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Validation of a Tibetan Translation of the Hopkins Symptom Checklist–25 and the Harvard Trauma Questionnaire

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This study sought to translate and validate the Hopkins Symptom Checklist–25 (HSCL) and the Harvard Trauma Questionnaire (HTQ) in a Tibetan population. Translated questionnaires were administered to 57 Tibetan survivors of torture/human rights abuses living in the United States and receiving services in a torture treatment program. Participants were evaluated to determine if they met criteria for major depressive episode, generalized anxiety disorder, or posttraumatic stress disorder (PTSD). Coefficient alpha for the HSCL Anxiety subscale (.89), Depression subscale (.92), and the HTQ (.89) were high. Diagnostic accuracy using receiver operating characteristic curve analysis generated good classification accuracy for anxiety (.89), depression (.92), and PTSD (.83). However, although sensitivity and specificity for HSCL subscales were quite high, the HTQ generated low sensitivity (.33), partly because of a low rate of PTSD. Results support the reliability and validity of the HSCL but suggest further study of the HTQ with this population is required.

Keywords: anxiety; PTSD; depression; Tibetan refugees; torture; cross-cultural assessment

Assessing trauma and its consequences in refugee populations has often been a difficult task for researchers (Hollifield, Warner, & Lian, 2002). Difficulties include the lack of consistent instruments used to measure psychological distress, variation in methodology of data collection, and differences in translation as well as culture (Hollifield et al., 2002). Subsequently, the lack of valid and reliable instruments for use in refugee populations has often been noted. In their review of instruments used to measure trauma in refugee populations, Hollifield et al. analyzed these measures against five criteria, consisting of having a clearly defined purpose, having a well-defined construct, the design of the instrument, the existence of a rationale behind the development process,

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and established reliability and validity. They found that among the instruments originally developed for refugee populations, the Harvard Trauma Questionnaire (HTQ; used to measure posttraumatic stress disorder [PTSD] symptomatology) met at least four criteria. Among instruments adapted for use with refugee populations, the Hopkins Symptom Checklist–25 (HSCL; used to measure anxiety and depressive symptoms) was one of two instruments meeting all five criteria.

The HSCL and HTQ have often been used in cross-cultural studies. Among the few published studies on the Tibetan refugee population, the HSCL and HTQ are often used; however, neither the construct being measured nor the translations of those instruments have yet been validated (Crescenzi et al., 2002; Holtz, 1998). In light of the trauma experienced by this population as a result of the Chinese occupation of Tibet and the refugee flight into neighboring countries, this is a significant concern in conducting research and assessment with this group.

For example, Holtz (1998) compared 35 Tibetan refugees (nuns and lay students) who were torture survivors with 35 nontortured Tibetan refugees. With the help of lawyers, allopathic and traditional Tibetan doctors, and human rights activists, Holtz adapted the HSCL for a Tibetan population and then translated and back-translated the questionnaire. However, the translated version of the HSCL developed by Holtz's study was not validated (e.g., through correlations with other comparable measures or clinician diagnoses), nor is any reliability data provided. As a result, despite finding significantly higher levels of anxiety (but not depression) among torture survivors, Holtz questioned the appropriateness of using the established HSCL cutoff score in light of the lack of validity data for this cutoff in a Tibetan population.

Crescenzi et al. (2002) used the HSCL and HTQ in their study of the psychological sequelae of trauma among newly arrived Tibetan refugees, half of whom ($n = 76$) had been imprisoned and tortured while living in Tibet. The researchers conducted an elaborate translation process for both instruments using translation and back-translation, focus groups, and pilot data, prior to finalizing the translations. However, despite an extensive translation process (taking 8 months to complete), and adequate reliability for these translated versions ($\alpha = .83$ for the HSCL Anxiety subscale, .79 for the Depression subscale, and .86 for the HTQ), the final version was not validated through comparison to any external criterion. They did, however, find significantly higher levels of anxiety (but not depression; the HTQ was administered to only imprisoned participants) in previously imprisoned Tibetans compared to those who had not been in prison. Crescenzi et al. explained that because of the lack of validity data, they were not able to assess the adequacy of previously published cutoff scores.

These previous studies of Tibetan refugees highlight the need for reliable and valid measures of psychological distress. Such measures are critical for assessment and to lay the foundation for the next generation of research on better understanding factors that influence trauma response. Construct validity can be particularly difficult to assess in cross-cultural research because some clinical constructs may not be universal in their expression. For example, there has been ongoing debate on the construct of PTSD and whether it appropriately describes the symptoms experienced by traumatized refugees (Kleinman & Kleinman, 1991; Marsella, Friedman, Gerrity, & Scurfield, 2001; Ruchkin et al., 2005). In his study with Tibetan refugees, Holtz (1998) did not assess PTSD because Tibetan professionals had reportedly questioned the cultural utility of this diagnosis, as defined by the *Diagnostic and Statistical Manual of Mental Disorders* (*DSM*), for a Tibetan population. Holtz acknowledged that the diagnosis of PTSD may be valid in the Tibetan population, but that Buddhist beliefs may impact reactions to trauma. For example, the Buddhist belief in *karma* (the belief that one's current suffering is a result of negative deeds in the past life) and the belief that one's suffering is less important than that of others may result in fewer avoidance behaviors in response to traumatic events. Despite lingering questions as to the applicability of current conceptualizations of PTSD for Tibetans, we nevertheless opted to assess the HTQ as a measure of PTSD because of the lack of any clear alternative diagnostic conceptualization and the widespread use of this measure in refugee research with other populations.

The current study assessed the psychometric properties of a Tibetan translation of the HSCL and the HTQ in a sample of Tibetan torture survivors. We assessed the reliability of these instruments and evaluated concurrent validity by comparing scores on these instruments to a clinical diagnosis made by a Western-trained Tibetan psychiatrist using *DSM-IV* diagnostic criteria.

METHOD

The sample consisted of 57 Tibetan survivors of torture and human rights abuses (12 women and 45 men) living in the New York City area. All participants were clients of the Bellevue/NYU Program for Survivors of Torture, a comprehensive, multidisciplinary treatment center, providing medical and mental health care and social services to survivors of torture and refugee trauma. To be accepted into the Program, clients must report experiences that meet the United Nations Definition of Torture (United Nations Convention Against Torture, 1987) or report other significant traumatic events as part of the flight from their country, including severe persecution and/or severe physical or

psychological harm. A total of 60 potential participants were contacted and offered study participation; 3 potential participants (5%) declined to participate in the study because of conflict with their work schedule. Referral information was available for 39 participants. Of those 39 participants, 17 were referred by other clients of the Program for Survivors of Torture, 7 were referred by their attorneys, 6 were referred by a Bellevue Hospital care provider (primary care provider, emergency room, etc.), 6 by a friend familiar with the program, and 3 by Tibetan community organizations. This study was approved by the Institutional Review Board of New York University School of Medicine.

Measures

Designed to measure change in psychotherapy patients, the HSCL was derived from the 90-item symptom checklist (Derogatis, Lipman, Rickels, Uhlenhuth, & Covi, 1973; Parloff, Kelman, & Frank, 1954) and has been widely used in refugee and torture survivor research. The HSCL is a 25-item self-report inventory that assesses symptoms of anxiety (10 items) and depression (15 items). Each item is scored on a Likert-type scale where 1 corresponds to *not at all* and 4 corresponds to *extremely*. Scores are typically calculated as the mean of the total scale (as an index of overall psychological distress), and each of the two subscales (Anxiety and Depression). A cutoff score of 1.75 is used to identify clinically significant symptoms. A number of prior researchers have studied translated versions of the HSCL in varying different languages and populations (e.g., Cepeda-Benito & Gleaves, 2000; Mollica, Wyshak, de Marneffe, Khuon, & Lavelle, 1987; Smith-Fawzi et al., 1997).

Scored on the same Likert-type scale as the HSCL, the HTQ (Mollica et al., 1992) is a 16-item instrument designed to measure severity of PTSD symptoms. The HTQ was developed specifically for an Indochinese refugee population, with validated translations in Vietnamese, Cambodian, and Laotian (Mollica et al., 1992). The items were based on *DSM-III* criteria for PTSD, although the authors originally included a number of additional items sensitive to trauma response in this population that have subsequently been omitted from versions used in other refugee studies. A cutoff score of 2.5 was established by the authors and generated roughly comparable diagnostic accuracy across the three original translations. Like the HSCL, the HTQ has been translated and validated in several other languages including Arabic, Farsi, Serbo-Croatian, and Russian (Kleijn, Hovens, & Rodenburg, 2001).

The HSCL and HTQ were translated into Tibetan by a college-educated Tibetan fluent in Tibetan and English with the assistance of a Tibetan psychiatrist and a Tibetan research assistant. A Tibetan scholar with extensive experience translating between English and Tibetan conducted the back-translation of the original Tibetan version of these instruments. The back-translated versions were then compared with the original English versions of the HSCL and HTQ to assess accuracy and resolve any discrepancies, as recommended by Jones, Lee, and Phillips (2001). Although previously translated versions of the HSCL exist (as noted above), these previous versions were not published and lacked critical reliability and validity data. Thus, we elected to initiate the translation process anew to establish semantic equivalence, reliability, and validity.

Procedure

All recent Tibetan clients of the Bellevue/NYU Program for Survivors of Torture were contacted either by telephone or in person and invited to participate in the study. After an explanation of the risks and benefits of study participation, those willing to participate were asked to provide written informed consent. Study participants were scheduled for an appointment during which a Tibetan research assistant (DL) administered the translated versions of the HSCL and the HTQ. This assessment was followed by a standard psychiatric evaluation with the study psychiatrist (SB), who is Tibetan and fluent in the Tibetan language, but completed psychiatric residency training in the United States Interviews were conducted in Tibetan. The psychiatrist met with the participant to determine whether the participant met *DSM-IV* criteria for a major depressive episode, a generalized anxiety disorder, or PTSD. Additionally, sociodemographic variables were ascertained, including age, gender, trauma history, and functional status. The psychiatrist was blind to the participant's scores on the HSCL and HTQ. Because structured diagnostic instruments have never been translated or validated in Tibetan, clinical diagnosis ascribed by an experienced psychiatrist who is unfamiliar with the participant's responses to the HSCL and HTQ was considered more appropriate than structured diagnostic instruments that have not been previously translated or validated in Tibetan (e.g., the SCID-I or CAPS; Blake et al., 1995; First, Spitzer, Gibbon, & Williams, 2002).

Statistics

Data analysis was conducted using SPSS for Windows, Version 12.0. Reliability was assessed using Cronbach's alpha and corrected item-total scale correlations. Concurrent validity was measured using receiver operating characteristic (ROC) curve analysis. The area under the curve (AUC) was used to assess for diagnostic accuracy of both instruments, and sensitivity and specificity scores are reported using the established cutoff score of 1.75 for

TABLE 1
Participant Demographic Characteristics

	Frequency
Gender	
Male	45 (79%)
Female	12 (21%)
Marital status	
Single	22 (39%)
Married	33 (58%)
Divorced/separated	2 (3%)
Education status ($n = 44$)	
No education	32 (73%)
Primary school	10 (22%)
Professional degree	2 (5%)
Employment	
Not employed	19 (33%)
Currently employed	38 (67%)
Asylum status	
Granted	29 (51%)
Pending case	17 (30%)
Not yet applied	11 (19%)

the HSCL Anxiety and Depression subscales and 2.5 for the HTQ.

RESULTS

Sample Characteristics

Participant ages ranged from 22 to 54 years ($M = 34$ years, $SD = 6.74$). Thirty-three participants (58%) were married. Sixty-seven percent of the participants were employed at the time of the study. At study time, approximately 51% of the participants had been granted asylum status, 30% had pending asylum cases, and approximately 20% had not yet applied or intended to apply for asylum. Among those participants whose education information was available ($n = 48$), a majority of the participants had no education (73%), approximately 22% had some primary education, and only 2 participants had a professional degree (Table 1).

Of the 57 individuals interviewed by the study psychiatrist, 18 were diagnosed with a major depressive episode (31.6%), and 23 were diagnosed with generalized anxiety disorder (40.3%). Despite frequent descriptions of severe torture and other traumatic experiences, only 3 individuals met diagnostic criteria for PTSD (5.3%); The most frequently endorsed items on the HSCL were headaches (endorsed by 37 of 57 participants, or 65%); feeling lonely (61%); faintness, dizziness, or weakness (60%); nervousness or shakiness inside (58%); feeling fearful (56%); and blaming yourself (56%). On the HTQ, the most frequently endorsed items were recurrent thoughts or memories of the traumatic event (86%), sudden physical or emotional reactions when reminded of the traumatic event (77%), outbursts of anger and irritability (72%), being easily startled (70%), difficulty concentrating (67%), and avoiding activities that reminds the individual of the traumatic event (67%; see Table 2). Mean scores were 1.68 ($SD = .55$) on the HSCL Anxiety subscale, 1.63 ($SD = .58$) on the HSCL Depression subscale, and 1.65 ($SD = .55$) on the HTQ. Despite these low mean scores, skew and kurtosis estimates were within the acceptable range (<1.0) for all three scales.

Reliability of the HSCL and HTQ

The HSCL and HTQ demonstrated high internal consistency. Cronbach's coefficient alpha exceeded .80 for the HSCL Anxiety subscale ($\alpha = .89$), the Depression subscale ($\alpha = .92$), and the HTQ ($\alpha = .89$). Corrected item-total scale correlations for individual items on the HSCL and HTQ revealed only one item with an item-total correlation below.30 and two additional items below .40 (see Table 2). Loss of sexual interest or pleasure (on the Depression subscale of the HSCL; item-total $r = .20$), feeling trapped (also on the Depression subscale; item-total $r = .34$), and trembling (on the Anxiety subscale; item-total $r = .36$). However, removal of these relatively weaker items did not result in a significant change in coefficient alpha for either of these scales.

Validity of the Tibetan HSCL and HTQ

Twenty-five participants (44%) scored above the HSCL cutoff (1.75) on the Anxiety subscale, and 21 (37%) participants scored above the cutoff on the Depression subscale. On the HTQ, 5 participants (9%) scored above the 2.5 cutoff for identifying probable PTSD (see Table 3). ROC curve analysis predicting clinical diagnosis from HSCL and HTQ scores revealed high levels of predictive accuracy. The AUC was computed for an overall estimate of the diagnostic accuracy of both instruments. The AUC for the HSCL Anxiety subscale predicting a diagnosis of generalized anxiety disorder was .89 (95% confidence interval [CI] = .80–.98). The AUC for the HSCL Depression subscale predicting a diagnosis of a major depressive episode was .92 (95% CI = .85–.99). The AUC for the HTQ predicting a diagnosis of PTSD was .83 (95% CI = .69–.99).

Comparing classifications based on the established cutoff scores (1.75 for the HSCL and 2.5 for the HTQ) to the clinical diagnosis of the independent psychiatrist, we found high rates of sensitivity and specificity for both HSCL subscales (see Table 4). The sensitivity and specificity for the Anxiety subscale were .91 and .88, respectively, and .89

TABLE 2
Hopkins System Checklist and Harvard Trauma Questionnaire Frequencies, Means, and Corrected Item-Total Correlations

Scale Item	*Frequency Endorsed*	M/SD	*Corrected Item-Total Correlations*
Hopkins Symptom Checklist–25			
Anxiety subscale			
Suddenly scared for no reason	21 (37%)	1.47/.70	.58
Feeling fearful	32 (56%)	1.73/.73	.74
Faintness, dizziness, or weakness	34 (60%)	1.89/.88	.64
Nervousness or shakiness inside	33 (58%)	1.78/.81	.64
Heart pounding or racing	22 (39%)	1.47/.69	.67
Trembling	10 (18%)	1.24/.54	.36
Feeling tense or keyed up	23 (40%)	1.58/.83	.62
Headache	37 (65%)	2.05/1.03	.68
Spells of terror or panic	30 (53%)	1.67/.70	.62
Feeling restless/cannot sit calmly	32 (56%)	1.84/.90	.74
Depression subscale			
Feeling weak in energy and cannot work fast	30 (53%)	1.79/.92	.60
Blaming yourself for things	32 (56%)	1.82/.91	.57
Crying easily	25 (44%)	1.79/1.05	.80
Loss of sexual pleasure or interest	13 (23%)	1.35/.72	.20
Poor appetite	20 (35%)	1.42/.63	.55
Difficulty in falling asleep and staying asleep	30 (53%)	1.74/.86	.67
Feeling hopeless about the future	14 (25%)	1.42/.82	.76
Feeling sad	31 (54%)	1.93/1.01	.80
Feeling lonely	35 (61%)	2.04/.98	.64
Thought of committing suicide	3 (5.3%)	1.11/.45	.49
Feeling of being trapped	14 (25%)	1.40/.82	.34
Worrying excessively about things	29 (51%)	1.84/.96	.79
Feeling no interest in things	23 (40%)	1.54/.78	.72
Feeling everything is an effort	25 (44%)	1.58/.76	.55
Feeling of worthlessness	24 (42%)	1.74/.99	.77
Harvard Trauma Questionnaire			
Recurrent thoughts or memories of the terrifying events	49 (86%)	2.38/.93	.65
Feeling as though the event is happening again	18 (32%)	1.40/.66	.46
Recurrent nightmares	29 (51%)	1.76/.92	.67
Feeling detached or withdrawn from other people	19 (33%)	1.47/.77	.45
Unable to feel emotions	17 (30%)	1.33/.55	.45
Feeling jumpy, easily startled	40 (70%)	1.98/.76	.64
Difficulty concentrating	38 (67%)	2.09/.99	.53
Difficulty sleeping	29 (51%)	1.82/1.0	.58
Feeling on guard	23 (40%)	1.51/.66	.62
Feeling irritable or having outburst of anger	41 (72%)	2.02/.83	.47
Avoiding activities that remind you of the traumatic or hurtful events	38 (67%)	1.98/.89	.69
Inability to remember parts of the most traumatic or hurtful events	22 (39%)	1.49/.74	.46
Less interest in daily activities	27 (47%)	1.67/.82	.45
Feeling as if you don't have a future	12 (21%)	1.31/.69	.58
Avoiding thoughts or feelings related to the traumatic or hurtful events	33 (58%)	1.84/.86	.43
Sudden physical or emotional reaction when reminded of the most hurtful or traumatic events	44 (77%)	2.20/.91	.72

and .87, respectively, for the Depression subscale. However, although specificity was high for the HTQ (.93), sensitivity was only .33 (i.e., one out of three individuals diagnosed with PTSD obtained an HTQ score above 2.5). To assess whether an alternative HTQ cutoff provided a better threshold for identifying PTSD, we examined the ROC curve to

TABLE 3
Psychiatrist Diagnosis Versus Hopkins System Checklist (HSCL) and Harvard Trauma Questionnaire (HTQ) Scores

(a) HSCL Anxiety Subscale Using 1.75 Cutoff Score

	Psychiatrist Diagnosis	
	Yes GAD	*No GAD*
HSCL Anxiety positive	21	4
HSCL Anxiety negative	2	30

(b) HSCL Depression Subscale Using 1.75 Cutoff Score

	Psychiatrist Diagnosis	
	Yes Major Depression	*No Major Depression*
HSCL Depression positive	16	5
HSCL Depression negative	2	34

(c) HTQ Using 2.50 Cutoff Score

	Psychiatrist Diagnosis	
	Yes PTSD	*No PTSD*
HTQ PTSD positive	1	4
HTQ PTSD negative	2	50

(d) HTQ Using 1.90 Cutoff Score

	Psychiatrist Diagnosis	
	Yes PTSD	*No PTSD*
HTQ PTSD positive	3	18
HTQ PTSD negative	0	36

NOTE: GAD = generalized anxiety disorder; PTSD = posttraumatic stress disorder.

identify alternative cutoff scores. Modification of the HTQ cutoff to 1.90 resulted in perfect sensitivity (i.e., all 3 participants with PTSD were identified), but much lower specificity (18 participants who were not diagnosed with PTSD fell above this cutoff score, for a specificity of .67).

DISCUSSION

These results provide strong evidence for the reliability and validity of a Tibetan translation of the HSCL, but raise a number of questions about the validity of the HTQ in this population. The high alpha coefficients and corrected item-total correlations support the reliability of both of these instruments. The concurrent validity of the HSCL, when contrasted with the clinical diagnosis of an independent Tibetan psychiatrist, was supported by the study results. The HSCL Anxiety and Depression subscales had good diagnostic accuracy based on ROC analyses and high sensitivity and specificity using the established cutoff scores. However, although the HTQ also had a relatively high level of predictive validity using ROC analyses, sensitivity and specificity were much weaker. Using the previously established cutoff score of 2.5, sensitivity was quite low (.33), but lowering the cutoff score to 1.9 generated a much lower level of specificity (.67 versus .93 with a cutoff of 2.5).

The equivocal findings for the HTQ in identifying PTSD are likely related to the low rate of PTSD in this sample of Tibetan survivors of torture/human rights abuses (diagnosed in 3 of 57 participants). Although Holtz (1998) highlighted the role of Buddhism in the experience of trauma and its sequelae and as a result did not assess for PTSD, other researchers have used the HTQ with this population (e.g., Crescenzi et al., 2002; Keller et al., 2006). Indeed, both of these studies have reported high levels of reliability for translated versions of the HTQ (as did the current study), though neither described any validity data. Our data provide some support for Holtz's assessment, in that PTSD was rarely observed despite many reports of severe torture experiences (although Crescenzi et al., 2002, reported that 20% of imprisoned Tibetans met criteria for PTSD). Unfortunately, our small sample size precludes any systematic examination of the construct of PTSD, as might be achieved through factor analysis of the HTQ. For example, the low rate of PTSD may reflect cultural differences in the expression of trauma response symptoms in Tibetans, or may simply reflect a greater degree of resilience among this population. Some researchers have suggested that social support, coping strategies, family responsibilities, and other factors may mediate the impact of psychological distress on daily functioning, effectively lowering the frequency of a clinical diagnosis of PTSD (e.g., Holtz, 1998). Although we did not use a systematic measure of functional status in this study, there were no cases in which an individual displayed the symptoms indicative of PTSD but did not qualify for this diagnosis because of adequate functioning.

Given these questions as to the nature of PTSD in Tibetans, one might wonder whether any modifications to the established HTQ cutoff scores are appropriate. The trade-off between higher sensitivity and the consequent increase in the number of false positives (and lower specificity) that occurs when a lower cutoff score is used (1.9 rather than 2.5) may be more appropriate if the instrument is intended to be used exclusively as a screening instrument. In this context, identification of possible PTSD cases is typically considered more important than failing to identify individuals who might need treatment. However, in other settings, such as when external diagnostic criterion

TABLE 4
Reliability and Validity of the Hopkins System Checklist (HSCL) and Harvard Trauma Questionnaire (HTQ) Using Cronbach's alpha and Receiver Operating Characteristics Curve

				Receiver Operating Characteristic Analyses		
	Cronbach's alpha	*Skew*	*Kurtosis*	*Area Under the Curve*	*Sensitivity*	*Specificity*
HSCL				.89	.79	.85
Anxiety subscale	.89	.62	–.52	.89	.91	.88
Depression subscale	.92	.88	–.12	.92	.89	.87
HTQ (2.5 cutoff score)	.89	.64	–.06	.83	.33	.93
HTQ (1.9 cutoff score)					1.00	.67

are unavailable, it may be more important to balance sensitivity and specificity, although researchers should be cautious about such classifications given the accuracy found in this study.

Examination of the individual HCSL and HTQ items revealed only one item of questionable reliability. "Loss of sexual interest or pleasure," on the Depression subscale of the HSCL, had the lowest corrected item-total correlation ($r = .20$). A likely explanation for this finding is that sexual activity is rarely talked about in the Tibetan culture and direct questioning of sexual interest may have made participants uncomfortable. Moreover, removing this item did not significantly increase coefficient alpha for the Depression subscale and therefore does not appear to adversely affect the internal consistency of the subscale.

The findings reported here must be qualified by several methodological limitations, including the modest sample size of 57 Tibetan survivors of torture and human rights abuses. This sample precluded many of the more sophisticated data analytic approaches that might have been useful, such as factor analysis or analyses based on item-response theory. Another limitation to this methodology pertains to our choice of diagnoses for clinical evaluation. Although the HSCL was designed to assess anxiety and depression broadly, we contrasted these data with only the diagnoses of generalized anxiety disorder and major depressive episode. Stronger results may have emerged with a broader spectrum of anxiety and depression diagnosed (e.g., inclusion of panic disorder, dysthymia, etc.). Nevertheless, the high degree of reliability and validity found with these narrow diagnostic categories further strengthens these results.

Another methodological concern is that instruments developed as self-report were administered orally, by the research assistant. This method of administration, which was predicated on the low literacy level of many participants, may have resulted in a greater tendency toward socially desirable responding. However, this limitation would have likely applied to both the self-report data and clinician-established diagnosis, and therefore should not adversely impact validity data. Moreover, given the low literacy rate of Tibetans in general, oral administration of these measures is likely to be common in future research studies with this population. Thus, validating measures administered orally appears worthwhile.

Finally, the current study's method of using a single psychiatrist's diagnosis in addition to the use of an unstructured diagnostic interview is not ideal. Although these diagnoses were established in accordance with *DSM-IV-TR* criteria, by a U.S. trained psychiatrist, the potential for diagnostic inaccuracy exists. However, the lack of any reliable or validated structured diagnostic instruments translated into Tibetan or other Tibetan-speaking clinicians made it impossible to do otherwise. Additionally, this method has been used in previous cross-cultural studies and could be useful when culturally valid instruments are lacking (Hinton et al., 1994; Mollica et al., 1987).

Despite strong findings for the translated version of the HSCL (and equivocal findings for the HTQ), it is critical to acknowledge that the constructs of anxiety, depression, and PTSD may be expressed differently across cultures. More exploratory research regarding the nature of psychological distress in the Tibetan population may help refine the constructs of anxiety, depression, and PTSD in this population. Such research will allow for the development of even more reliable and valid measures of psychological distress to be used in future studies, and will help ensure that important elements of psychological distress are not overlooked by clinicians who work with diverse populations.

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