The Validity and Clinical Utility of Post-traumatic Stress Disorder in Afghanistan

KENNETH E. MILLER  
François-Xavier Bagnoud Center for Health and Human Rights, Harvard School of Public Health

PATRICIA OميدAN  
Aga Khan University

MADHUR KULKARNI  
University of Michigan

AZIZ Yaqub, HAQMAL DAUDZAI  
AFSC-Afghanistan

ANDREW RASMUSSEN  
New York University School of Medicine

Abstract  This study examined the validity and utility of PTSD among 320 adults in Afghanistan. Findings support the validity of PTSD in this cultural context: PTSD symptoms were highly prevalent, shared common variance, and correlated as expected with exposure to traumatic stress. However, only limited support was found for the clinical utility of PTSD. Other types of
psychiatric symptomatology, including depression and a culturally specific measure of general distress, correlated more highly with traumatic stress than did PTSD; and PTSD accounted for limited variance in functioning beyond that explained by depression and general distress. Implications for research and intervention are considered.

**Key words**  Afghanistan • culture • PTSD • validity • war

Research on the psychological impact of armed conflict has focused primarily on assessing the prevalence and correlates of Post-traumatic Stress Disorder (Arroyo & Eth, 1986; Fox & Tang, 2000; Kinzie, Sack, Angell, Manson, & Rath, 1986; Michultka, Blanchard, & Kalous, 1998; Mollica, Caspi-Yavin, Bollini, & Truong, 1992; Weine et al., 1998). The rationale for this focus on PTSD in studies of culturally diverse war-affected populations lies in the intersection of an established fact—that exposure to traumatic stress is generally high in situations of armed conflict, and a widely held assumption—that PTSD is a universal response to traumatic stress, and should therefore be the primary focus of clinical assessment and intervention (Bracken, Giller, & Summerfield, 1995).

The assumed universality of PTSD has come into question in recent years (Bracken et al., 1995; Breslau, 2004; Miller, Kulkarni, & Kushner, 2006a; Summerfield, 1999; Wessells & Monteiro, 2004). Critics have expressed concern that researchers working with non-Western war-affected populations have focused narrowly on the assessment of PTSD without sufficient consideration of either its construct validity or its clinical relevance in particular sociocultural contexts. There is no question that symptoms of PTSD are found in most, if not all, populations exposed to traumatic stress (Marsella, Friedman, Gerrity, & Scurfield, 1996); however, as Summerfield (1999) and others have noted, the presence of PTSD symptoms in a particular culture does not necessarily mean that PTSD represents the primary expression of psychological trauma in that context, or that the syndrome—even when clearly present—represents the most pressing mental health concern relative to other forms of war-related suffering. Kleinman (1987) has coined the term *category fallacy* in reference to the reflexive assumption that a diagnostic category developed in one cultural context is similarly meaningful in a different cultural context simply because the symptoms that comprise it can be identified in both settings. In the case of PTSD, there may be culturally-specific idioms of trauma-related distress that occur more frequently or are more readily acknowledged and accepted than PTSD, such as *calor* among Salvadorans (Jenkins, 1996), or *jigar khun* among Afghans (Miller et al., 2006a,b).

Symptoms of distress other than those that comprise PTSD may be of greater concern to affected individuals (e.g., family conflict, depression,
somatic distress, spirit loss and other supernatural phenomena; Breslau, 2004, de Jong, 2002; Englund, 1998; Farias, 1994). And psychosocial functioning – a critical marker of mental health and an important determinant of help-seeking behavior – may be affected more strongly by other types of distress than by PTSD, making the latter a less urgent focus for clinical and public mental health interventions (Neal, Green, & Turner, 2004; Summerfield, 1999). This last point is especially important because it suggests that merely establishing the presence of PTSD in a particular context is not sufficient to justify its centrality as a focus of research and intervention; rather, priorities for research and practice in war-affected societies – where mental health resources are typically scarce – should be informed by the identification of those forms of suffering that most concern affected individuals and that most strongly impact people's daily functioning.

Because the overwhelming majority of armed conflicts in the past 60 years have occurred in societies of the developing world (de Jong, 2002), and because such conflicts typically entail a high degree of exposure to traumatic stress, we suggest that greater empirical attention to the cross-cultural validity and clinical utility of PTSD in conflict and post-conflict settings is urgently needed. Towards that end, in the present study we examine the construct validity and clinical significance of PTSD in a heavily war-affected, non-western setting: Afghanistan's capital city of Kabul. As part of a larger project focused on identifying mental health needs and priorities in Afghanistan (Miller et al., 2006; Omidian & Miller, 2006), we gathered data on war exposure, psychiatric symptomatology, and functional impairment in a sample of 320 adults in eight of Kabul's 16 districts. In a previous study we conducted in Kabul (Miller et al., 2006b), narratives of suffering were used to identify culturally salient indicators of distress. An analysis of the narratives suggested that symptoms of PTSD were less salient than other, more culturally specific expressions of distress. However, participants also noted that Afghans are generally reluctant to talk about their memories of traumatic events, in order to avoid upsetting others who are struggling with their own experiences of war-related trauma – a reciprocally adaptive strategy in a war-torn city where every family has been affected by the years of warfare and oppression. This observation raised the possibility that PTSD symptoms might be more widely experienced than was reflected in the narratives. However, because we did not systematically assess symptoms of PTSD, we were unable to determine whether their relative scarcity in the narrative data reflected a genuinely low level of PTSD symptomatology, or a form of avoidance aimed at protecting others from an activation of their own trauma symptoms. The present study, in which PTSD symptoms were assessed directly, was designed to address this question.
CONSTRUCT VALIDITY OF PTSD

To examine the construct validity of PTSD (i.e., “Does PTSD exist as an expression of trauma-related psychopathology in Afghanistan?”), we first assessed the prevalence and severity of PTSD symptoms. We then examined the extent to which PTSD symptoms shared common variance by assessing the internal consistency of our PTSD measure, the Impact of Event Scale-Revised (IES-R; Weiss & Marmar, 1997). Although two recent studies have assessed the prevalence of PTSD symptoms in different regions of Afghanistan (Lopes Cardozo et al., 2004; Scholte et al., 2004), neither study reported the internal consistency of their measure of PTSD, the Harvard Trauma Questionnaire (Mollica et al., 1992). We then examined the relationship between PTSD symptoms and war-related traumatic stress, hypothesizing that we would find a strong, positive correlation, given (1) the generally positive (though highly variable) association found between PTSD and traumatic stress in studies of other war-affected populations, and (2) the theoretical and empirically established etiology of PTSD in exposure to traumatic stress (Foa, Keane, & Friedman, 2004).

CLINICAL UTILITY OF PTSD

Our second aim was to assess the clinical utility of PTSD in the socio-cultural context of Afghanistan. To be clinically useful, we reasoned that (1) PTSD should be the primary expression of trauma-related psychopathology, and should therefore correlate more strongly than other types of psychopathology with exposure to war-related traumatic stress; and (2) PTSD symptomatology should account for a statistically significant and clinically meaningful amount of variance in functional impairment, beyond that accounted for by other types of distress including depression, anxiety, and a culturally specific measure of general distress, the Afghan Symptom Checklist (Miller et al., 2006b).

POLITICAL VIOLENCE AND REPRESSOR IN AFGHANISTAN

Afghanistan is currently in the early stages of reconstruction, following more than 25 years of war and political repression. The Soviet invasion in 1979 led to a 10 year war of resistance, followed by 4 years of civil war among highly armed warlords who fought each other for control of the country following the Soviet withdrawal. By the time the radical Islamist Taliban took control of Kabul in 1996, the war against the Soviets and the subsequent civil war had laid waste to much of Afghanistan: over 1m had people had been killed, the economy and infrastructure had been destroyed, and roughly one third of the pre-war population had gone into
exile, creating the world's largest refugee population of 6m people (Goodson, 2001; UNDP, 2005). The Taliban, in turn, imposed a draconian rule of fundamentalist Islamic law in which basic human and civil rights were routinely violated, and severe punishment for the smallest infractions created a climate of pervasive fear (Rashid, 2000).

The overthrow of the Taliban by the US-led attacks on Afghanistan in November of 2001 created a window of opportunity for the country's reconstruction (UNDP, 2005). Although heavily armed warlords still control of much of the country and Taliban forces continue to engage in frequent terrorist attacks, a process of reconstruction is nonetheless underway, and there is growing interest within the Afghan Ministry of Health and among non-governmental organizations (NGOs) in addressing the mental health needs of the country's heavily war-affected population. At present, however, there is a paucity of data available to guide the development of culturally appropriate mental health services tailored to meet local mental health needs and priorities. Although several studies have examined prevalence rates of PTSD symptoms among Afghans (Lopes Cardozo et al., 2004; Rasekh, Bauer, Manos, & Iacopino, 1998; Scholte et al., 2004), the actual validity and utility of PTSD in Afghanistan have yet to be established. The present study was designed to address this empirical gap.

**Methods**

**Participants**

Participants in this study included 320 adults (160 women and 160 men) in eight of Kabul's 16 districts. Male participants were somewhat older and more educated than female participants, with a mean age of 37.4 versus 34.3 years ($t(318) = -2.20, p < .05$), and 7.3 versus 4.9 years of schooling ($t(318) = -4.39, p < .001$). The majority of participants of both sexes were married; however, 25% of the women indicated that they were widows, while none of the men identified as widowers. There was a high level of exposure to war-related violence and loss in this sample. For example, 85% of participants had experienced the destruction of their homes at least once during the war, 49% indicated that one or more relatives had been killed, 53% had at least one family member who had been injured, and 25% had been injured themselves as a result of the violence. Most (83%) of the sample had been displaced at some point, forced to seek safe haven elsewhere in Afghanistan or in neighboring Pakistan or Iran.

Convenience sampling was utilized in the present study. Districts were selected to ensure variance in the intensity of war exposure, though such variance was limited due to the pervasive nature of the civil war. Women
were interviewed in their homes by female surveyors, who went door to
door in each district, beginning on a randomly selected street and continu-
ing until the target number of female participants had been surveyed.
Men, who are rarely at home during the day, were interviewed by male
surveyors in shops, mosques, and on the street. For their participation,
women received a box of washing soap, while men received a box of tea
(these items were selected by the team of surveyors). A maximum of two
women in the same household could be interviewed, but had to be of
different generations to increase sample diversity. Participation rates were
high: 100% for women, and approximately 95% for men. Responses to the
survey were generally quite positive, with women in particular comment-
ing that they appreciated the opportunity to share their experiences with
an interested listener.

**Measures**

All measures were translated from English into Dari, the *de facto* common
language of Kabul, using a multi-step back-translation and group review
process to ensure the accuracy and ease of comprehension of all items.
Details on the development of the two culturally specific measures, the
Afghan Symptom Checklist and the Afghan War Experiences Scale, are
available in Miller et al. (2006b). Because Kabul has extremely low literacy
rates, survey items were read aloud to participants, who were presented
with graphics depicting drinking glasses filled to levels that corresponded
to the specific Likert-scaled answer choices of each questionnaire (e.g.,
empty = rarely, half full = sometimes, full = *most of the time*). To ensure
consistency across the various measures, participants were asked to focus
on the previous month when responding to the items on each question-
naire. The surveyors were all residents of Kabul, including four recent
graduates of Kabul University and two community members with prior
experience doing community research.

**Post-traumatic Stress Disorder**

PTSD symptomatology was assessed using the 22 item Impact of Event
Scale-Revised (IES-R; Weiss & Marmar, 1997), one of the most widely used
measures of psychological trauma. The 22 item IES-R is Likert scaled, with
answer choices ranging from 0 ("not at all") to 4 ("extremely"). The
IES-R was originally intended to assess three underlying factors or
sub-scales: Intrusion, Hyperarousal, and Avoidance, corresponding to the
DSM’s three factor model of PTSD; however, while the measure’s internal
consistency has generally been quite high, its actual factor structure –
like that of other measures of PTSD – has varied considerably, with no
consistent set of factors or factor loadings appearing across different
studies (e.g., Brunet, St-Hilaire, Jehel, & King, 2003; Creamer, Bell, & Failla, 2003). In the present study, we added a 23rd item to the questionnaire, assessing the extent to which participants avoided talking about their symptoms of trauma in order to avoid upsetting others who might also be experiencing trauma symptoms. This item was only used descriptively, however, and was not included when calculating total IES-R scores for data analysis.

**Anxiety and Depression**

Anxiety and depression were measured using the Hopkins Symptom Checklist (HSCL; Mollica, Wyshak, Khoun, & Lavelle, 1987). The HSCL is a 25-item measure that includes two subscales measuring anxiety (10 items) and depression (15 items), with answer choices ranging from 1 (“not at all”) to 4 (“extremely”). The HSCL has been used widely in studies of refugees and other war-affected populations (Mollica et al., 1987; Thapa, van Ommeren, Sharma, de Jong, & Hauff, 2003), including two recent studies of Afghans (Lopes Cardozo et al., 2004; Scholte et al., 2004), and has demonstrated good reliability and construct validity. In the present study, Cronbach’s alpha for the depression subscale was .73, and for the anxiety subscale .84.

**General Psychological Distress**

The Afghan Symptom Checklist (ASCL; Miller et al., 2006b) is a culturally specific measure of psychological distress that includes several indigenous items (e.g., jigar khun; literally “bloody liver”, a state of dysphoria or melancholy; asabi, a state of nervous irritability; and fishar-e-payin, a state of low energy and motivation), as well as several items familiar to psychiatry (e.g., crying, insomnia, social withdrawal, rumination). In a recent survey of 320 adults in Kabul, the ASCL demonstrated excellent internal consistency (Cronbach’s alpha coefficient = .93) and good construct validity, correlating positively ($r = .70$) with level of exposure to war-related stressors (Miller et al., 2006b).

**Functional Impairment**

Functional impairment was assessed using the World Health Organization Disability Assessment Scale-II (WHODAS-II; WHO, 2000). The WHODAS-II 12 Item Version taps various domains of functioning, and has been used extensively in cross-cultural mental health research. Answer choices range from 1 to 5, yielding possible scores of 12–60, with higher scores reflecting greater functional impairment. Due to a logistical complication, the WHODAS-II was not administered to the first 76 participants; therefore, analyses using the WHODAS-II include data from only those 244 participants (122 women and 122 men) who completed the
WHODAS-II. The internal consistency (alpha) of the WHODAS-II in this study was .78.

**War-Related Traumatic Stress**

Exposure to war-related traumatic stress was assessed using the Afghan War Experiences Scale (AWES; Miller et al., 2006b), which asks respondents to indicate whether they have experienced each of 17 war-related events (1) never, (2) once, or (3) more than once. Scores for all items are summed, yielding a range of 17 to 51. In a recent survey of mental health in Kabul, the AWES demonstrated excellent internal consistency (Cronbach's alpha = .93), and correlated positively ($r = .70$) with a culturally specific measure of psychological distress, the previously mentioned Afghan Symptom Checklist (Miller et al., 2006b).

**Data Analysis**

We first calculated descriptive statistics for all items on the IES-R. We then assessed the internal consistency of the IES-R, and examined the correlation between the IES-R and our measure of war-related traumatic stress, the AWES. To assess the clinical utility of PTSD as a diagnostic construct in Afghanistan, we first used Fisher's $Z$ Test for dependent correlations to compare the strength of the correlations between war-related traumatic stress and PTSD, depression, anxiety, and general distress. We then used hierarchical multiple regression to assess whether PTSD accounted for a statistically significant and clinically meaningful amount of variance in functional impairment, beyond that explained by other types of distress (depression, anxiety, and general distress). All statistical analyses were conducted using SPSS for Windows, Version 14.

**Results**

1. **The Construct Validity of PTSD**

**Prevalence of PTSD Symptoms**

In Table 1 we report the means and standard deviations for all items on the IES-R. While there is considerable variation in the relative frequencies (means) of the different items, it is evident that symptoms of PTSD are quite prevalent in this sample, with several symptoms of intrusion and avoidance particularly common. These include the recurrent triggering of trauma-related memories and feelings, along with attempts to avoid both internal and external reminders of previously experienced traumatic events. Symptoms of intrusion were quite variable in their reported frequency, however, with nightmares and flashbacks comparatively
infrequent. Items related to psychological numbing were endorsed the least frequently. Symptoms of hyperarousal generally occupied a middle ground, ranging from a mean of 1.89 (having strong physical reactions to reminders of traumatic events) to 2.37 (difficulty concentrating). It is noteworthy that our additional item (#23), which asks how often people have avoided talking about one's own trauma-related distress in order not to upset others who might have similar traumatic experiences, was the fourth most highly rated item. This finding, together with the actual prevalence of PTSD symptoms in this sample, suggests that although symptoms of PTSD are unlikely to be mentioned spontaneously by Afghans when speaking about their mental health, it would be a mistake to conclude that such symptoms are not present without first inquiring directly about them.
Internal Consistency of the IES-R and its Subscales
The internal consistency of the IES-R in the present study was good, with Cronbach's alpha = .89. This level of common shared variance among is consistent with the reliability of a latent PTSD construct in this sample. The internal consistency of the three DSM-IV PTSD dimensions (as specified on the IES-R by Weiss & Marmar, 1997) was also consistent with the reliability of these subscales: Intrusion = .76, Hyperarousal = .81, and Avoidance = .65.

Correlation between War-related Traumatic Stress and PTSD
We had posited that one measure of the construct validity of the IES-R — and thus of PTSD as a diagnostic construct — would be the extent to which it correlated positively with participants' level of exposure to war-related traumatic stress. The Pearson correlation between the AWES and IES-R was small, as specified by Cohen (1988), but statistically significant (r (318) = .26, p < .001). This finding does lend support to the construct validity of PTSD in this sociocultural context. However, the actual effect size ($R^2$) of the correlation is quite modest, with war-related traumatic stress accounting for only about 7% of the variance in PTSD scores (see Table 2).

2. The Clinical Utility of PTSD
As discussed earlier, we operationalized clinical utility in two ways: first, as the extent to which war-related traumatic stress correlated more highly with PTSD than with other types of distress, and second, as the extent to which PTSD symptomatology accounted for a statistically significant and clinically meaningful amount of variance in functional impairment, beyond that explained by other categories of distress (depression, anxiety, and general distress).

| TABLE 2 |
| Pearson correlations between all pairs of variables |
| **AWES** | **ASCL** | **HSCL-A** | **HSCL-D** | **IES-R** | **WHODAS-II** |
| AWES     | 1       | .37*      | .25*       | .32*       | .25*       | .25*       |
| ASCL     | 1       | 1         | .67*       | .76*       | .55*       | .58*       |
| HSCL-A   | 1       | 1         | .73*       | .75*       | .54*       |
| HSCL-D   | 1       | 1         | .56*       | .61*       |
| IES-R    | 1       | 1         | 1          | 1          |
| WHODAS-II| 1       | 1         | 1          | 1          |

* p < .001

Note: AWES = Afghan War Experiences Scale; ASCL = Afghan Symptom Checklist; HSCL-A = Hopkins Symptom Checklist-Anxiety Subscale; HSCL-D = Hopkins Symptom Checklist-Depression Subscale; IES-R = Impact of Event Scale-Revised; WHODAS-II World Health Organization Disability Scale-II.
The Psychiatric Correlates of War-related Traumatic Stress
We first calculated the Pearson correlation coefficients between the AWES and each of our measures of psychiatric symptomatology (Table 2). We then used Fisher's Z Test (two tailed) for dependent groups to examine the relative strength of the correlation between war-related traumatic stress and each type of distress.

In the first analysis, we compared the correlation between AWES and the IES-R \( (r = .25) \) with that between the AWES and the HSCL-Depression \( (r = .32) \). The correlation between war-related traumatic stress and depression was marginally stronger than that between war-related traumatic stress and PTSD \( (Z = 1.76, p = .08) \). In the second analysis, we compared the correlation between the AWES and the IES-R \( (r = .25) \) with that between the AWES and the HSCL-Anxiety \( (r = .24) \). The two correlations were nearly identical, and the difference was not significant \( (Z = -.01) \). Lastly, we compared the correlation between AWES and the IES-R \( (r = .25) \) with that between the AWES and the ASCL \( (r = .37) \). The correlation between war-related traumatic stress and general psychological distress as measured by the ASCL was significantly stronger \( (Z = 2.83, p < .01) \).

In sum, contrary to our hypothesis, exposure to war-related traumatic stress was marginally more highly correlated with depression and significantly more highly correlated with our culturally specific measure of general distress than it was with PTSD. This finding is not consistent with a view of PTSD as the primary manifestation of trauma-related suffering in Afghanistan.

PTSD and Functional Impairment
To examine the extent to which PTSD accounted for a statistically significant and clinically meaningful amount of variance in level of psychosocial impairment beyond that explained by other types of distress, we used two sets of hierarchical multiple regression analyses. In the first set (presented in Table 3) we examined the contribution that depression, anxiety, and general distress (as measured by the ASCL) each made to functional impairment above and beyond that of PTSD. Methodologically this involved entering PTSD in the first step of three regression equations (labeled Models I, II, and III, respectively) and, in the second step, depression (Model I), anxiety (Model II), and general distress (Model III). In the second set of analyses (Table 4), we reversed the order of variable entry, examining the contribution of PTSD to functional impairment after depression, anxiety, and general distress had each been taken into account. Depression, anxiety, and general distress were each entered in the first step of three regression equations (labeled Models IV, V, and VI, respectively),
and PTSD in the second step of each equation. This procedure yielded
three sets of parallel models: Models I and IV examine the relative con-
tribution of PTSD and depression to level of functional impairment; Models
II and V do likewise with PTSD and anxiety; and Models III and VI ex-
amine the variance in functional impairment accounted for by PTSD
and general distress.

The two models examining PTSD and depression (Models I and IV)
accounted for 41% of the variance in functional impairment (Adj. R² = .41,
F = 83.96, p < .001); both models account for identical variance because
they both include the same two independent variables. In both models,
depression is a stronger predictor of functional impairment than PTSD.
This is reflected in the relative strength of the Beta values (.44 for
depression, .26 for PTSD), and in the ΔR² values: when depression was
entered after accounting for PTSD in Model I, it explained an additional
10.7% of the variance in functional impairment (ΔF = 43.78, p < .001);
h owever, when PTSD was entered after accounting for depression, it

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**TABLE 3**
Hierarchical Regression Analyses Predicting Functional Impairment (WHODAS
II) from Psychological Distress with PTSD Entered in Step 1 (N = 244)

<table>
<thead>
<tr>
<th>Variable</th>
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<th>SE B</th>
<th>β</th>
<th>F Change</th>
<th>ΔR²</th>
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<td><strong>Step 1</strong></td>
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<td>IESR (PTSD)</td>
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<td>.03</td>
<td>.55*</td>
<td>105.57*</td>
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<td><strong>Step 2</strong></td>
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<td>IESR (PTSD)</td>
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<td>.03</td>
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<td>HSCL-Depression</td>
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<td>.44*</td>
<td>43.77*</td>
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<td>HSCL-Anxiety</td>
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<tr>
<td>Afghan Symptom Checklist</td>
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<td>.05</td>
<td>.39*</td>
<td>32.08*</td>
<td>.08*</td>
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*p < .001
explained only an additional 3.6% of variance in functional impairment ($\Delta F = 14.85, p < .001$) — a statistically significant increment, though considerably smaller than that associated with depression; in fact, depression demonstrated roughly three times the predictive power with regard to functional impairment as did PTSD.

The two models examining PTSD and anxiety (Models II and V) accounted for 33% of the variance in functional impairment ($\text{Adj. } R^2 = .33, F = 61.56, p < .001$). These results suggest that PTSD and anxiety were very similar as predictors of functional impairment ($\beta = .29$ for anxiety and $\beta = .33$ for PTSD, with both variables included in each model). After accounting for PTSD (Model II), anxiety produced a $\Delta R^2$ of 3% ($\Delta F = 12.55, p < .001$); conversely, PTSD explained an additional 5% of variance in functional impairment after accounting for anxiety (Model V; $\Delta F = 16.61, p < .001$).

The two models examining PTSD and general distress (Models III and VI) accounted for 38% of variance in functional impairment ($\Delta F = 75.60,$
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p < .001). General distress (β = .39) was a stronger predictor of functional impairment than PTSD (β = .29). In Model 3, with PTSD accounted for, the addition of general distress resulted in a ΔR² of 8% (ΔF = 32.08, p < .001), twice the magnitude of the ΔR² of 4% (ΔF = 17.43, p < .01) that resulted from the addition of PTSD to Model VI, in which general distress was entered first.

Discussion

The results of this study suggest a somewhat complex picture regarding the phenomenon of PTSD in Afghanistan. On the one hand, PTSD appears to have good construct validity in this sociocultural context. With a few exceptions (symptoms of numbing, flashbacks, and nightmares), PTSD symptoms were moderately to highly prevalent in this sample, and the high internal consistency of the IES-R suggests that symptoms of PTSD do reflect a reliably measured latent construct, as one would expect of indicators of an underlying syndrome. The positive (though modest) correlation between PTSD and exposure to war-related traumatic stress lends further support to its construct validity, suggesting that PTSD symptoms are related as one would expect (given the etiological link between PTSD and traumatic stress) to exposure to war-related violence in Afghanistan.

On the other hand, we did not find strong support for the clinical utility of PTSD as a diagnostic construct in Afghanistan. War-related traumatic stress was not more strongly related to PTSD than to depression, anxiety, or general distress (as measured by the ASCL); in fact, traumatic stress was marginally more highly correlated with depression, and significantly more highly correlated with generally distress, than it was with PTSD. This latter finding is particularly noteworthy. The ASCL includes several indigenous indicators of distress that are widely used by Afghans to describe the mental health effects of their war-related experiences. When describing the mental health difficulties of people who had lost family members during the years of warfare, often under gruesome circumstances, participants in a narrative study we conducted in 2004 (Miller et al., 2006b) commonly used the term jigar khun – a kind of grief or melancholy that may persist for years. While acknowledging that intrusive images of violent experiences may endure for some time, participants generally emphasized jigar khun and other culturally specific indicators of distress in their narratives. For example, when they are highly distressed, women may beat themselves quite intensely, and in the wake of traumatic stress people may become asabi – a blend of nervousness and anger that may lead to verbal and even physical violence. We are currently examining more closely the etiology and phenomenology of these and other culturally specific expressions of
suffering, with the aim of better understanding the ways in which they are both distinct from and similar to expressions of distress familiar in European and North American cultural contexts.

The positive association we found between traumatic stress and our measure of general distress (the ASCL), which has two factors reflecting different expressions of dysphoria, is consistent with the strong correlation we found between traumatic stress and depression. In Afghanistan, it is not that armed conflict does not give rise to symptoms of PTSD; clearly it does, as the results of this study and other studies of Afghans have shown (Lopes Cardozo et al., 2004). Rather, what is most salient for Afghans is the profound sadness resulting from experiences of violence, destruction, and loss. A critical marker of adaptation to life’s difficulties among Afghans is the capacity to hold on to hope and not remain *jigar khun*, to stay connected to one’s social network, and to maintain one’s faith in God despite the adversities one has experienced. Afghans talk about people “leaving this life”, which refers to a withdrawal from one’s social world and a failure to meet one’s responsibilities to one’s family and community; this is the ultimate adverse psychological outcome of war-related destruction and loss: people lose their sense of hope and patience (*saber*), and with that, they lose their capacity to function (Miller et al., 2006a,b).

In this regard, our finding regarding the comparatively lesser contribution of PTSD to functional impairment is noteworthy. Our experience in Afghanistan suggests that functional impairment draws the attention of family members, friends, and neighbors, far more so than merely experiencing symptoms of distress that do not impair functioning. In a similar vein, we have found that help-seeking behavior is more likely to result from impairment in core areas of functioning, than it is from the experience of emotional suffering per se. Consequently, mental health programs that aim at restoring functioning should target those forms of distress that contribute most significantly to functional impairment; in Afghanistan, this means focusing on depression, and on culturally specific expressions of dysphoria. Although a focus on alleviating symptoms of PTSD may make intuitive sense to Western-trained clinicians, our findings are not consistent with making such a focus the primary target of assessment and intervention. There may be individuals for whom PTSD symptoms are particularly salient, and who may benefit specifically from trauma-focused interventions (Hubbard & Pearson, 2004). In general, however, our data suggest that mental health interventions in Afghanistan are likely to have the greatest benefit when they target other types of distress that impact more substantively on people’s functioning, and that are subjectively perceived as salient and requiring assistance.
LIMITATIONS

The present study was limited by its reliance on self-report measures, which are subject to a variety of reporting biases (Bradburn, 1983). Particularly in Afghanistan, we have found that men tend to under-report their level of distress; unfortunately, it is difficult to circumvent this problem. Given the low level of literacy in Kabul, it is necessary to have the surveyors read the questionnaires aloud to participants. Culturally, it would be inappropriate for women to interview men, and it is not clear that women surveyors would eliminate or even reduce the tendency of men to downplay their distress.

The study was also limited by the concurrent assessment of predictor and outcome variables. It was also limited by our use of the IES-R, which though widely used to assess PTSD, does not correspond precisely to the 17 item criteria of the DSM. However, the IES-R does fully cover the three DSM symptom clusters, and if anything it may oversample certain PTSD items. A more significant limitation relates to our use of only one measure of PTSD in this study. Because of the various limitations of any single measure or method of assessing a latent construct such as PTSD, it may be argued that our findings regarding construct validity and clinical utility may be specific to the IES-R rather than to the construct of PTSD per se. To address this possibility, it will be important for future research with non-western war-affected populations to examine PTSD using multiple measures, and ideally, multiple methods of assessment.

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REFERENCES


KENNETH E. MILLER, PhD, is Senior Research Scientist at the François-Xavier Bagnoud Center for Health and Human Rights, Harvard School of Public Health. He is also a consultant to organizations doing mental health and psychosocial interventions in conflict and post-conflict settings. Address: François-Xavier Bagnoud Center for Health and Human Rights, Harvard School of Public Health, 651 Huntington Avenue, 7th floor, Boston, MA 02115 USA. [E-mail: kmiller@hsph.harvard.edu]

PATRICIA OMIDIAN, PhD, is a medical anthropologist and Associate Professor in the Community Health Sciences Department at Aga Khan University, Karachi, Pakistan. She has worked extensively in Pakistan and Afghanistan, running community-based programs and conducting research for various UN and international agencies and for the Government of Afghanistan’s Ministry of Public Health. Address: Medical Anthropologist and Head, Social Sciences, Faculty of Arts and Sciences, Aga Khan University, Karachi, Pakistan. [E-mail: patricia.omidian@aku.edu]

MADHUR KULKARNI, MS, is a doctoral candidate in clinical psychology at the University of Michigan, Ann Arbor.

AZIZ YAQUBI is Deputy Director for the American Friends Service Committee in Afghanistan. [E-mail: yaqubikabul@hotmail.com]

HAQMAL DAUDZAI, BA, is a Certified Focusing Trainer in Afghanistan and a coordinator in training through The Focusing Institutes, which provides training in community-based psychosocial wellness programs. [E-mail: haqmal_2005@yahoo.com]

ANDREW RASMUSSEN, PhD, is Research Director at the Bellevue/NYU Program for Survivors of Torture and Assistant Professor of Psychiatry, New York University School of Medicine. [E-mail: andrew.rasmussen@med.nyu.edu]