

# **Culturally Sensitive PTSD Screening in Non-Western Youth: Reflections and Indications for Mental Health Practitioners**

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## **Abstract**

Children around the world are exposed to traumatic events and research confirms that cultural factors play a central role in the psychological experience of trauma and the manifestation of symptoms in trauma and stress-related disorders. The DSM-5 and ICD-11 call on practitioners to consider the role of culture and context in the manifestation, assessment, and treatment of mental health disorders. This article analyzes peer-reviewed literature involving youth and adolescent PTSD screening in non-Western contexts, revealing only few instruments that have undergone validation for cultural contexts outside those for which they were developed. Studies that include cultural validation show marked differences in methodology and conceptual framework for adaptation, translation, and validation, and disagreement on the scale and scope of tools necessary to assess the impact of trauma in non-Western youth. The discussed studies reveal a need to debate a uniform methodology for cultural adaptation and validation of PTSD screening instruments.

**Keywords:** PTSD screening, refugee children, cultural adaptation, mental health

## Introduction

This narrative review aims to present a critical analysis of published studies that address the cultural adaptation and validation of screening instruments for the early identification of post-traumatic symptoms in non-Western youth.

Peer-reviewed literature underlines the influence of culture and socio-historical factors on the perception of and emotional response to a trauma and on the symptom structure of post-traumatic stress disorder (PTSD) (Bal and Jensen 2007). Various studies confirm that trauma, similar to feelings of shame, fear and embarrassment, vary according to culture (Derluyn *et al.* 2008). Culture and context join with the intra-psychical factors that shape the psychological experience of trauma, including attachment and parental psycho-social functioning (Tsujii *et al.* 2017), defence mechanisms (Marc 2016), attribution of meaning (Palosaari *et al.* 2016) and cognitions of self and the world (Ehlers and Clark 2000) to provide a complex and dynamic picture of trauma response in children and adolescents.

While the need to adapt and validate diagnostic instruments to cultural context is rooted in scientific literature and recognized in official diagnostic manuals (APA 2013a), an interest in cultural sensitivity as it applies to screening tools for post-traumatic symptoms in youth has only recently attracted initial attention (Gadeberg *et al.* 2017).

Analysis of peer-reviewed literature involving youth and adolescent PTSD screening in non-Western contexts reveals only few instruments that have undergone validation for cultural contexts outside those for which they were developed (Gadeberg *et al.* 2017). Furthermore, studies that include cultural validation show marked differences in methodology and conceptual framework.

In light of the current 'global refugee crisis' that saw 68.5 million people worldwide forcibly displaced by the end of 2017 (UNHCR), the need for culturally sensitive adaptation and validation of screening instruments appears fundamental. Unlike diagnostic tools, aimed at identifying specific mental health disorders in order to guide psychotherapeutic interventions, screenings of large populations seek only the differentiation of those who are in need of further mental health intervention from those who are not. If properly used, screening tools prove invaluable in allocating limited resources and ensuring that the attention of mental health professionals is concentrated on the subjects in greatest need. In order to be effective, these instruments must capture the cultural dimensions that attribute clinical significance to symptoms.

## Method

The articles referenced resulted from a search in peer-reviewed, English-language journals, published from 1999 to 2018. The searches were conducted between February 2017 and February 2019. The literature analysis has been

conducted through PubMed, PsycINFO and Scopus databases and key terms included: trauma, youth, culture, screening.

### **Trauma and Culture**

The World Health Organization's International Classification of Diseases assumed universality of mental health disorders in its prior version, ICD-10. The newly published ICD-11 aims to correct this limitation, noting within the revision's conceptual framework that culture must be viewed not as a distraction, but as a key factor in psychiatric diagnosis and central to the definition of mental and behavioural disorders (International Advisory Group for the Revision of ICD-10 Mental and Behavioural Disorders 2011).

Cultural understanding of mental health, culture-specific syndromes in the local context and the language available to describe distress all impact the expression of mental health disorders and the cognitive and behavioural constructs that link the traumatic experience with expression of symptoms (American Psychiatric Association (APA) 2013a). Culture modulates perceptions of traumatic events and the belief systems referenced to make sense of them (Su and Chen 2008), just as it impacts the way a subject overcomes a traumatic experience and the extent to which that trauma is integrated in cognitive structures. DSM 5 guidelines underscore the role of culture in determining the risk and severity of PTSD, as well as the expression of the syndrome, particularly with regard to avoidance and hyper-arousal (APA 2013b).

For children and adolescents impacted by trauma, culture plays a role in their reaction, emotional expression and possible therapeutic needs. Culture impacts not only the lived experience of trauma, but also its perception from the outside. Observed behaviours in youth such as group and independent play, degree of sociality and use of imagination are all strictly viewed through cultural lenses (Nader 2007).

### **International Standards for Cultural Sensitivity in Public Health**

The World Health Organization defines the social determinants of health as the conditions into which people are born, grow, live, work and age, all influenced by the distribution of wealth, power and resources in a particular context (World Health Organization 2017). In the United States, the Department of Health and Human Services establishes a 15-point set of standards for culturally and linguistically appropriate health care, indicating that effective care must be responsive to 'diverse cultural beliefs and practices' (US Department of Health and Human Services 2013).

For the first time in the DSM 5, the American Psychiatric Association defines the central role of culture and context in the manifestation and diagnosis of psychological disorders. Beyond reference to the role of culture in the diagnosis of specific disorders or generalized symptoms, including, for

example, a thorough explanation of the signs of psychological stress in different cultures, the DSM includes tools such as the Cultural Formation Interview that allow clinicians to investigate the impact of culture on symptom structure before undertaking research (APA 2013a).

### **PTSD Screening in Non-Western Youth: Methodological Issues**

Every day, children around the world experience trauma, whether physical violence, sexual assault, natural disasters, grave accidents or any number of other events. Between 10 and 35 per cent of these individuals will develop PTSD (Diehle *et al.* 2013). Incidence of certain traumatic events and the probability of repeated or continual exposure vary according to geographic and cultural factors (Ponnamperuma and Nicolson 2016).

Youth in non-Western, low-resource contexts are characterized by a number of unique PTSD risk factors. The entire world is subject to *natural disasters*, but individuals in the developing world, as well as historically and economically marginalized communities in developed countries, are most significantly impacted. Children constitute more than half the population in low- and middle-income countries (Marquer *et al.* 2015), although the majority of research funds in those contexts are applied to adult studies (Bal and Jensen 2007). Additionally, studies link *extreme poverty, violence and insecurity* in developing countries, as well as *limited availability of proper health care*, to increased probability of traumatic life events (Familiar *et al.* 2014). Children in contexts with *high incidence rates of HIV/AIDS* are impacted by life with a chronically ill parent, may be orphaned and are often subject to stigma and discrimination—all factors that aggravate the impact of traumatic events (Familiar *et al.* 2014).

In the case of *youth refugees*, children and adolescents fleeing their home countries face traumatic experiences during migration, mourning of a life left behind and negative environments in a new country, all of which contribute to increased emotional and behavioural problems. Adolescent refugees in Belgium revealed an average of 3.64 traumatic life events compared to 2.67 in a non-refugee group (Derluyn *et al.* 2008).

Regardless of the nature of traumatic events, practitioners need mental health screening tools sensitive to age and appropriate for use in non-Western and low-resource contexts.

Youth PTSD screening often includes care-giver feedback, made impossible in contexts subject to *war and famine*, with abnormally high populations of orphans and vulnerable children (Familiar *et al.* 2014). Chronic exposure to traumatic events in youth can lead to difficulties in regulating emotions and developing meaningful relationships. In fact, subjects exposed to *multiple traumas* show higher scores on PTSD-RI screenings (Steinberg *et al.* 2004, 2013).

Youth PTSD screening in non-Western contexts presents two methodological challenges: lack of established methodology for conducting those culture-specific validations and non-uniformity of translation practices (Murray *et al.* 2011)—conditions that result in a very narrow selection of tools validated for culture-specific or transcultural use (Gadeberg *et al.* 2017). The exercise of validating screening instruments to specific cultural contexts seems intuitive and necessary, especially considering the weight of culture and context on the lived experience of trauma and the elevated risk factors associated with trauma in the developing world. Recent scientific literature reveals a unified call for validation, although a review of non-Western PTSD studies confirms the need to debate and establish a uniform methodology among practitioners.

### *Validation against a Gold Standard*

Recent studies reveal methodological inconsistencies in determining criterion validity of assessment tools after adaptation for new cultural contexts. In most cases, psychometric comparison against a gold-standard clinical interview, closely tied to DSM or ICD diagnostic criteria and conducted by a local psychologist, is used to test the criterion validity of a screening instrument in a new cultural context (Marquer *et al.* 2015).

Significant obstacles are noted, however, in determining criterion validity against such a gold standard for studies in low-income, developing countries (Murray *et al.* 2011). The official diagnostic criteria that are used in such clinical interviews, developed in Western cultures, do not always accurately represent the manifestations of that disorder within a different cultural context. Moreover, the local clinicians called upon to conduct the gold-standard interview have often been trained in Western schools and may have inherent bias or not be sufficiently knowledgeable of the terminology and perceptions associated with the disorder.

Murray *et al.* (2011) adopt a method of validation proposed by Bolton (2001), particularly useful for the validation of instruments for use in low-income, developing countries, determining criterion validity through interviews with key cultural informants from the local context, instead of the gold-standard psychiatric diagnosis.

Recognizing the challenges of using a gold-standard psychiatric interview in a Burundian context, one study proposes an alternative approach (Ventevogel *et al.* 2014). The work group determined criterion validity with a psychiatric assessment performed together by an expatriate research psychiatrist, with a limited understanding of local culture, and one of two Burundian psychologists associated with the non-governmental organization where the research was conducted. In independent ratings, the team considered cultural information from the Burundian setting in evaluating whether the responses were pathological.

*Translation*

A review of scientific literature also highlights variation in the translation process. The use of back-translation is common, with the first translation most frequently conducted by a group of psychologists or psychiatrists who are also native speakers of the language of study and the back-translation curated by a professional translator (Diehle *et al.* 2013).

The many exceptions include cases where the original translation is not conducted by the authors of the study, but by other native speakers (Derluyn *et al.* 2008; Zhang *et al.* 2012); studies that employ another round of translation with double back-translation (Su and Chen 2008); group translation of the original screening tool (Familiar *et al.* 2014); and even reference to a research team that devised a five-step procedure for cross-cultural translation involving multiple back-translations and the participation of local mental health professionals, focus groups of local children and pilot testing at a local school (Ventevogel, *et al.* 2014).

When adapting a screening tool for an ethnically and culturally diverse group (Derluyn *et al.* 2008) or for children in developing countries with educational levels below international standards (Murray *et al.* 2011; Marquer *et al.* 2015), it is common to adapt the level of language used in the tool as part of the translation process. In these cases, the most frequent authors of these changes are local informants—health professionals, community leaders and other culturally significant points of reference.

**Tracing Diverse Screening Methodologies in Literature**

Seemingly more complex than the determination of methodological standards for validation and translation is the choice of the assessment itself. Over the past decade, various studies investigating youth PTSD in non-Western contexts have relied on two opposing classes of assessment tools: those specifically developed to screen PTSD in one particular cultural context and others envisioned for generalized use across cultures and contexts of the Global South.

The studies that follow explore the previously mentioned methodological issues and show how these challenges have been addressed by different research groups. While not all studies are centred on screening instruments specifically, the lessons learned from each allow for reflection on the complexity of cultural adaptation.

*Transcultural Youth Mental Health Screening*

Marquer *et al.* (2015) advocate for the development of simple, transcultural screening scales that can be readily translated for use in different developing countries, as is the case with the Psychological Screening for Young Children (PSYCa 3–6). The tool, validated in a prior study for use in Niger, is further adapted for use across in two urban contexts—Bogotá in Colombia and

Nairobi in Kenya, separated geographically, but linked in socio-economics, violence and insecurity (Marquer *et al.* 2015). The original assessment is condensed, translation conducted by informant groups and language adjusted for local education levels, with the resulting instrument demonstrating adequate concurrent validity across the two contexts. The tool is considered valid to screen for general psychological distress, after translation, across different cultural contexts of the Global South.

### *Culture-specific Instruments for PTSD Screening in Youth*

In contrast to this type of transcultural screening, multiple studies aimed at validating the UCLA Child Posttraumatic Stress Disorder–Reaction Index (PTSD-RI) for use in Zambia are based on an understanding of a very specific, culture-based manifestation of PTSD in Zambian youth.

In a first study designed to investigate the prevalence of mental health problems linked with child sexual violence in Zambia, Murray *et al.* (2011) set forth a cultural validation of the PTSD-RI for use in a centre for sexually abused youth in Lusaka. Familiar *et al.* (2014) then use the validated instrument at HIV palliative-care programmes in Lusaka and Kabwe to confirm the local symptom structure of PTSD in Zambian youth.

Translations of the PTSD-RI had previously been validated for youth samples in non-Western contexts with socio-economic and political conditions similar to those in Zambia, although this study (Murray *et al.* 2011) represents the first effort in peer-reviewed literature to propose a transcultural validation linked to a specific local context. Criterion validity is verified against the input of key informants within the local culture (Bolton 2001). Central to the use of local informants is the idea that, if a syndrome is identified as such by the local community, then their assessment as to the presence or absence of that syndrome should be used as a local criterion (Murray *et al.* 2011).

This exercise is time- and resource-intensive. The identification and inclusion of local informants in an already large and ideologically diverse working group, tasked with the understanding of local, culture-specific manifestations of the syndrome, are complex operations.

Adopting the cultural adaptation from their colleagues at Johns Hopkins University, Familiar and colleagues (2014) aimed to confirm a culture-specific PTSD symptom structure in a sample of orphans and vulnerable children in HIV palliative-care centres in Lusaka and Kabwe. Sixty-nine per cent of the sample had been exposed to six or more traumatic events. The study suggests that the specific manifestation of PTSD symptoms in the sample is likely linked to the cultural items included in the adapted PTSD-RI and associated with the manifestation of the syndrome in the local cultural context.

These findings would underscore the importance of the work done to develop a culturally sensitive adaptation and confirm the complex and intrinsic relationship between culture and the manifestation of mental health

syndromes. A review of current literature reveals remarkably few studies that go to such depths to adapt a screening instrument to local culture and then use that tool to identify a culture-specific symptom structure. While these conclusions in Zambia highlight the relevance of culture in screening for post-traumatic response, as is also underscored DSM 5, many studies related to youth trauma do not account these factors.

### *Impact of Culture and Context on Negative Cognitions*

While the impact of culture and context on symptom factors such as hyperarousal and avoidance are well documented (Wilson 2007; McDonald *et al.* 2018), a study of Taiwanese adults (Su and Chen 2008) confirms the role of culture in the structure of negative cognitions. The Posttraumatic Cognitions Inventory (PTCI) was developed in 1999 to measure negative cognitions that have been correlated to the development and persistence of PTSD, identified as predictors of PTSD severity (Foa *et al.* 1999), officially incorporated into the PTSD symptom structure with the publication of DSM 5 (APA). Recognizing the need for a culture-specific adaptation of this instrument, Su and Chen undertake a validation of Foa's scale with particular attention on the concept of self-blame in East Asian cultures. Compared to Westerners, East Asians have a stronger belief in the role of context or 'situationism' (Choi *et al.* 1999). This cultural condition leads individuals to be acutely aware of the role of situational and causal factors that influence their behaviour and less likely to attribute self-blame. As a result of their research, Su and Chen propose a revised blame subscale with reduced items proven to be more suitable for a Chinese population.

In contrast to this study of negative cognitions and confirmation of the role of culture in measuring this predictor of PTSD severity, a youth adaptation of the PTCI published one year later (Meiser-Stedman *et al.* 2009) does not refer to culture in the adaptation of the tool itself, discussion of study limitations or in reference to potential future research. The study was based on over 500 subjects between six and 17 years old in two Western contexts: the United Kingdom and Australia. Subjects are identified in children's hospitals and each presents only one traumatic experience: a fall, vehicular accident or episode of violence. Using five validated scales to measure test-retest, divergent and discriminant validity, the group identifies specific subscales for children and adolescents.

The authors note the limitations inherent to the study's single-trauma population and non-validity of the instrument on subjects exposed to multiple and prolonged trauma, prevalent in low-resource and developing countries. While the authors do not build on the work of Su and Chen (2008) to reference the role of culture and context in the manifestation of negative cognitions and PTSD, analysis of studies such as these have accelerated a dialogue on the importance of culture and context in mental health screening



that would result in the formal inclusion of culturally sensitive screening and diagnosis in DSM 5 upon publication in 2013.

### **Conclusion and Implications for Future Research**

Accurate screening of mental health problems in youth is essential to mitigate more complex problems in adulthood that place strain on individual well-being, as well as the wider functioning and economy of a country (Murray *et al.* 2011). Unresolved needs in young children may negatively impact emotional, cognitive and physical development in ways that extend long beyond immediate and recognizable suffering (Marquer *et al.* 2015). Traumatic experiences may hinder children's psychological development, including trust in others, sense of safety, self-esteem and self-efficacy, and interpersonal skills (Tsuji *et al.* 2017). Screening instruments that are imprecise risk pathologizing children whose response to trauma could be considered a normal psychological reaction.

Practitioners intervening in the study of trauma in non-Western contexts must move towards methodological consistency and objective standards for cultural sensitivity in the screening of PTSD and other trauma-related disorders. The same objectives must then be set for diagnostic tools and treatment standards, establishing procedures for culture-specific adaptations that recognize the non-universal application of Western mental health concepts, while still allowing an efficient and effective response for the affected population.

In light of the 'global refugee crisis', particular attention should be given to the diverse cultural responses to trauma and the need for cultural sensitivity in screening culturally heterogeneous, non-Western populations within Western refugee contexts. Each of these spaces is unique and considerations will need to take into account the diverse objectives of screening, whether for research, the distribution of public resources or as a first step towards diagnosis and treatment. The context of screening—hospital, reception centres, schools—and resources available will also impact these decisions. Other key factors include the timing of screening in relation to host-country arrival; age and time lived in home-culture and other demographic factors like family composition, cultural integration and socio-economic status; composition of group and cultural diversity within group of refugees included. This work in Western refugee contexts is worthy of detailed exploration in a future review.

The studies and screening tools analysed in this article are all derived from DSM IV diagnostic criteria. Future research conducted around youth and adolescent PTSD should use the updated criteria of DSM 5 (Diehle *et al.* 2013) and ICD-11 (Tay *et al.* 2018) as points of departure when considering the culture-specific manifestations of the disorder in non-Western cultural contexts and carefully consider the calls to action regarding cultural sensitivity in mental health screening now included in both manuals.

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