Beyond the *DSM-5* Diagnoses: A Cross-Cultural Approach to Assessing Trauma Reactions

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Although trauma exposure is a global phenomenon, trauma reactions vary considerably across cultures. Western psychiatric diagnoses, such as posttraumatic stress disorder (PTSD), may be limited in capturing the breadth of trauma reactions in cross-cultural contexts. Instead, cross-cultural instruments should examine locally relevant reactions, such as idioms of distress and explanatory models of illness, and account for ongoing stress and adversity. This article explains the need for complementing traditional trauma assessment approaches, how to create culturally sensitive instruments, the style and stance of practicing cultural humility when administering instruments, how to account for ongoing trauma and adversity, and ways to incorporate findings into treatment. These steps can improve culturally sensitive and comprehensive trauma assessment to capture universal and culturally relevant trauma reactions.

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According to the World Mental Health Surveys, roughly 70% of the global population experiences traumatic events (1). From internal displacement to war and migration, trauma is a near-ubiquitous human experience. Although the scope of trauma is a global phenomenon, diagnostic considerations may differ across cultures. Therefore, assessment methods are expanding to meet the needs of increasingly diverse populations who require trauma-informed services. This article considers diagnostic variations in trauma reactions across cultures, evidence-based assessment strategies to account for culturally distinct trauma reactions, and incorporation of cross-cultural trauma reactions into treatment.

DIAGNOSTIC CONSIDERATIONS: UNIVERSAL AND CULTURALLY RELEVANT TRAUMA REACTIONS

As posttraumatic stress disorder (PTSD) is a consequence of traumatic experiences, it is natural to assume that PTSD should exist and be the key psychiatric condition among people exposed to trauma. Although empirical support for the validity of the PTSD construct is found in many cultural groups, it cannot be automatically assumed for every cultural group. The essential question when working with diverse cultural groups remains: is PTSD a valid construct applicable to quantify suffering within this population?

Most psychological research is premised on studies sampling a minority of the global population. As Henrich et al. discussed in their 2010 *Nature* article "Most People Are Not WEIRD," most psychological research draws from subject pools whose demographic characteristics are westernized, including being more educated, more industrialized, rich, and from democratic nations that do not represent the vast majority of the world, such as individuals from the Global South. Therefore, clinicians and researchers must be cautious of what Arthur Kleinman described in 1977 as a "category fallacy" (2): This refers to the misconception that categories created in one cultural context apply equivalently to another. Put differently, if we define suffering using a Western lens and seek to find corresponding reactions of this suffering, we will likely find this evidence. However, finding evidence of a disorder predefined this way does not mean that these are the most important reactions to evaluate in this context (3) or that they form the same cohesive syndrome (e.g., PTSD) within the cultural group.

In fact, mounting evidence suggests that PTSD is just one type of trauma-related disorder and that trauma reactions are quite culturally variable (4). Four arguments support this claim. First, the endorsement rate of reactions varies considerably by cultural setting. Second, certain reactions that are excluded from Western diagnostic categories (i.e., idioms of distress) may be the hallmark of trauma reactions in some cultural settings. Third, explanations attributed to trauma-related suffering vary by cultural setting, and such explanations shape distinct illness experiences. Finally, cultural groups experiencing ongoing adversity may not fit into Western biomedical diagnoses such as PTSD.

Reactions of PTSD Vary Across Cultures

In 2011, Hinton and Lewis-Fernández (4) conducted a comprehensive narrative review and found cross-cultural

differences in the prevalence of PTSD symptom clusters. First, they found that the presence of the numbing-avoidance cluster—present in the *DSM-IV*—varied considerably across cultures. Two independent studies with Kalahari bushmen and Vietnamese refugees found that, although intrusion reactions were highly endorsed, the numbing-avoidance reactions were not central trauma reactions; this lower endorsement rate led to significantly underdiagnosing PTSD in these groups (5, 6). The finding that numbing-avoidance reactions varied cross-culturally may be partly explained by the nature of these symptom clusters. PTSD symptom clusters consist of biological abnormality through autonomic nervous system reactivity (e.g., re-experiencing, arousal), behavioral abnormality through coping responses (e.g., avoidance), and affective abnormality through sustained cognitive and mood changes (e.g., negative alterations in cognition and mood). Although the biological responses could be more cross-culturally universal, the behavioral and affective responses are more likely to be culturally mediated (7, 8). In the process of cultural socialization, behaviors are rewarded, punished, and ignored. Over time, these behaviors become culturally socialized as either adaptive and desired in a cultural context or maladaptive and to be avoided (7). Similarly, affective aspects of PTSD may be culturally mediated through rules that determine which emotional experiences and expressions are culturally permitted to be displayed (9). Altogether, the behavioral and affective aspects of PTSD may be more culturally malleable than the biological aspects. The notion that some PTSD symptom clusters appear biologically invariant whereas others may be culturally shaped bolsters the finding that PTSD symptom presentation varies across cultures (4, 7, 8, 10).

Although avoidance-numbing reactions are not universally endorsed, somatic complaints are frequently reported across cultures but remain excluded from the diagnostic descriptions of PTSD (11–13). Examples include increased body heat, reported by Salvadoran and Senegalese refugees; sudden shortness of breath, reported by Rwandan genocide survivors; and a host of somatic complaints linked to trauma exposure, reported by Cambodian refugees (4). Cambodian refugees, who survived human rights violations and extensive trauma during the Pol Pot regime, represent an illustrative case in point. One study found that 65% of Cambodian refugees diagnosed as having PTSD reported a sleep paralysis episode in the past year, compared with 15% without PTSD (14). Similarly, they reported panic-like phenomenology when reminded of their trauma (15). Although most somatic complaints are excluded from the PTSD diagnosis, the notion that somatic complaints are part of trauma-related clinical presentations has gained wider acceptance in the cross-cultural PTSD literature; some researchers have developed assessment tools specifically to assess somatic complaints after trauma exposure (16).

Idioms of Distress

As PTSD reactions can vary across cultures, idioms of distress offer an alternative lens into cultural manifestations of trauma-related distress. Idioms of distress are culturally relevant reactions that are locally shaped and culturally recognizable forms of suffering (17–20). Idioms of distress are not included in Western psychiatric diagnoses precisely because of their local—rather than universal—relevance. Idioms of distress often do not map cleanly onto Western psychiatric diagnoses. For instance, the widely reported idiom "thinking too much" can be associated with depression and PTSD, but it does not always correspond to any one Western psychiatric diagnosis (21). Therefore, idioms of distress can be useful stand-alone diagnostic categories within some cultural groups.

Idioms of distress may also be important diagnostic indicators of PTSD (22). In a study of Cambodian refugees, the idiom "thinking a lot" was a more prominent trauma reaction than most of the *DSM-5* PTSD symptoms (23), which argues for including this idiom within the assessment of trauma reactions for Cambodian refugees. Another cultural manifestation of distress within this population are "khyâl attacks" (wind attacks), which involve fear of death, dysregulation within the body when standing up, and shared symptoms of panic attacks (24). In the Chinese context, "shenjing shuairuo," or neurasthenia, is a syndrome indicated by physical exhaustion, fatigue, weakness, and nonspecific aches and pains that highly overlaps with the Western psychiatric diagnosis of depression (25). Somatization is also commonly reported, along with dissociation among cultural groups with PTSD (26), and "shenjing shuairuo" might also be a culturally specific reaction to stress, including traumatic events.

The practical usefulness of idioms in psychological assessment is the shared language they provide to describe suffering. As these expressions hold cultural meaning, they are also less stigmatizing than Western psychiatric concepts (27), which may not possess cultural salience and could be interpreted incorrectly. Rather than engage in one-way psychoeducation about mental health from a Western psychiatric perspective, a culturally informed perspective is comprehensive in that it elicits idioms of distress, cultural syndromes, and illness beliefs. Comprehensive assessment hinges on using qualitative and quantitative approaches to define and evaluate universal and culturally relevant trauma reactions. Altogether, comprehensive trauma assessment includes universal and culturally relevant trauma reactions.

Explanatory Models of Illness

Explanatory models of illness refer to a client's or cultural group's viewpoints on the nature of the illness they are experiencing, its perceived causes, and solutions or help-seeking associated with it (28). Applied to trauma reactions, explanatory models may also include a cultural group's view of why a traumatic event occurred. For example, some cultural groups may believe that a trauma occurred because supernatural forces punished them or their community for a transgression or a trauma occurred as part of their karma (29, 30). The impact of the trauma itself may be experienced

communally rather than individually; that is, trauma reactions may be conceptualized as a disruption to the social and moral order (31). These dynamics present a complex task for clinical judgment: Clinicians must untangle the attributions of trauma that may be unhelpful to healing while appreciating the culturally normative interpretations of reactions and precipitating events (32). When clinicians incorporate explanatory models into the assessment process, the accuracy of clinical diagnoses is enhanced. Further, this process can offer culturally diverse clients a more consistent and integrated view of their reactions by grounding their conceptualization in their own cultural beliefs. This process, referred to as "explanatory model bridging," is an essential part of culturally informed clinical conceptualization and produces therapeutic results in treatment (33).

Ongoing Stressors: When the Trauma Isn't "Post"

Finally, diagnosing PTSD or other trauma reactions across cultures can be complicated by the failure to account for ongoing stressors (34–36). Ongoing stressors are daily stressful events that can reduce people's ability to cope with stressors overall. Cross-cultural PTSD research from low- and middle-income countries and within contexts of relative deprivation in high-income countries has centered on chronically poor communities and conflict-affected people, for whom ongoing stressors are pervasive. People in resource-constrained settings experience poverty-related stress, vulnerability to sexual violence, food insecurity, lack of resources, insecure housing, and the threat of future physical or political violence (36). Such ongoing stressors raise the question of whether psychological findings from high-income countries—often premised on Western psychiatric concepts and treatment modalities—can viably generalize to low- and middle-income countries or resource-constrained settings (17, 36, 37).

Overall, posttrauma reactions across cultures may be qualitatively distinct from PTSD reactions because of the variable endorsement of PTSD reactions, the centrality of idioms of distress, different explanatory models of illness, and the presence of ongoing stressors that render trauma and adversity as ongoing phenomena. Together, these findings support the need to complement traditional assessment approaches of universal trauma reactions with culturally relevant trauma reactions for comprehensive trauma assessment.

EVIDENCE-BASED ASSESSMENT OF PTSD ACROSS CULTURES

Valid and reliable assessment is a cornerstone of evidence-based clinical intervention. An emic approach uses frameworks present within the cultural group regarding illness, whereas an etic approach applies definitions of illness developed outside a cultural group. The application of etic approaches assumes that psychopathology is a universally experienced phenomenon, regardless of culture, and this largely follows a biological view. A culturally relativistic view suggests that culture is essential in understanding psychopathology and that, at the extreme, culture is a mediating force through which all pathology is defined and expressed. This latter approach would, therefore, challenge whether PTSD or any psychiatric disorder is applicable outside the culture where it was developed as an illness category. To address this tension, methods and strategies that account for both etic and emic perspectives can be applied toward the comprehensive assessment of universal and culturally relevant trauma reactions.

Methods and Strategies to Create Culturally Sensitive Instruments

A key advancement in assessing trauma reactions involves identifying culturally specific syndromes and idioms and incorporating them into established Western screening instruments (38). This approach bridges the divide between emic and etic approaches by leveraging the established psychometric properties of existing instruments as a starting point for further psychometric adaptation and evaluation. Screening instruments are critical in assessing PTSD, because most low- and middle-income countries lack enough trained clinical professionals to assess and treat high numbers of trauma-exposed individuals needing services (39). By incorporating culturally relevant reactions, such instruments can become more holistic assessment tools and have greater sensitivity to detect suffering (16). The integration of culturally relevant reactions follows the approach outlined by Bolton and Tang (40), which has been applied in many cultural settings (41–43). This method follows five steps:

1. Conducting qualitative interviews to identify community-defined mental health priorities;
2. Identifying existing instruments with established psychometric properties that appear to capture the reactions identified (alternatively, de novo instruments can be created on the basis of the qualitative interviews; 44);
3. Translating and adapting these instruments by incorporating local idioms or reactions identified in the first step;
4. Conducting cognitive interviews to assess comprehension of items; and
5. Validating the instruments and assess their psychometric properties.

In the first step, qualitative interviews engage members of the cultural group in a discussion about priority needs. These methods can take the form of in-depth qualitative interviews, focus groups, or free listing methods that provide an opportunity for the group to list the various reactions associated with a community-defined illness concept. Frequencies of these reactions provide evidence of their primacy within the symptom presentation of the community. The second step involves examining the reactions and mapping them onto instruments that appear to assess the concept following Western psychiatric definitions, including for PTSD. The third step involves translating these scales through a rigorous process: iterative

translation and back-translation, review by bilingual mental health professionals, evaluation of items in focus group discussions, comparison between back-translated and original versions, and pilot testing of the scale (45).

A critical stage during instrument validation is to conduct cognitive interviews (46), which is a think-aloud method of ensuring that items are conceptually clear, nonoffensive, relevant, appropriate, and meaningful. Cognitive interviews involve asking members of the community to state the meaning of an item or describe it in their own words. The adequacy of the translation and conceptual equivalence can be established with this method. Another critical area that receives less attention is the response option of a scale. The traditional Likert-type scale, typically used in PTSD instruments, may not be understood universally. In some cultures, response options such as "not at all," "somewhat," "a little bit," "moderately," and so on are not well-defined or meaningful gradients. Therefore, visual analog response options might aid participants in ascribing differences in their degree of distress. For example, studies have used images of people carrying larger weights on their heads (43), facial images that range from smiles to frowns (47), or circles filled in by quarters to show how much of a symptom is present (42). Each approach uses visual representations, which are likely to communicate burden in gradients more effectively than numeric Likert-type scales. The final step is to validate the instruments. Validation takes several forms, including structural and factorial validity, largely assessed using confirmatory factor analysis; convergent and discriminant validity, which is assessed by evaluating the test against other constructs that are known to correlate (or not correlate) with the construct under study; and criterion validity, which is the examination of whether the instrument performs against a gold standard and to establish a clinical screening cutoff score to assess the disorder.

If the goal of screening is to categorize people as those with or without PTSD (rather than to assess severity), the tool must be evaluated against a gold standard to establish criterion validity. This gold standard may be defined by the community themselves, in a "known groups" method so that people who are thought to have the disorder are nominated by health workers and are compared with people who are thought not to have the disorder through a similar nomination process (40). As an example, this process was applied to validate the child PTSD reaction index among Somali refugee children living in Ethiopian refugee camps (42). Another gold standard could be using a clinician-administered interview with a standardized instrument, as was done to validate the PTSD Checklist for *DSM-5* in a study with Filipino domestic workers in China (48). Notably, the *DSM-5* Cultural Formulation Interview is a semi-structured interview. This interview encourages culturally formulated idiographic assessment and builds off the work of global mental health and transcultural psychiatry in previous decades. Although this interview is foundational to starting discussions with culturally different clients, it is unclear how often this interview is used in day-to-day clinical practice. This interview can be augmented with the administration of clinical instruments assessing both universal and culturally relevant trauma reactions for a comprehensive clinical assessment.

Finally, because determining PTSD is complicated in conditions of ongoing stress and adversity, instrument findings can be strengthened by querying for experiences of ongoing stress and adversity at the time of the assessment. A recent study used this approach to measure pre- and postmigration stressors among Filipino migrants, providing more context for interpreting PTSD and anxiety findings (49). Reporting ongoing stressors and adversity can improve confidence in study findings and provide a more nuanced picture of clinical considerations, because PTSD may not be the best diagnosis to capture reactions to current stressors.

How to Assess Across Cultures: Practicing Cultural Humility

When considering the style and stance of the assessor, the concept of cultural humility bears consideration. Cultural humility is a process of self-reflection and critique to redress power imbalances that exist between health professionals and patients to develop a mutually beneficial relationship (50). Applying this concept to the field of traumatic stress invites reflection about power imbalances between those who develop and codify psychiatric diagnoses, those who conduct assessments, and those who are being assessed. In a global context, individuals receiving Western psychiatric diagnoses may lack agency, resources, and engagement with those in power, thereby preventing equitable co-creation of knowledge regarding the Western psychiatric concepts being applied to them. With humility comes respect for other cultures, and a consequence of this respect is an openness to other perspectives.

Although a tension exists between what is reified as psychiatric canon and what culture might teach us about mental illness, one should not fully abandon their own training and beliefs. However, humility affords the opportunity to consider alternative explanations for the symptoms or reactions, the expectations of norms of behavior, and the predicted course of the illness. Humility can thus lead to more nuanced, appropriate, and holistic definitions of trauma reactions so that all reactions are not pathologized (51).

Researchers and clinicians should be aware of historical events occurring between cultural groups, as these may shape expectations and activate stereotypes that may not be helpful for the assessment process. For example, structural racism and discrimination experienced by Native Americans and ethnic minorities in the United States exacerbates poor mental health in general and may decrease openness and trust during a clinical encounter (52). Similarly, encounters with assessors from different cultural backgrounds, or within contexts of uncertainty (e.g., refugees and asylum seekers), may evoke defensiveness, which could be misjudged as paranoia or uncooperativeness. Mischaracterizing such behavior can lead to improper inferences that may

further harm mental health and reduce access to appropriate care. Clinicians should also be aware of their own blind spots with regard to historical trauma and educate themselves (2). With the rise of migration to Western countries, the historical contexts that necessitated this migration and the geopolitical processes that may have led to collective or individual trauma should not be ignored. The framework of cultural humility invites ongoing education, acknowledgment of blind spots and power differentials, and the practice of reconnecting with curiosity and respect in clinical encounters. Finally, cultural humility is also consistent with culturally sensitive clinical practice. Cultural sensitivity is defined by cultivating awareness of one's own and others' cultural identities, using culturally formulated case conceptualization, and tailoring services to each client (53). Overall, cultural humility is a stance that is consistent with culturally sensitive care overall and an aspirational practice for conducting assessment across cultures.

INCORPORATING CROSS-CULTURAL TRAUMA REACTIONS INTO TREATMENT

Psychological treatments from high-income countries are increasingly being disseminated to low- and middle-income countries. Most trauma-focused treatments target PTSD, which is a common outcome of interpersonal violence across cultures (1, 54, 55). However, given the cultural relevance of idioms of distress and explanatory models of illness, these concepts should also be addressed in treatment.

In 2011, Benish et al. (56) conducted a direct-comparison meta-analysis with 21 studies. They confirmed that culturally adapted treatment is, in fact, more effective than unadapted treatment (d=0.32). However, the only significant moderator accounting for this difference was modification of the "illness myth," also known as the explanatory model. How psychological distress is experienced, labeled, caused, and cured all form part of this explanation. This study highlights the importance of eliciting a group's explanatory model and adapting treatment in accordance with it. In fact, understanding the client's interpretation of reactions—invariably influenced by the prevailing cultural interpretation—and providing treatment congruent with the client's explanatory model appears to be the most "active ingredient" in culturally adapted treatment.

Reviews of culturally adapted cognitive behavioral therapy also highlight the usefulness of incorporating cultural concepts gleaned from formative assessment work into treatment (33). Using the cultural explanatory model in psychoeducation about an illness, highlighting how treatment can address idioms of distress most concerning to clients in the cultural group rather than Western biomedical diagnoses, and relying on cultural metaphors to socialize clients to treatment are all effective strategies to enhance the viability of psychological treatments within cross-cultural settings. Notably, these strategies evolve from community-based participatory research practices that allow researchers and cultural agents to co-create knowledge to optimize the sustainability of these treatments in the long term (57).

An illustrative example of using cultural concepts of distress in treatment comes from Nepal. Kohrt and colleagues (27) have studied Nepali ethnopsychology, including how trauma is conceptualized, and used the relevant cultural concepts to provide recommendations for many evidence-based psychological treatments. For example, this group adapted dialectical behavior therapy to target dysregulated emotions and suicidality in Nepal (58). They adapted this treatment in many ways, including using culturally salient metaphors, describing skills as universally applicable, and having members involved in this sociocentric culture.

CONCLUSIONS

Overall, the privilege given to Western psychiatric diagnoses across cultural settings may have the unintended consequence of collective forgetting about how culture may affect mental health. Rather than relying only on Western psychiatric diagnoses, culturally diverse perspectives on health and well-being should continue to be rigorously studied and meaningfully incorporated into assessment and treatment. Studying these concepts, systematically adding them to instruments during assessment, and referring back to them as part of treatment is a cross-cutting approach to culturally sensitive assessment that goes beyond the approach offered by the *DSM-5*. These steps, which are becoming a gold standard in global mental health, can improve the quality and access to care for marginalized populations in low- and middle-income countries and in resource-constrained environments in high-income countries.

The suggestions that we provide in this article can be used in routine clinical settings. When available, clinicians can append their assessment batteries with assessments incorporating idioms of distress to assess culturally relevant trauma reactions. When such assessments are not available, clinicians can listen for idioms of distress and use their clinical assessment skills to probe into the lived experience for each patient. Similarly, clinicians can position themselves as curious learners and practice cultural humility with patients to improve engagement with clinical services and enhance trust toward health care systems as a whole. Finally, clinicians can enhance the treatment process and clinical outcomes of patients by continually targeting and evaluating idioms of distress alongside the clinical diagnoses for which they are treating patients. This step will ensure that all aspects of a patient's distress—universal and culturally relevant reactions—are being addressed in a comprehensive manner.

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REFERENCES

1. Kessler RC, Aguilar-Gaxiola S, Alonso J, et al: Trauma and PTSD in the WHO World Mental Health Surveys. Eur J Psychotraumatol 2017; 8(Supp 5):13533–13583. https://www.tandfonline.com/doi/full/10.1080/20008198.2017.1353383.
2. Kleinman A, Das V, Lock M, et al: Social Suffering. Los Angeles, University of California Press, 1997.
3. Miller KE, Omidian P, Kulkarni M, et al: The validity and clinical utility of post-traumatic stress disorder in AFhanistan. Transcult Psychiatry 2009; 46:219–237.
4. Hinton DE, Lewis-Fernández R: The cross-cultural validity of posttraumatic stress disorder: implications for DSM-5. Depress Anxiety 2011; 28:783–801. http://www.ncbi.nlm.nih.gov/pubmed/21910185.
5. Fawzi MCS, Pham T, Lin L, et al: The validity of posttraumatic stress disorder among Vietnamese refugees. J Trauma Stress 1997; 10:101–108. http://doi.wiley.com/10.1002/jts.2490100109.
6. McCall GJ, Resick PA: A pilot study of PTSD symptoms among Kalahari Bushmen. J Trauma Stress 2003; 16:445–450. https://onlinelibrary.wiley.com/doi/pdf/10.1023/A%3A1025702326392.
7. Marsella AJ: Ethnocultural aspects of PTSD: an overview of concepts, issues, and treatments. Traumatology 2010; 16:17–26.
8. Rasmussen A, Smith H, Keller AS: Factor structure of PTSD symptoms among West and Central African refugees. J Trauma Stress 2007; 20:271–280. http://doi.wiley.com/10.1002/jts.20208.
9. Ekman P, Sorenson ER, Friesen WV: Pan-cultural elements in facial displays of emotion. Science 1969; 164:86–88.
10. Tseng W-S. Culture and psychopathology: general view; in Textbook of Cultural Psychiatry. Edited by Bhugra D, Bhui K. Cambridge, UK, Cambridge University Press, 2007.
11. Renner W, Salem I, Ottomeyer K: Cross-cultural validation of measures of traumatic symptoms in groups of asylum seekers from Chechnya, AFhanistan, and West Africa. Soc Behav Personal 2006; 34:1101–1114.
12. Van Ommeren M, Sharma B, Sharma GK, et al: The relationship between somatic and PTSD symptoms among Bhutanese refugee torture survivors: examination of comorbidity with anxiety and depression. J Trauma Stress 2002; 15:415–421.
13. Hiar S, Thomas CL, Hinton DE, et al: Somatic symptoms mediate the relationship between trauma during the Arab Spring and quality of life among Tunisians. J Nerv Ment Dis 2016; 204:153–155.
14. Hinton DE, Pich V, Chhean D, et al: Sleep paralysis among Cambodian refugees: association with PTSD diagnosis and severity. Depress Anxiety 2005; 22:47–51.
15. Hinton DE, Hinton AL, Eng K-T, et al: PTSD and key somatic complaints and cultural syndromes among rural Cambodians: the results of a needs assessment survey. Med Anthropol Q 2012; 26: 383–407.
16. Hinton DE, Kredlow MA, Bui E, et al: Treatment change of somatic symptoms and cultural syndromes among Cambodian refugees with PTSD. Depress Anxiety 2012; 29:147–154.
17. Kohrt BA, Rasmussen A, Kaiser BN, et al: Cultural concepts of distress and psychiatric disorders: literature review and research recommendations for global mental health epidemiology. Int J Epidemiol 2014; 43:365–406.
18. Nichter M: Idioms of distress revisited. Cult Med Psychiatry 2010; 34:401–416.
19. Kirmayer LJ: Cultural variations in the clinical presentation of depression and anxiety: implications for diagnosis and treatment. J Clin Psychiatry 2001; 62(Suppl 13):22–28, discussion 29–30.
20. Kleinman A, Eisenberg L, Good B: Culture, illness, and care: clinical lessons from anthropologic and cross-cultural research. Ann Intern Med 1978; 88:251–258.
21. Kaiser BN, Haroz EE, Kohrt BA, et al: "Thinking too much": A systematic review of a common idiom of distress. Soc Sci Med 2015; 147:170–183. doi: 10.1016/j.socscimed.2015.10.044.
22. Hinton DE, Lewis-Fernández R: Idioms of distress among trauma survivors: subtypes and clinical utility. Cult Med Psychiatry 2010; 34:209–218.
23. Hinton DE, Reis R, de Jong J: The "Thinking a Lot" Idiom of Distress and PTSD: An Examination of Their Relationship among Traumatized Cambodian Refugees Using the "Thinking a Lot" Questionnaire. Med Anthropol Q 2015; 29:357–380.
24. Hinton DE, Nickerson A, Bryant RA: Worry, worry attacks, and PTSD among Cambodian refugees: a path analysis investigation. Soc Sci Med 2011; 72:1817–1825.
25. Hall BJ, Chang K, Chen W, et al: Exploring the association between depression and shenjing shuairuo in a population representative epidemiological study of Chinese adults in Guangzhou, China. Transcult Psychiatry 2018; 55:733–753.
26. Kirmayer LJ: Confusion of the senses: implications of ethnocultural variations in somatoform and dissociative disorders for PTSD; in Ethnocultural Aspects of Posttraumatic Stress Disorder: Issues, Research, and Clinical Applications. Edited by Marsella AK, Friedman MJ, Gerrity ET, et al. Washington, DC, American Psychological Association, 1996.
27. Kohrt BA, Hruschka DJ: Nepali concepts of psychological trauma: the role of idioms of distress, ethnopsychology and ethnophysiology in alleviating suffering and preventing stigma. Cult Med Psychiatry 2010; 34:322–352.
28. Kleinman A: Patients and Healers in the Context of Culture: An Exploration of the Borderland between Anthropology, Medicine, and Psychiatry, Vol. 3. Los Angeles, University of California Press, 1980.
29. Dinh M-HN: Vietnamese Buddhist Monks'/Nuns' and Mediums' Views on Attribution and Alleviation of Symptoms of Mental Illness. San Diego, Alliant International University, 2018.
30. Landrine H, Klonoff EA: Cultural diversity in causal attributions for illness: the role of the supernatural. J Behav Med 1994; 17:181–193.
31. Summerfield D: A critique of seven assumptions behind psychological trauma programmes in war-affected areas. Soc Sci Med 1999; 48:1449–1462.
32. Aggarwal NK, Nicasio AV, DeSilva R, et al: Barriers to implementing the DSM-5 Cultural Formulation Interview: a qualitative study. Cult Med Psychiatry 2013; 37(3):505–533.
33. Hinton DE, Patel A: Cultural adaptations of cognitive behavioral therapy. Psychiatr Clin North Am 2017; 40:701–714. doi: 10.1016/j.psc.2017.08.006.
34. de Jong JT, Komproe IH, Spinazzola J, et al: DESNOS in three postconflict settings: assessing cross-cultural construct equivalence. J Trauma Stress 2005; 18:13–21. https://pdfs.semanticscholar.org/a738/3f9d2a43c5e92c718ca1d9dd0d9ec6ab8cb5.pdf.
35. Keeley JW, Reed GM, Roberts MC, et al: Disorders specifically associated with stress: A case-controlled field study for ICD-11 mental and behavioural disorders. Int J Clin Health Psychol 2016; 16:109–127. https://www.sciencedirect.com/science/article/pii/S169726001500085X.
36. Tol WA, Barbui C, Bisson J, et al: World Health Organization guidelines for management of acute stress, PTSD, and bereavement: key challenges on the road ahead. PLoS Med 2014; 11: e1001769. http://dx.plos.org/10.1371/journal.pmed.1001769.
37. Tol WA, Komproe IH, Jordans MJD, et al: School-based mental health intervention for children in war-affected Burundi: a cluster randomized trial. BMC Med 2014; 12:56.
38. de Jong JT, Van Ommeren M: Toward a culture-informed epidemiology: Combining Qualitative and Quantitative Research in Transcultural Contexts. Transcult Psychiatry 2002; 39:422–433.
39. Chipimo PJ, Fylkesnes K: Comparative validity of screening instruments for mental distress in Zambia. Clin Pract Epidemiol Ment Health 2010; 6(1):4–15.
40. Bolton P, Tang AM: An alternative approach to cross-cultural function assessment. Soc Psychiatry Psychiatr Epidemiol 2002; 37:537–543. https://link.springer.com/content/pdf/10.1007/s00127-002-0580-5.pdf.

41. Betancourt TS, Bass J, Borisova I, et al: Assessing local instrument reliability and validity: a field-based example from northern Uganda. Soc Psychiatry Psychiatr Epidemiol 2009; 44(8):685–692.
42. Hall BJ, Puffer E, Murray LK, et al: The importance of establishing reliability and validity of assessment instruments for mental health problems: an example from Somali children and adolescents living in three refugee camps in Ethiopia. Psychol Inj Law 2014; 7:153–164. http://link.springer.com/10.1007/s12207-014-9188-9.
43. Kohrt BA, Jordans MJD, Tol WA, et al: Validation of cross-cultural child mental health and psychosocial research instruments: adapting the Depression Self-Rating Scale and Child PTSD Symptom Scale in Nepal. BMC Psychiatry 2011; 11:127. https://link.springer.com/articles/10.1186/1471-244X-11-127.
44. Miller KE, Omidian P, Quraishy AS, et al: The AFhan symptom checklist: a culturally grounded approach to mental health assessment in a conflict zone. Am J Orthopsychiatry 2006; 76:423–433. http://doi.apa.org/getdoi.cfm?doi=10.1037/0002-9432.76.4.423.
45. van Ommeren M, Sharma B, Thapa S, et al: Preparing instruments for transcultural research: use of the translation monitoring form with Nepali-speaking Bhutanese refugees. Transcult Psychiatry 1999; 36:285–301. http://journals.sagepub.com/doi/10.1177/136346159903600304.
46. Willis GB: Cognitive Interviewing: A Tool for Improving Questionnaire Design. Thousand Oaks, CA, Sage, 2004.
47. Palermo T, Hall BJ, Cirillo C, et al: Enhanced life distress inventory: Development and validation in two African countries. Br J Health Psychol 2020; 25:728–753. https://onlinelibrary.wiley.com/doi/abs/10.1111/bjhp.12448.
48. Hall BJ, Yip PSY, Garabiles MR, et al: Psychometric validation of the PTSD Checklist-5 among female Filipino migrant workers. Eur J Psychotraumatol 2019; 10:1571378. https://www.tandfonline.com/doi/full/10.1080/20008198.2019.1571378.
49. Mordeno IG, Hall BJ: DSM-5-based latent PTSD models: Assessing structural relations with GAD in Filipino post-relocatees. Psychiatry Res 2017; 258:1–8.
50. Tervalon M, Murray-Garcia J: Cultural humility versus cultural competence: a critical distinction in defining physician training outcomes in multicultural education. J Health Care Poor Underserved 1998; 9:117–125.
51. Kirmayer LJ, Rousseau C, Jarvis GE, et al: The cultural context of clinical assessment. Psychiatry 2008; 3:54–66.
52. Kirmayer LJ, Gone JP, Moses J: Rethinking Historical Trauma. London, Sage, 2014.
53. Benuto LT, Singer J, Gonzalez F, et al: How do clinicians define cultural sensitivity?: A mixed methods study. Int J Ment Health (Epub ahead of print, Oct 18, 2020).
54. Chung H, Breslau N: The latent structure of post-traumatic stress disorder: tests of invariance by gender and trauma type. Psychol Med 2008; 38:563–573.
55. Breslau N: The epidemiology of trauma, PTSD, and other posttrauma disorders. Trauma, Violence, & Abuse 2009; 10(3):198–210. http://journals.sagepub.com/doi/pdf/10.1177/1524838009334448.
56. Benish SG, Quintana S, Wampold BE: Culturally adapted psychotherapy and the legitimacy of myth: a direct-comparison meta-analysis. J Couns Psychol 2011; 58:279–289.
57. Minkler M: Community-based research partnerships: challenges and opportunities. J Urban Health 2005; 82(2, Suppl 2):ii3–ii12.
58. Ramaiya MK, Fiorillo D, Regmi U, et al: A cultural adaptation of dialectical behavior therapy in Nepal. Cognit Behav Pract 2017; 24:428–444. https://www.sciencedirect.com/science/article/pii/S1077722917300263.