major problems, I use Risperdal instead of clonidine. For anger control 1 mg at night is often sufficient. For psychotic symptoms (hallucinations and delusions), it may be necessary to go up to 4 mg a day.
5. There are multiple combinations of antidepressants, antiadrenergic, and antipsychotic medicines which are useful in treating PTSD. As long as symptoms are present different medicine combinations should be tried to get optimal relief.

SPECIFIC GUIDELINES FOR COMBINED TREATMENT

1. Medicine for PTSD and depression is extremely helpful for specific symptoms which occur. These symptoms include agitation, insomnia, nightmares, and depression. The relief is often rapid and can be substantially maintained over time.
2. Medicine can be used early in treatment. Do not wait until the effects of psychotherapy are known. It is important to relieve

suffering and reduce symptoms as often as possible. It is not an opposition to psychotherapy. In fact, in my experience, people perform much better in therapy when they are not nearly so distressed in their symptoms.

3. Part of the ongoing treatment involves education and support and the interpretation of the traumatic to the onset of events to the symptoms. Availability of the staff in times of crises and providing multiple services including housing, medical, information about citizenship, and specific recommendation about job training are all part of the total treatment needed by patients.
4. Be aware of ongoing stresses that happen during the course of the treatment. These may be personal stresses, family stresses, or society stresses which affect the patients.
5. Ask about the positive and negative effects of medicines. Indeed, if the medicine has been taken since noncompliance is a large issue.
6. Involve the patients in the medical decision. Even if they are doing well, we usually ask if the patient wants a change in medicine or if there are other symptoms that need to be addressed.
7. Prepare the patient for the long haul. PTSD and severe depression of refugees is a long-term disorder and needs a long-term treatment plan.

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Chapter 16

Western Psychiatry and Difficulty: Understanding and Treating Hmong Refugees

Joseph Westermeyer and Cheng Her

INTRODUCTION

Brief Ethnography and Recent History

The Hmong in Asia comprise a large, distinctive ethnic group that inhabits the countries of China, Vietnam, Laos, Burma, and Thailand. Although they do live in lowland areas of even islands of the South China Sea, they are widely known as "mountain people" who dwell in the Annamite Chain of mountains, several thousand feet above sea level (Geddes, 1976). The Hmong, whose name for themselves means "free [people]," possess a long tradition of self-sufficiency and resistance to outside interference or domination (Lemoine, 1972). Throughout the twentieth century, national, regional, and even international forces have challenged their traditions, world views, and sociopolitical roles in Southeast Asia (Yang, 1974).

Perhaps due to their strong freedom value, the Hmong allied themselves with the French and later with the Americans in their struggle with the Vietminh. When the Vietminh and later the North Vietnamese prevailed in these struggles, large numbers of Hmong fled to France and later to the United States. Other countries taking in large numbers of Hmong refugees included China, Thailand, Canada, and Australia.

Many of the original Hmong immigrants to the United States were illiterate farmers accustomed to living in remote areas. An ancient mix of kinship relationships, strongly held values, and unwritten "laws" or customs guided their life way. This highly integrated life, reinforced by its common acceptance by family, friends, and neighbors, created a stable,

reliable, reassuring, if sometimes demanding social fabric. Predictably, their taking up residence among people of different social organization and values has produced special challenges for the Hmong and their various hosts (Downing & Olney, 1985; Dunnigan, 1982; Hendricks et al., 1986; Westermeyer, Bouafeuly, & Vang, 1984).

Obstacles to Assessment and Care

Language may present a problem if the Hmong patient does not speak English. If a translator is needed, the clinician should first know the translator's training and experience. The next step consists of establishing a working relationship with the translator. This can begin by meeting with the translator, asking him or her their preferred ways of working (e.g., duration of speech or number of concepts to be translated in one exchange). The clinician should also have in mind using one of the clinician–translator models, which may include the "black box," "junior clinician," or "three-way role" models (Westermeyer, 1990).

A Hmong patient for whom English is a second language may have day-to-day functional skills in English, but still have difficulty expressing affect in any language besides Hmong (Oquendo, 1996). In addition, the non-Hmong clinician may have difficulty appreciating Hmong expression of affect (Foulks, 1979). Previous traumatic experiences may further limit the acquisition of cognitive as well as affective fluency in English (Clarke, Sack, Ben, Lanham, & Him, 1993). Since language and culture hew closely to one another, the differing cultural experience of patient and clinician can hinder mutual understanding even when they share denotative meaning for a word or phrase (Lambert & Taylor, 1990).

Although some students of language have expressed doubt that "accurate" translation is even possible (Scheff, 1987), most clinicians who work in crosscultural contexts agree that work across languages and cultures is feasible (Sartorius, 1989). Moreover, crosscultural care may enhance the therapeutic experience for the patient, while expanding the knowledge and skill of the clinician. Key elements consist of appreciating the role of language in the expression of psychopathology as well as in the practice of psychotherapy, and devoting adequate time to clarification of words, beliefs, and affects (Westermeyer & Janca, 1997).

Interpretation can present additional impediments to care. Two major dialects of the Hmong language, the White and Green dialects, are spoken in the United States. Color here denotes the predominant color used in ethnic dress and refers only secondarily to dialect. Over the last half century, these dialects share a common, modern Latinized alphabet. However, sufficient variation exists in both the written and spoken dialects to challenge an interpreter. Similarities in idiomatic expressions and nuances between these two dialects do exist, so that a skilled interpreter should be able to successfully navigate an interchange.

Clan differences between interpreter and patient can also pose potential conflicts. Long-standing and sometimes bitter clan conflicts continue to overshadow many social and political engagements within and outside of the Hmong community. These tensions may have their origins in marriage conflicts, stereotypes regarding clan characteristics, unfair hiring and promotion practices, presumed slights, and old disputes that reach almost mythic proportions.

Suspicions and mistrust regarding the intents of clinicians toward Hmong patients can impede the patient–clinician relationship. Mistrust among Hmong refugees in the United States has been well established (Westermeyer, 1989), although paranoid symptoms have long been reported in other migrant and refugee groups (Kino, 1951; Prange, 1959; Tseng, 1969). Some cultures may foster paranoid world views and thus elicit suspicions and mistrust (Lambo, 1955). The Hmong may have evolved this inter-cultural dynamic as a means of ameliorating oppression, since their ancestors have lived among majority peoples that have not always dealt with them in kindly ways (Geddes, 1976). Hmong refugees' previous interactions with Western researchers working in Thai refugee camps have resulted in misunderstanding and startling misinterpretation, which may have affected their trust in American clinicians (Hurlich, Holtan, & Munger, 1986). Their precarious relationship with the United States in the final days of the Vietnam War and the abandonment of the Hmong by the United States in Laos probably contribute to this mistrust (Hendricks et al., 1986).

The first manifestations of these suspicions began even before the Hmong came to the United States. During the winter of 1982, Hmong living in the Ban Vinai refugee camp expressed the following concerns, reflecting their misperceptions and fears about American doctors:

> "When Hmong people die in the United States, is it true that they are cut into pieces and put in tin cans and sold as food?"
> "After you die, why do American doctors try to open up your head and take out your brains?"
> "Do American doctors eat the liver, kidney, and brain of Hmong patients?"
> "Why do American doctors draw so much blood from patients?"

These reports reflect the fear and insecurity of many Hmong refugees.

This skepticism, doubt and uneasiness linger among some acculturated Hmong. Although assimilation and acculturation have diminished the potency of these early fears over time, many Hmong individuals continue to harbor distrust, perpetuating a pervasive second-class citizenship mentality. This, in turn, fosters an undercurrent of defensiveness in matters of health and well-being.

Fear of being duped and manipulated by American clinicians may influence the mode of care seeking. Some patients may give just enough information to initiate the interchange, but withhold information vital to

the care plan. This strategy serves to plumb the true intentions of the clinician before proceeding further.

Another common feat is that the clinician may be withholding curative therapy, saving it instead for non-Hmong patients. Even educated, acculturated Hmong manifest skepticism regarding the clinician's true intentions. These misgivings may even apply to other Hmong clinicians trained in Western medicine.

Case Example. A 32-year-old married, college-educated Hmong man insisted he be treated for Syphilis. Upon review of his medical records, there were numerous documented visits to generalists' offices and ultimately, to specialists in Infectious Disease. Every visit and subsequent testing demonstrated no evidence to substantiate infection with Syphilis. The patient insisted on empirical treatment based on what he felt was persistent, genito-urinary symptoms. The patient ultimately presented to the second author as he was convinced that the previous White doctors were holding out on him. Again, routine exams and testing ensued. Education and diplomacy failed at reaching a compromise and the patient ultimately traveled to Laos to seek out definitive treatment from native healers.

The differential diagnosis for such cases is extensive, ranging from undiagnosed biomedical disorders, to somatoform disorders, to somatization of mood or anxiety or substance use disorders, to somatic delusions (in association with delusional disorder, major depression with mood incongruent psychotic features, and other psychoses). Since the treatments and prognoses of these conditions differ greatly, a thorough diagnostic assessment is in order before initiating treatment. However, the refugee patient may resist the notion that the etiology of the somatic symptoms may reside in the brain or head.

Belief systems can also impede diagnosis and treatment in several ways. Most of these problems involve misunderstanding on the clinician's part. For example, the clinician may misinterpret a cultural or religious belief as a delusion, if it falls sufficiently far from the clinician's worldview (Gaines, 1995). Culturally prescribed preternatural experiences may mimic hallucinations, although the former usually begin and end on cue, are egosyntonic, and serve positive psychological purposes (Westermeyer, 1987). Clinicians may encounter countertransference problems if the patient's experience falls so far outside of the clinician's experience that bridges to an empathetic relationship fails to materialize (Comas-Diaz & Jacobsen, 1991). An example involves the Hmong kinship system, which is discussed below.

Traumatic experiences in refugees can also impede assessment and care. The variety and severity of traumatic experiences can be difficult for clinicians to appreciate, or at times to even bear hearing (Westermeyer & Wahmanholm, 1989). For several decades the Hmong have been exposed to the kind of genocidal warfare that once tormented American Indian

tribes. In their conflicts with first the Vietminh, later the Pathet Lao and North Vietnamese, and finally the People's Republic of Laos, they have been exposed to systematic attack with modern weapons, starvation, "scorched earth" warfare, and poison gas. In addition, many Hmong were combatants who survived the same traumatic experiences that our own veterans have faced during warfare (Hyer, Woods, Summers, Boudewyns, & Harrison, 1990). In this respect, the Hmong resemble most other refugee groups (Hauff & Vaglum, 1994). Nonetheless, many clinicians experience considerable difficulty in listening to, empathizing with, and maintaining a therapeutic stance in the face of the victimized patient from another culture.

Trauma-related mental health problems include posttraumatic stress disorder, as one might expect. Other anxiety disorders related to trauma include phobic disorder, panic disorder, and generalized anxiety disorder. In addition, refugee-related loss and missed bereavement comprise common precipitants for major depressive disorder. Substance use disorders may ensue as the refugee attempts to self-treat the emotional and mental sequelae of trauma. War-related physical trauma and illness can also cause mental, emotional, and behavioral disorders though one of more of the following mechanisms (Ta, Westermeyer, & Neider, 1996):

- Traumatic brain injury, with the myriad of problems that can result from diffuse and/or focused brain injury.
- Physical disability as a result of musculoskeletal, malnutrition, and other diseases.
- Chronic pain associated with injury and disease.
- Allergic, autoimmune, autonomic nervous system, and endocrine disease associated with stress.

Acquiring Experience in Hmong Society

The author's sojourn in Hmong society began during 1965–1967, while working as a physician–surgeon with the Public Health Division of the US Agency for International Development in Laos. This called for spending the better part of a year at a hospital located in a predominantly Hmong town in northern Laos (i.e., Sam Thong). Shorter stays in a score of Hmong villages resulted in living as a guest in Hmong homes. Subsequently, following psychiatric training, the author returned to Laos several times, spending about two months per visit. These latter trips focused on epidemiological studies and consultations to develop mental health services (Westermeyer, 1971b; Westermeyer & Peng, 1978). Considerable time was spent in Hmong communities and households during these return visits. The last of these visits was in 1975, just prior to the communist take-over of the central government.

One year later, in 1976, thousands of Hmong began flooding into the United States as refugees. In 1977, at the request of Hmong elders, the author opened up a clinic for Hmong refugees at the University of Minnesota. Research studies supplemented clinical experience and studies over the subsequent decades (Westermeyer, 1986, 1988a, 1988b, 1989; Westermeyer, Callies, & Neider, 1990; Westermeyer, Vang, & Lyfong, 1983; Westermeyer, Vang, & Neider, 1984). Friendship with Hmong leaders and health workers continued from Laos to the United States.

Living among the Hmong in Laos, having adjusted personally to their ecology and life ways, provided some insights into the changes that were emerging. By the same token, in the United States the Hmong were changing rapidly and in a myriad of ways (Westermeyer & Her, 1996; Westermeyer, Neider, & Callies, 1989). Some outcomes were predictable, but others surprised everyone, including this observer. Suffice here to say that current experience with Hmong people and communities in the United States trumps previous experience in Asia, insofar as obtaining information relevant to clinical circumstances.

Acquiring relevant experience in assessing and treating Hmong people need not be difficult or as circuitous as the route traveled by the author. As a people, the Hmong tend to be open and trusting toward outsiders unless personal experience leads them to behave otherwise. Once rapport is established and information collected regarding the current problem, an inquiry into the *patient's explanatory model* for the current problem can be useful. This information can serve as a first step in negotiating the nature of the presenting problem. If the clinician's model and the patient's model resemble each other, treatment may proceed readily. If the two models differ greatly, some negotiations may be in order. Learning the *family's explanatory model* can also be helpful, since the family's perspectives may differ notably from the patient's model. Learning these models can provide a valuable entrée into Hmong worldview and values, as well as into the historical precursors for the clinical problem.

Faced with emotional mental or behavioral problems, Hmong individuals and families utilize many of the same approaches employed by others (Westermeyer et al., 1989). The suffering individual may seek counsel from a friend or elder, utilize herbal or over-the-counter compounds, or speak to a health care provider (especially regarding psychophysiological symptoms such as insomnia or pain). Families faced with a member who is increasingly maladaptive or dysfunctional will first try remediation within the family or extended family. Next, they may seek help outside of the family, but within Hmong society, from a healer or clergyman or nurse. Finally, faced with a worsening situation, most Hmong individuals and families are willing to use the resources of the mainstream society. The latter transition is eased if local resources include Hmong workers who are team members of mental health units. Well acculturated Hmong

people utilize mental health resources in a way similar to other groups (Westermeyer, Neider, & Vang, 1984).

HMONG SOCIAL ORGANIZATION: RESOURCES AND CHALLENGES

Extended family resources are perhaps the major resource when a Hmong patient requires mental health care. Isolated Hmong patients are virtually nonexistent, or at least rare as compared to patients from other ethnic groups. Even a sole surviving member of a nuclear family would have relatives with whom he or she might live, or at least provide solicitous support.

Case Example. A 15-year adolescent boy was the sole surviving family member fleeing Laos across the Mekong River. Arriving in the United States with missed bereavement and a cannabis abuse habit, he became isolated at home and school. A school worker referred him for care, and his family becomes involved in his care and adjustment to school and the community.

Patriarchal family organization dominates Hmong society. The following manifests this:

- Children named after the father (patrinymy).
- Inheritance at death to the man's relatives (patrilineal).
- "Bride price," in which the husband's family conveys a sum of money or other wealth to the bridge's family, symbolizing the transfer of her work and offspring to the husband's family.
- Residence near a husband's relatives (patrilocal).
- Fathers/husbands making final decisions regarding children and women in the family (balanced by the continued interest of the woman's clan in her well-being, as well as community concern with proper moral and legal behavior, from the Hmong point of view).

An advantage of this clear-cut family organization lies in everyone understanding family organization and function. On the contrary, people with differing traditions surround Hmong migrants, exposing them to differing customs. In addition, the prevailing legal system in the United States contains elements of matriarchy and gender-free aspects inconsistent with Hmong traditions.

Case Example. A 19-year-old Hmong man refused to grant permission for his newborn son to have a life-saving surgical procedure. The surgical team obtained a court order for the procedure, and preparations for surgery proceeded. Suddenly, the Hmong father jumped on the surgeon and attempted to choke him. The father was restrained while the team

completed a successful surgical intervention. Consultation oriented the father to realities in this country, indicated awareness that he was attempting to be a responsible new father, and counseled him how best to proceed in his current legal dilemma. The child had an excellent surgical outcome, the father had a change of heart, and the surgeon did not press legal charges against the young father.

Strongly patriarchal families can foster problematic relationships between daughters-in-law and mothers-in-law – a vulnerability peculiar to this type of family organization. This is especially the case if the newly married couple must take in the widowed mother of the new husband.

A 23-year-old Hmong mother of two children presented with symptoms of Major Depressive Disorder, progressive over the last several months. Around the time that her symptoms began, her mother-in-law had arrived from another community following the death of her husband. The mother established herself as the head woman of the household, treated the wife as a servant, took over the kitchen and the household funds, and interfering in the relationship between her son and daughter-in-law. The young wife tried to intercede with her husband, but he told her that he could not tell his mother how to behave. Moreover, he indicated that his wife must solve this problem on her own and learn to adjust.

Such cases almost always involve a young, naïve, or inept husband who behaves in a fashion similar to this husband. He fails to realize the importance of a face-saving accommodation between the two women in his life, which must involve him. Therapeutic intervention in the above case involved immediate support and consensual validation for the bereft wife, while orienting the husband to the seriousness of the situation and his central role in ameliorating the conflict. Since typically these husbands have shied away from picking up this challenge, the latter step may require motivational interviewing. Once that step has been achieved, the husband can be referred to several older, experienced husbands who have successfully navigated the course between a domineering mother and beset wife. As the therapist becomes familiar with the Hmong families and the individual personalities involved, the therapist can often provide sensitive guidance. However, the guidance must take into account Hmong sensibilities and values, which may not allow for extruding the mother-in-law from the household.

Marriage practices in Hmong society can precipitate a number of conflicts with the major society. A preferred marriage form, common in patriarchal societies, is marriage to one's mother's sibling's daughter – in the other words, the proband's first cousin. Such *crosscousin marriages* give rise to a number of congenital abnormalities (such as extra digits and certain dental abnormalities). In many states, marriage at this level of cosanguinity is illegal, so that anyone fostering such a marriage may become a criminal. Partners to such a marriage can obtain annulment readily.

Marriage is perceived culturally as a joining of clans (since a person cannot marry a member of one's own clan). Parents and extended family leaders must affirm a marriage, else it cannot be condoned socially. As in most rigid cultural practices, means exist for coping with this exigency. Partners who want to marry without family sanction can elope. Since such an act would be especially shameful for a woman, such events are usually attributed to the passionate male partner, who is seen as promulgating *"bride theft" or "bride kidnap."* Elopement poses a crisis in Hmong society, since one alternative consists of the woman's relatives seeking out the "kidnapper" and summarily killing him. Such killing is supported by the culture; the man's family has no recourse to recompense or sanction for the death (Westermeyer, 1971a). Alternatively, the man's family can approach the woman's family, apologizing and offering to pay bride price. The woman's family usually recognizes the *fiat accompli*, accepts the bride price and new marriage, and learns from the event. In this country, however, the woman's family can bring down the entire strength of the police, courts, and prisons if the "bride" is under-age, or if she says she was not a party to the kidnapping. A number of Hmong men have ended up in American prisons for precipitating this traditional crisis in a society that does not understand or will not tolerate it.

As in many traditional societies of Asia, the practice of *polygyny* (having more than one wife at a time) persists. Even in Asia, only a small percent of Hmong marriages involved polygyny. Several factors inveigh against it, including the high cost associated with bride price, personal preference of men as well as women, and the notion of personal love and romance alive in many Hmong myths, songs, and courting practices. Polygyny is not widely practiced among Hmong families in the United States, since immigration officials made it clear that this practice was illegal and could lead to imprisonment. Nonetheless, polygyny can appear as a relevant aspect of mental health problems in the United States.

Case Example. An 18-year pregnant Hmong woman experienced increasing insomnia, crying spells, and suicidal ideation during her third trimester with her pregnancy. Married several months ago, she had arrived in the US with her new husband. Her arranged marriage had ensued following the deaths of both parents, who had been killed while fleeing from Laos to Thailand. Referred for depression by her obstetrician, she was diagnosed as having major depressive disorder. During assessment, it became evident that her 35-year-old husband was also depressed. A common theme was their separating from the major wife, a woman aged 35 who was living with her five children. A decision had been made by the extended family prior to leaving Laos that the major wife could cope on her own, while the minor wife needed the husband's support to provide care and legitimacy to their unborn child. Faced with this new reality, the young mother-to-be missed the major wife, whose support and

guidance she missed. Likewise, the husband missed his children and felt irresponsible being away from them. Following treatment for their respective depressions, the couple sought counsel regarding how they might affiliate with the major wife and the five children without breaking the law. This was accomplished, with good resolution of the clinical and family problems.

OPIUM: PRODUCTION, COMMERCE, AND ADDICTION

Opium production and commerce were an accepted aspect of economic realities in Laos. Virtually all rural families were involved in poppy agriculture, and many Hmong merchants traded in opium (Westermeyer, 1982). Although informed that opium commerce would not be tolerated in the United States, many responsible Hmong do not discern that the opium trade is immoral, particularly if needed for economic livelihood. This has led to legal problems, as well as widespread opium addiction in some Hmong communities.

Opium use was never so universally accepted as opium commerce in Hmong society. Some Hmong would not take opium under any circumstances, even with severe pain, due to opprobrium associated with its use. Nonetheless, many Hmong individuals and families accepted opium for a variety of reasons, including cough, diarrhea, musculoskeletal aches, pain, and persisting misery or sadness. A large segment of men also smoked opium as a social recreation, especially at celebrations such as New Year (Westermeyer, 1974).

Most opium addicts coming to the United States had withdrawn from opium, for periods lasting from days to years. Very few smuggled a supply with them and never missed a dose. Following resettlement in the United States, some former addicts never returned to opium use. Those experiencing a return of symptoms for which they formerly used opium returned to its use. In addition, people who had never used opium began using opium for the first time in the United States (Westermeyer, Lyfoung, & Neider, 1989). Most treatment seeking Hmong people addicted (or readdicted) to opium in the United States had a comorbid Mood and Anxiety Disorders.

In most instances, the patient or a family member readily reported opium addiction, so diagnosis was not difficult. Occasionally, an addicted patient would deny use even thought physical signs would suggest its presence (e.g., smelling of opium, cachexia, cyanotic mucous members, opium residence under a little finger, constricted pupils, slurred speech, ataxia, slowed mentation, and so forth). Urine screen readily identified opium addiction, showing both morphine and codeine.

Case Example. A 63-year-old married Hmong man was referred after failing in an insurance scheme to obtain recompense illegally. He complained of insomnia, chronic pain, weakness, irritability, loss of appetite, and insomnia. Although he possessed many of the stigmata of opium addiction and admitted to addiction in Laos, he denied current addiction. Urine screen revealed morphine and codeine. Presented with this information, he admitted to addiction and agreed to a treatment plan that included detoxification.

REFUGEE-RELATED MENTAL HEALTH PROBLEMS

The struggles experienced by the Hmong prior to their arrival here accounted for the clinical conditions commonly found in other refugee groups. Examples included Posttraumatic Stress Disorder, Major Depressive Disorder, missed or delayed bereavement, and traumatic brain injury.

Anomie, a French term for "no name," was first coined by the sociologist Durkheim. He used this term to describe the elevated suicide rates observed in traditional cultures undergoing rapid culture change, especially when change was so extensive as to undermine core cultural values, including notions of right and wrong, good and bad. Older Hmong men were especially likely to experience this condition.

Case Example. A 52-year-old Hmong man presented to the hospital with a drug overdose, following his announcing to his family that he no longer wished to live and would be killing himself. The precipitant consisted of his 31-year-old son's buying a new car, with money that he had earned himself. From the patient's worldview, any major decision (such as buying a car) was an extended family decision. As patriarch of the family, he felt that he would necessarily have final say over the type of car and the actual purchase. The patriarch also believed that he should be the repository of all extended family savings, so that he could make important decisions regarding purchases of cars or homes, or major expenditures such as college tuition. His perspective was the betterment of the clan, regardless of which person or nuclear family earned the money. His children and spouses, educated in the United States, were not adverse to extended family betterment, but felt that they had earned the money and should be the final arbiters of how the funds were spent. The patriarch, aware that American law backed his children and their spouses, faced a situation that fundamentally prevented him from behaving in ways that he considered responsible and necessary.

Acculturation failure consisted of the inability to acquire knowledge and skills to function in the United States. Numerous factors could contribute

to this final common pathway. Limited intelligence, illiteracy, advanced age, social isolation, and psychiatric disorder could account for this experience. In turn, increasing isolation even within the Hmong community, and indeed the family itself, eventually transpired.

Case Example. A 42-year-old Hmong woman had been in the United States for two decades, but had never learned English nor worked outside of the home. Although her earlier life had gone well, she had become increasingly lonely and socially isolated as her children entered college and left home. Her husband had both Hmong and American friends who spoke no Hmong. Most Hmong women in her kinship group had jobs and were contributing to the family finances. Following the departure of her last child from the home a year earlier, she had become increasing depressed, weak and anorectic, losing about 25 pounds in a year. In addition to treatment for major depressive disorder, rehabilitation required a multiyear plan to acculturate to the Hmong–American society in which all of her friends and relatives now functioned, but which was closed to her.

Intergenerational conflict related to culture change occurs in any immigrant–refugee group. As suggested by cases above, however, intergenerational changes have been especially great in Hmong families. This may occur between adjacent generations, but can also involve conflicts between grandparents and grandchildren, with the parents trying to mediate across the generations. At times, grandparents will back the preferences of grandchildren, causing distress to the parents. (A proverb from Southeast Asia asserts, "Grandparents and grandchildren get along so well because they have an enemy in common.")

Case Example. A 14-year-old Hmong girl was referred by a social worker, who made a home visit to visit the girl's grandmother. While visiting the home, the social worker observed a note written on a blackboard in the living, stating, "Love turns to hate. Hate is this family." Further investigation by the social worker revealed that the daughter, the eldest in the family and an excellent student, was in fairly constant conflict with her illiterate parents, whom she perceived as not understanding, supporting, or even loving her. From the parents perspective, their every breathing moment was aimed at enhancing their children's chances for a successful live. Two separate sessions and two combined sessions resulted in a salutary outcome.

Role reversal often ensues as children and adolescents learn the local language and customs faster than their parents and grandparents. This rapid acculturation by the youth can benefit the family by enabling the unit to become independent of outside helpers more rapidly. However, it can also disrupt traditional roles in which elders lead and care for younger family members. In refugee families, children, and adolescents may be needed to go shopping, negotiate with landlords, guide elders

through public transportation, and other instrumental activities. This role reversal can distress elders, who readily perceive their reliance on the young. And it can foster premature adult roles in youth. This can lead to youth not experiencing childhood and adolescence as periods needed for healthy adulthood. Or it can also lead to adolescents manipulating, belittling, or threatening their elders.

THE HMONG WORLDVIEW: CAUSES OF MENTAL, EMOTIONAL, AND BEHAVIOR DISORDERS

Hmong folk theories regarding disorders related to mental health greatly resemble those of mainstream Americans (Westermeyer & Wintrob, 1979). These include genetic or constitutional factors, the make-up of one's brain or mind, relationships with others, past decisions or behaviors, and environmental factors such as illness or disaster. Certain other explanatory models supplement these usual suspects, making for an interesting variability as well as providing valuable insights into the patient's worldview.

The ancestors comprise one cause that may be unfamiliar to many American clinicians. In the Hmong cosmology (as well as in many Asian cultures), relationships with one's deceased relatives transcend the grave. The living honor the dead throughout their lives; failure to do so can anger the spirits of the dead, who can cause no end of trouble for the living. Such disasters can range from a failed crop, to the death of a newborn child, to depression or hallucinations. Ancestors may appear in dreams or nightmares, cementing the belief that the deceased relative is causing misery.

Case Example. A 34-year-old Hmong widow had coped with life in the United States for several years, until she was mugged in a grocery store parking lot. The event brought back the insecurity of life in Laos and the death of her husband during flight out of the homeland. She began having a dream in which her deceased mother appeared to her, walking toward her, saying nothing. The patient, struggling with raising her four children, had progressive symptoms of major depressive disorder. She interpreted the dream as evidence that her mother had caused her current illness because she had not been in Laos to accord her a proper burial and now was inviting her to join her in the afterlife.

In this case, the patient's explanatory model and the clinician's explanatory model differed greatly. Through negotiation, the patient agreed to take medication, to return to the clinic weekly, and to accept outreach services to help with her parenting and homemaking responsibilities. However, she remained convinced that her mother's apparitions in her dream were a sure omen of death. At the second visit, once the patient was doing better and rapport was established, the following conversation ensued.

Continued Case Example. The clinician, familiar with Hmong cosmology, agreed with the patient that her mother's leaving the land of the dead to travel to her dreams could indeed be a harbinger of death. By the same token, the clinician reported knowing of similar cases in which the deceased relative had traveled from the land of the dead to offer emotional support for the living relative, who was encountering a difficult crisis or illness. And the deceased mother needed the honor of the patient's children during their lifetimes, in order to provide her with a pleasurable afterlife. So she needed for her daughter to live and instruct her children in proper ways of honoring the dead ancestors. Finally, the clinician suggested that she might consult a Hmong spirit healer in order to discuss these alternative ways of interpreting her mother's visit. At the next visit, the patient reported to the clinician that her mother had come closer and had smiled at her. This convinced her that her mother knew about the earlier conversation and supported the clinician's new interpretation. The patient decided not to consult a spirit healer, as she had been considering. In this case, the reader may aver that the clinician was acting like a spirit healer in giving advice about the motivations of her mother's ghost. On the contrary, the clinician perceived the dream to represent the patient's own poorly suppressed death wishes, in the midst of a severe melancholia. From his perspective, he was employing the following psychological interventions:

- Suggestion as a means of changing a hopeless attitude.
- Social network intervention, fostering the patient's viewing her mother as a support for life rather than an omen of death.
- Cognitive-behavioral therapy, exchanging a focus on death to a focus on life and the future.
- Utilizing concepts that had currency in the patient's culture.

A psychology intern, who participated in the care of this patient, raised two objectives. First, the intern felt that the woman's belief about her mother leaving the land of the dead to visit her during her dream-sleep comprised a delusion. The clinician and the Hmong translator both disagreed. In the Hmong view, sleep was a time when a person's soul was adrift between life and the afterlife. During this time, the dead could visit and communicate with the living. In normal people, such visitations occurred primarily during sleep. Second, the intern asked if the clinician believed in ghosts, and if not, why was he speaking with patient as though he did believe in them? The clinician agreed that the interchange could be viewed in this way, but his perspective was that he was communicating using the patient's vernacular and mode of understanding for therapeutic benefit.

Integration of the mind, body, and soul was a core element of Hmong psychology. This perspective lent itself to integrating spiritual–moral,

psychosocial, and bio-medical elements. The average Hmong's ability to transcend these artificial abstractions was much more than in the average western patient, whose education and worldview favored a compartmentalization among these elements. The integration of these elements eased the therapy of somatization, since the typical Hmong patients could readily accept that their somatic symptoms might be related to moral dimensions of past behaviors, or recent interpersonal transactions, or to factors from childhood or even predating one's birth.

Collectivism, the transcendence of the group over the individual, was at the core of many traditional Hmong values. Individualism, the valuing of the individual over the group, certainly existed in fact, but was considered a sign of moral as well as mental weakness. As in all societies, each person had to make choices in which the self in relation to the group posed an unavoidable dilemma.

Perhaps the most heart-wrenching decisions occurred on the refugee trail. The death rate of the elderly, infants, and small children was high. Thus, those with small children and elderly parents at times needed to make important decisions. Who would be left weakened by the side of trail? Who would receive the last morsels of rice? Who would be carried up one's back on a steep incline? Parents decided in favor of their children. The elderly seemed to support these decisions. Nonetheless, the guilt surrounding these decisions can result in subsequent psychological turmoil.

Hmong myths as well as case studies abound with examples when individual romance takes precedence over family commitment. Many youth risked all for love, much as they might in the west.

Case Example. A 19-year-old Hmong woman had gone away from home for advanced training. Around the time of her birth, her father had betrothed her to the son of a good friend. This son had grown to be an able young man, a competent farmer and hunter. But he was illiterate, and the young women had no interest in him. Instead, she had fallen in love with a well-educated young man of another ethnic group. The young woman fell on the mercies of her father, who insisted that she marry the man to whom she had been betrothed, in the service of the family honor. She pled with her five brothers to support her against her father; they insisted that she obey their father. Faced with this strong family opposition, the young woman fled with her lover.

The case above occurred in Laos, not in the United States. To be sure, the woman's education had introduced non-Hmong values. In addition, her training enabled her to exist independent of her family. Absent the ability to live independent of her family, her behavior may have been different.

In sum, the culturally informed clinician must be aware of the Hmong patient's individual as well as group values, commitments, and preferences. Despite their collectivist values, some individual Hmong do over-ride collective preferences in favor of individual needs.

HMONG FAMILY ORGANIZATION AND MENTAL HEALTH

Arranged marriage was the ideal norm in Hmong society, although the actual situation often involved some admixture of personal choice and family acquiescence. Many Hmong youth in the US did know or would not accept this traditional mode of obtaining a marital partner. In addition, American dating and social practices during adolescence created various crises for Hmong families.

Case Example. A 14 Hmong girl allowed a Hmong boy of her age to carry her books home – a practice that she had observed among other Hmong and non-Hmong teenagers in her high school. Her mother, recently arrived in the US, was shocked at this behavior. She erroneously concluded that her daughter was committed to marrying this boy, had probably already had sexual relations with him, and had shamed the family honor. Once her daughter was safely in the home, she accused her daughter of the above infractions, rent her clothes, and took an overdose of aspirin. The daughter called her father at work, who brought her to the hospital. Psychiatric consultation was obtained, with subsequent mediation between the daughter and the parents, so that all were able to understand one another's perspectives, save face, and negotiate future social behaviors for the daughter in a context of changing norms and values. At a follow-up visit, the parents reported that they had consulted with other Hmong parents (as they had been asked to do), to find that their daughter's behavior was acceptable in this new social context.

The following case involves similar cultural dynamics, but altered in several respects.

Case Example. A 17-year-old Hmong girl, a high school student and the family's eldest child, asked permission to attend her high school prom with a date. The father took this event as evidence that her daughter was of an age when she wanted to marry. Since this was the only Hmong family in their particular town, he went to a larger nearby town and arranged a marriage with a promising young Hmong man and accepted bride price, thereby betrothing the couple (unbeknownst to his daughter). Proud of his judgment in the matter, he returned home to announce his accomplishment to his wife and daughter. Thereupon his daughter left the room weeping, while his wife gave him a stony stare and also left the room. Subsequently, neither woman spoke to him. The daughter informed a favorite teacher at school that she was planning to kill herself rather than marry a man should did not know. (In addition, she was planning to attend college and had no interest in marrying at this time.) By the time the family was seen several weeks later, the father had symptoms of a major depressive disorder. Mother and daughter were

distraught, but neither met criteria for any disorder beyond a transient adjustment disorder. The mother, who had been married to her husband in manner similar to that which her husband was pursuing, was enraged with her husband and backed her daughter. Treatment consisted of treating the husband for his disorder over a period of weeks, while working on face-saving plans for him to return the bridge price and cancel the betrothal. This process was successful, greatly enhancing the husband–wife and father–daughter bonds, while reestablishing the father's confidence that he could lead his family responsibly in this new sociocultural milieu.

Note that both of these family crises occurred in a context of (1) recent arrival in the US and (2) isolation from other Hmong families. Such crises were typically avoided when Hmong parents spoke with one another regarding to how best to forge a new amalgam of traditional values and new exigencies. Likewise, Hmong adolescents discussed the same topics in parallel to their parents.

Addressing marital problems often created problems for two reasons. First, in a patriarchal society such as the Hmong practiced, husbands/fathers/sons felt themselves to be responsible for all untoward family outcomes. We as mental health workers view this as a maladaptive belief at best and a grandiose delusion at worst. Although our beliefs may not aid us in empathizing with the family patriarch, still we have to understand this common Hmong belief in order to launch a therapeutic adventure that has some reasonable likelihood of success.

In Laos, the patriarchal imperative could often be managed by negotiations between the extended families. Thus, a wife could go to her fathers and brothers, who can then go to their clan elders, who in turn approaches the clan elders of the husband's family, who in turn can discuss the matter with the husband's father and brothers, who in turn can counsel the husband in matters regarding proper patriarchal behavior. If this family system is intact in the US, the clinician should take advantage of it insofar as it is helpful. However, it is unlikely to exist intact. Even if a shadow family organization does exist, the amount of time necessary for such negotiations and the distances to be traveled for conducting them may preclude this approach. Thus, the nuclear family and the clinician are left to work things out.

Case Example. A 22-year-old woman was referred from a neurology clinic with recent onset of tension headache. The mother of two children, she was attending business school. Her husband felt that two children were insufficient and was ordering her to have more children – a right to which he believed bride price permitted him. Separate meetings with the couple indicated that they both felt affection for one another and wanted the marriage to succeed. Then both members were informed that American law did not require the woman to have more children than she wished,

regardless of bride price. During these sessions, each partner was requested to think seriously about their individual preferences versus the possible effects of these preferences on the family. The husband indicated that he would cease pressuring his wife for more children. The wife indicated that she would consider having a third child in 5 years, after she had completed her education and had her career established. Her headaches had ceased following the first visit and were not longer an issue. With his wife relieved of her headaches, the husband felt that he was proceeding in a responsible fashion for a young husband.

These cases, as well as the daughter-in-law/mother-in-law conflicts described above, reflect that problems that young husbands face in a patriarchal society. They also underscore the challenges faced by young women as they achieve responsible family roles and understand means of expressing informal power in a family organization that seems at first glance to under-value, and perhaps even to demean them.

Falling in love with an "arranged marriage" spouse occurs with some frequency during arranged marriages. This phenomenon can comprise a resource to keep families together during difficult times. It can also present a crisis if the spouse dies or is otherwise absent from the relationship.

Case Example. A 42-year-old Hmong woman presented with major depressive disorder and delayed grieving for her husband, who had been killed during the flight out of Laos. In telling about their marriage a few decades earlier in Laos, she reported that she felt no affection for him during their betrothal, their brief courtship, and during their first year of marriage. He did not communicate well, did not play any of the musical instruments with which the Hmong expressed romantic messages to their beloved, and seemed always focused on his farming and hunting activities. However, upon the birth of their first child, he took up all of her chores (e.g., collecting firewood, carrying water, cooking) for several weeks following childbirth. She had lost considerable blood with the birth and was weak for some months afterward. During this time, he remained solicitous about her welfare, insisting that she do only what she felt able to do, and putting in long hours completing her tasks as well as his own. For this first time, she felt a deep affection for him that now continued beyond his death.

In addition to romance, the passage of time fosters the development of trust in a marriage. Typically in western marriages, the development of trust precedes marriage. In Hmong marriages, it may only begin following marriage and continue developing through the early months and years of marriage. Although friendship is a *sine qua non* of ideal western marriages, it is not a core element of traditional Hmong marriage, especially in arranged marriages. Each partner may have their primary friends outside of marriage, with relatively little time or psychological intimacy in the marriage.

CHILDBIRTH, CHILD RAISING, AND CHILDHOOD

Spirit babies were infants sent by malevolent spirits to cause grief and misery, according to Hmong beliefs. Such infants were malformed or died within the first few months of life. Since both problems occurred with some regularity, the availability of a ready explanation generally served a good purpose. However, the notion of a "spirit baby" could cause problems within a family, especially for the child.

Case Example. An infant born without an anus received surgical care allowing it to survive. The infant would have a colostomy during the early years of life until it was large enough to have further surgery. The infant was returned to the family in excellent health, but returned to the hospital on a few occasions in dire straits. Finally, after the infant had died, the parents averred that it was for the best, as its malformation indicated that it was a spirit baby, and could only cause trouble.

In other instances, the surviving child could encounter health problems as a result of family discord regarding whether the child was a spirit baby.

Case Example. An 18-month-old child was brought to the pediatric department with failure-to-thrive. In the hospital the child's lassitude gave way to bubbly enthusiasm, and she gained weight readily. Psychiatric consultation revealed that the child's older sibling had died of leukemia a few years earlier. The mother, anxious to replace the deceased child, became pregnant soon after the death. The maternal grandmother opined that this was a dangerous decision, because the deceased child was almost surely a spirit child that might "infect" a new pregnancy. Although the child was healthy at birth, the grandmother declared it a spirit child. The mother, still grieving the first child, became depressed, meeting criteria for Major Depressive Disorder at the evaluation. The grandmother had advised everyone to avoid the child. Isolation and emotional neglect had led to a failure-to-thrive condition. The psychiatrist began treating the mother while the child was still hospitalized. Although not Hmong, he expressed doubt that the child (who was doing so well in the hospital) was indeed a spirit child and recommended consultation with a spirit healer. The healer declared the child to be not a spirit child, which the grandmother accepted. On the follow-up the mother and child both did well. Although initially irritated that she had been shown to be wrong regarding the child, the grandmother became open to other perspectives regarding health and child raising.

In unusual cases, the label of "spirit baby" can last for decades.

Case Example. A Hmong baby was born in Laos with a facial hemangioma. Although medical consultation indicated that the child should do well over time, the paternal grandmother declared the child to be a spirit baby. The mother, trained in a health field, disagreed with the grandmother.

Nonetheless, the grandmother – who lived with the family – hammered the label home at every opportunity. Although he had to struggle with this negative image throughout his childhood and adolescence in the US, he did well as a young adult. Around the time of the grandmother's death, the young man was married, had two children, was well employed in a highly technical field, and owned his own home. Grandmother indicated finally that she had been wrong and paid tribute to his accomplishments.

Sibling hierarchy overshadowed sibling rivalry in traditional Hmong families. That is, each child was imbued with a sense of responsibility for younger siblings, and respect for older siblings. This tradition was highly adaptive when mother and father were away from the home for hours at a time with subsistence-related activities. By the same token this mode of family organization could be problematic.

Case Example. The eldest son in a Hmong family was 12 years old when his father died in the US. His mother's work hours increased, as she assumed two jobs (one of them requiring regular overnight travel away from home). Throughout his preteen and teenage years, his primary focus was on the family. Although he had good grades, as well as good social and athletic skills, his academic and high school accomplishments were overshadowed by his family commitments. Upon leaving home to attend college, he went through a period of irresponsibility and academic underachievement. When this tack led to failures and loss of face, he joined a religious cult for a time. Over this period he had a series of girlfriends whose common feature was their immaturity and need for a stable "big brother" relationship. His attitude toward his ever-changing employers and parental figures was that they expected too much, did not treat him fairly, and took advantage of him.

APPLICATION OF PSYCHOTHERAPIES TO HMONG PATIENTS

Behavioral modification is perhaps the most readily applicable psychotherapy. It does require some commitment to a period of therapy, at times requiring effort and/or exacerbation of misery. However, it requires neither faith in talk as a means of therapy nor belief in western psychological concepts (e.g., motivation, unconscious, and repression) that are not universally shared even in the west.

Case Example. A 43-year-old Hmong woman had been unable to sleep in a room alone since the death of her husband 6 months earlier. She also required that the room be lit, adding to the burden of meeting her request. Placed by herself in a darkened room in the clinic, she immediately became intensely anxious to the point of having a panic attack. Treatment consisted of tricyclic medication to reduce the severity of her panic attacks together with a series of five daily exposures to a darkened room in the

clinic. These periods in the darkened room progressed from seconds before panic occurred, eventually to a period of 2 h with no panic. She was able to extend this clinic experience to her being alone in a bedroom at night.

Interpersonal therapy can be highly effective with Hmong patients, whose ordinary appreciation of the mental health implications of social relationships exceeds that of many native born Americans. Most Hmong do indeed appreciate that they are their "brother's keeper," unlike the American ambivalence regarding this concept. Thus, emotional distress can have its origins, as well as its remediation in family relationships. The concepts of Eric Berne offer a useful conceptual frame of reference to clinicians conducting this type of therapy.

Network therapy, using the methods described by Cherokee psychologist Attneave, can be particularly effective in working with extended families. This approach requires a sufficiently large room, a sufficient period of time (90 minutes to a few hours), extra time to develop rapport and set the group task, and a final period of commitments to action by extended family members, including the patient. This approach can be therapeutic for a variety of disorders as well as age groups, assuming that the patients are not alienated from or already extruded from the extended family network.

Interpretations in psychodynamic-oriented psychotherapy reach heightened effectiveness when they employ Hmong myths or proverbs. An early indication of the therapist's success or failure lies in observing the patient's emotional response. Amusement with the interpretation, or an irritated denial of its remote possibility suggest that the clinician has honed into the heart of the matter. Absence of any response suggests that the interpretation is not an accurate or useful one. A valuable interpretation meets the following criteria:

- Has utility in numerous other situations besides the immediate one being discussed, so that the patient revisits it often.
- Permits gradually more intensive and extensive self-understanding, in a variety of settings and situations, so that the patient learns from reconsidering it.
- Leads to preventive actions, so that the actor can avoid repeating the same mistakes, rather than simply providing self-awareness after the fact.
- Is both critical and laudatory in regard to its value-laden judgments regarding the patient's decisions and behaviors.

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