Pre-Migration Trauma Experiences of East African Refugees in the United States

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Abstract

This study examines potentially traumatic experiences and symptoms, as measured by the Harvard Trauma Questionnaire (HTQ), of 17 male and 36 female resettled East African refugees in the United States. Eight of the 40 HTQ traumatic events were experienced by at least 75 percent of either male or female participants. The number and types of events, as well as the severity of symptoms, were different for males and females. Males experienced significantly more events and had a greater average symptom severity than females. Both groups reported symptoms of great enough severity to warrant mental health treatment. The number of events experienced was positively correlated with symptom severity. Many of the most distressful symptoms reported by participants are not part of the DSM-5criteria for Post-Traumatic Stress Disorder (PTSD). This finding has significance regarding the diagnostic criteria for PTSD in populations outside of mainstream America.

***Keywords*:** trauma symptoms, East African refugees, gender differences, post-traumatic stress

1. Introduction

Globally pervasive socio cultural and political unrest and violence have led to unprecedented numbers of displaced individuals. A recent report released by the United Nations Refugee Agency (2015) estimated that by the end of 2014, 59.5 million people were forcibly displaced worldwide as a result of war, internal conflict, persecution, or human rights violations. This figure includes 19.5 million refugees and 1.8 million asylum-seekers. In the fiscal year 2015, the United States granted resettlement to more refugees (69,933) than any other country in the world and granted asylum to an additional 25,199 individuals (Zong & Batalova, 2015).The number of refugees from Africa admitted to the United States has steadily increased with 18,659 new admissions from October, 2016 – June, 2017 (U.S. Department of State, Bureau of Population, Refugees, and Migration, 2017).

Forcibly displaced individuals have been subjected to multiple traumatic events within their country of origin, during the migration process, and during resettlement in their new location (Carroll, 2004; Young& Gordon,2016). As a result, refugees and asylum-seekers are at high risk for mental health problems. Relative to other refugee groups, studies of those from Africa are under-represented in the literature (Carroll, 2004; Rasmussen, Smith & Keller, 2009).

However, studies that do exist report high rates of posttraumatic stress disorder (PTSD), major depressive disorder (MDD), and anxiety disorders with high rates of comorbidity (Bhui et al., 2003; Gerritsen et al., 2006; Jaranson et al., 2004; Karunakara et al., 2004; Nakash et al., 2015; Neuner et al., 2004; Onyut et al., 2009; Schweitzer, Melville, Steel & Lancherez, 2006; Vinck & Pham, 2010). Meta-analytic studies suggest that prevalence rates vary across studies as a function of the type and number of traumatic events experienced, country of origin, sample size, type of diagnostic measure used, displacement, and living in refugee camps (Fazel, Wheeler, & Danesh,2005; Steel et al., 2009). It is important to note than only one of the above described studies involved refugees in the United States (Jaranson et al., 2004).

Several studies have examined the type of pre-migration potentially traumatic events (PTEs) experienced by African refugees and/or the relationship between PTEs and psychopathology. Bhui et al. (2003) studied a random sample of 180 Somali refugees selected from a community register in London. The most frequently reported PTEs for both men and women (listed in order from highest to lowest proportion of the sample) included being in a combat situation, poor health, witnessing murder, separation from family, feeling close to death, a shortage of food, and enforced isolation. A greater of proportion of men than women endorsed each event. The total trauma event score (using part 1 ofthe HTQ) was significantly related to both anxiety and depression. In a study of 63 Sudanese refugees re-settled in Australia (snowball sampling), Schweitzer et al.(2006) reported an average of 5.6 PTEs with the most frequently endorsed events being separation from family, murder of a family member or friend, lack of food, water andshelter, combat situation, and being close to death. The symptom severity score (using the first 16 items of part four of the HTQ) was 1.6, with a significant correlation between PTEs and PTSD symptom severity. Two inter-related studies of Sudanese refugees re-settled in Uganda reported a clear, near linear, relationship between the number of PTEs and the prevalence of PTSD (Karunakara et al., 2004; Neuner et al., 2004). In a study specifically focusing on torture in Somali and Oromo refugees living in the Minneapolis/St. Paul area, Jaranson et al. (2004), reported a positive correlation between the number of trauma events and a variety of social, psychological, and physical problems. Lastly, a study of refugees from various regions, including Africa, who were seeking treatment at a New York facility were reported to have experienced a high frequency of traumatic events including beatings, threats of death or injury by authorities, being forced to perform degrading behavior, and deprivation of food, water or sensory stimulation (Rasmussen et al.,2015). No gender differences or a dose-response relationship were noted by these authors.

Given the high number of African refugees admitted to the United States and the relative paucity of studies reporting on this population (especially in the U.S.), the present study sought to describe the types of PTEs experienced by female and male East African refugees as well as the relationship between PTEs and the severity of trauma-related symptoms.

2. Method

2.1 Participants

As part of a larger clinical study, participants were female and male refugees from East Africa. They were recruited through three community agencies in San Diego, California: the Southern Sudanese Community Center of San Diego, Horn of Africa, and United Women of East Africa. This resulted in 44 female and 18 male participants. Eight female and one male participants were excluded because they did not fully complete the required forms, yielding a total of 36 females and 17 males. All participants signed an informed consent form. This study was approved by the University's Institutional Review Board.

2.2 Materials

Part one of the English version of the HTQ was used to identify PTEs and part four was used as a measure of trauma symptoms. The HTQ is a widely used instrument for the assessment of trauma symptoms associated with PTSD in culturally diverse populations (see Heeren et al., 2012; Kleijn, Hovens & Rodenburg, 2001; McColl et al., 2010; Mollica et al., 1992). The first section listed 40 events and participants were asked to check "yes" or "no" depending on whether or not they had experienced them (e.g., lack of shelter, lack of food and water, beating to the body, rape). The fourth section asked participants to rate the degree to which each of 40 trauma symptoms (e.g., recurrent nightmares, bodily pain, feeling no trust in others) had bothered them during the past week. Symptom severity was rated on a 4-point scale ranging from 1 (not at all) to 4 (extremely).

The first 16 items of part four correspond to the DSM-IV criteria for PTSD, while the remaining items are symptoms commonly reported by refugees who have experienced trauma (Mollica et al., 1992). When necessary, community leaders translated the questionnaire.

2.3 Procedures

Potential participants were paid $15.00 to attend an initial intake session and complete the required forms (demographic information sheet, informed consent form, and the HTQ). We used purposive sampling for the clinical study. Participants who had experienced at least three traumatic events and three moderate to severe symptoms were designated as qualified for the study. The literature suggests that individuals who have experienced three or more traumatic events have an eight-fold increase in the risk of developing PTSD (Steel, Silove, Phan & Bauman, 2002) and a mean score greater than2.5 on part four (first 16 items only) of the HTQ is considered a reliable predictor of probable PTSD (Mollica et al., 1992).

3. Results

3.1 Demographics

Table 1Participant demographics expressed as a percent of the sample (N = 53)

Demographic Variable	Female	Male
Age		
18-29	35	12
30-39	24	24
40-49	27	12
over 50	15	53
Country of Origin		
Ethiopia	31	6
Somalia	25	47
S. Sudan	33	18
Uganda	6	24
Other	6	6
Education		
<High School	62	53
High School Diploma	16	12
Some College or College Degree	22	35
English Speaking Fluency		
Good/Excellent	35	41
Moderate/Poor	65	59
English Writing Fluency		
Good/Excellent	22	69
Moderate/Poor	78	31
Marital Status		
Married	65	53
Single	30	47
Divorced/separated	6	-
Non-English Languages		
Arabic	19	-
Neur	11	18
Somali	28	53
Other	42	29
Religion		
Christian	44	41
Islam	56	53
Other/none	-	6
Spent Time in Camp		
Yes	85	71
No	15	29
Years in the U.S.		
< 1	-	12
1-5	41	18
6-10	21	24
>11	38	47

Not all participants supplied demographic data on the questionnaire, but the response rate was high (90-95% depending on the question). Table 1 summarizes the demographic data for those who responded.The majority of participants were female (69%). There was a wide age range (reported in decades) with males, on the whole, older than females. Length of residence in the U.S. was longer for males than females. Over half of the sample were married and reported their religious affiliation as Islam. A number of different Native languages were reported with the most frequent (in order of frequency) being Somali, Arabic and Neur for females and Somali and Neur for males. The primary countries of origin were Ethiopia, Somalia, South Sudan, and Uganda. The majority of females were from (in order of frequency) South Sudan, Somalia, and Ethiopia and males from Somalia, Uganda, and South Sudan. The majority reported having less than a high school education and moderate to poor English speaking fluency skills. Self-reported English writing skills was higher for males than for females. Eighty-five percent of females and 71% of males reported spending time in a refugee camp.

3.2 Frequency Analysis

3.2.1 Event Frequency

Table 2Events experienced by 50% or more of male and female participants (expressed as percent of sample). Number in parentheses is the number of participants who answered the question.

Event No	Event Description	Female % (N)	Male % (N)
1	Lack of Shelter	69 (36)	88 (17)
2	Lack of Food and water	78 (36)	94 (17)
3	Ill health without access to medical care	66 (35)	94 (17)
6	Forced evacuation under dangerous conditions	60 (35)	91 (17)
15	Extortion or robbery	50 (36)	77 (17)
17	Forced to hide	61 (36)	82 (17)
31	Murder, or death due to violence, of other family member or friend	58 (36)	69 (16)
35	Serious physical injury of family or friend due to combat or landmine	58 (36)	65 (17)

Table 3Events experienced by 50% or more of men but not women (expressed as percent of sample)

Event No	Event Description	Female % (N)	Male % (N)
4	Confiscation or destruction of personal property	43 (35)	65 (17)
5	Combat situation (e.g. shelling and grenade attacks)	43 (35)	77 (17)
7	Beating to the body	33 (36)	65 (17)
11	Torture (i.e. while in captivity you received deliberate and systematic infliction of physical or mental suffering)	31 (35)	53 (17)
13	Imprisonment	26 (35)	65 (17)
19	Other forced separation from family members	47 (36)	71 (17)
21	Enforced isolation from others	40 (35)	50 (16)
22	Someone was forced to betray you and place you at risk of death or injury	19 (36)	59 (17)
34	Disappearance or kidnapping of other family member or friend	36 (36)	53 (17)
36	Witness beating to head or body	36 (36)	77 (17)
37	Witness torture	33(36)	82 (17)
38	Witness Killing/murder	33 (36)	60 (15)
40	Other situation that was very frightening or in which you felt your life was in danger	42 (31)	53 (17)

Part 1 of the HTQ asked participants to indicate whether they had experienced any of 40 traumatic events by responding “yes” or “no.” The responses are shown as the percentage of the females and males in the sample that responded “yes” to the event. Some events stand out as highly prevalent in this sample. Table 2illustrates the eight events that were experience by 50% or more of both female and male participants, the most notable being a lack of food, water, shelter and medical care (see Appendix A for the complete table of all 40 events).

When the events are separated by gender, it becomes clear that females and males experienced different traumas in their life. None of the events occurred for a majority of the women but not the men. In contrast, Table 3 shows the 13 events that occurred for 50% or more of the men but not the women, with acts of violence figuring prominently in the male experience. By contrast, three events were not experienced very frequently (25% or fewer) by either gender: rape, murder, or death due to violence of spouse, and disappearance or kidnapping of child (see Appendix A).When we compare the average number of events reported by gender, it is clear that the males experienced more trauma (M = 21.29 events, SD = 10.89) than the females (M = 12.89 events, SD = 7.12). This difference was statistically significant: t (51) = -3.37, p< .01

3.2.2 Severity Frequency

Table 4Symptoms receiving ratings of 2 or higher for 50% or more of both males and females

Symptom No	Symptom Description	Female	Male
1	Recurrent thoughts or memories of the most hurtful or terrifying events	77 (35)	93 (17)
2	Feeling as though the event is happening again	57 (35)	77 (17)
3	Recurrent nightmares	72 (35)	83 (17)
4	Feeling detached or withdrawn from people	52 (36)	59 (17)
6	Feeling jumpy, easily startled	50 (34)	65 (17)
7	Difficult concentrating	75 (36)	65 (17)
8	Trouble sleeping	75 (36)	93 (17)
9	Feeling on guard	56 (36)	77 (17)
10	Feeling irritable or having outbursts of anger	61 (36)	54 (17)
11	Avoiding activities that remind you of the traumatic or hurtful event	69 (35)	100 (17)
12	Inability to remember parts of the most traumatic or hurtful events	57 (35)	71 (17)
13	Less interest in daily activities	58 (36)	65 (17)
15	Avoiding thoughts or feelings associated with the traumatic or hurtful events	63 (34)	73 (17)
16	Sudden emotional or physical reaction when reminded of the most hurtful or traumatic events	78 (35)	94 (17)
17	Feeling that you had less skills than you had before	66 (44)	57 (16)
18	Having difficulty dealing with new situations	72 (36)	77 (17)
19	Feeling exhausted	69 (36)	82(17)
20	Bodily pain	72 (36)	69 (16)
21	Troubled by physical problem(s)	62 (36)	54 (17)
23	Finding out or being told by other people that you have done something that you cannot remember	54 (35)	59 (17)
31	Feeling that people do not understand what happened to you	72 (36)	71 (17)
32	Feeling others are hostile to you	50 (36)	53 (17)
38	Spending time thinking why these events happened to you	50 (36)	64 (17)

Participants rated the severity of each of 40 HTQ symptoms ("how much did each symptom bother you in the past week") on a scale from 1 (Not at all) to 4 (Extremely). Twenty-three out of 40 (56%) possible symptoms received ratings of 2 or higher for 50% or more of both females and males (see Table 4; for a complete list of symptoms see Appendix B).Four symptoms received ratings of 2 or greater by 50% or more of the females but not the males and these were unable to feel emotions (F = 50%; M = 41%), difficulty concentrating (F = 75%; M = 65%),paying attention (F = 60%; M = 36%), and feeling unable to make daily plans (F = 60%; M = 48%; see Appendix B).Other symptoms were more distressful for the men compared to the women.

As can be seen in Table 5 ten symptoms received ratings of 2 or greater by 50% or more of the males but not the females. These symptoms were primarily related to feelings of guilt, shame, trust, and hopelessness.

Table 5 Symptoms receiving ratings of 2 or greater by 50% or more of males but not females

Symptom No	Symptom Description	Female	Male
14	Feeling as if you don't have a future	46 (35)	54 (17)
22	Poor memory	35 (35)	59 (17)
27	Blaming yourself for things that have happened	34 (36)	71 (17)
28	Feeling guilty for having survived	12 (36)	65 (17)
29	Hopelessness	40 (36)	59 (17)
30	Feeling ashamed of the hurtful or traumatic events that have happened to you	47 (36)	83 (17)
33	Feeling that you have no one to rely upon	46 (35)	65 (17)
35	Feeling humiliated by your experience	45 (36)	54 (17)
36	Feeling no trust in others	43 (35)	65 (17)
37	Feeling powerless to help others	37 (35)	65 (17)

Table 6 DSM vs. non-DSM symptoms that were very distressful (a rating of 3 or 4) for at least 25% or more of both females and males

Symptom No	Symptom Description	Female % (n)	Male % (n)
DSM Criteria B Intrusion			
1	Recurrent thoughts/memories (N = 35F; 17M)	46 (16)	65 (11)
2	Flashbacks (N = 35F; 17M)	37 (13)	35 (6)
3	Nightmares (N = 35F; 17M)	43 (15)	59 (10)
16	Emotional/physical reaction (N = 35F; 17M)	49 (17)	47 (8)
DSM Criteria C Avoidance			
11	Avoiding activities (N = 35F; 17M)	46 (16)	47 (8)
15	Avoiding thoughts and feelings (N = 34F; 17M)	39 (13)	35 (6)
DSM Criteria D Negative Cognition/Mood			
13	Less interest in daily activities (N = 36F; 17M)	36 (13)	35 (6)
14	Feeling that you don't have a future (N = 35F; 17M)	26 (9)	35 (6)
DSM Criteria E Arousal and Reactivity			
7	Difficulty concentrating (N = 36F; 17M)	36 (13)	29 (5)
8	Trouble sleeping (N = 36F; 17M)	43 (18)	59 (10)
10	Irritable/anger outbursts (N = 36F; 17M)	25 (9)	39 (5)
Non-DSM Symptoms			
17	Feeling like you have less skills (N = 34F; 16M)	47 (16)	44 (7)
18	Difficult dealing with new situations (N = 36F; 17M)	33 (12)	29 (5)
19	Feeling exhausted (N = 36F; 17M)	50 (18)	31 (5)
20	Bodily pain (N = 36F; 16M)	50 (18)	31 (5)
21	Physical Problems (N = 36F; 17M)	33 (12)	29 (5)
34	Feeling that someone you trust betrayed you (N = 35F; 17M)	26 (9)	35 (6)
36	Lack of trust in others (N = 35F; 17M)	29 (10)	35 (6)
38	Thoughts about why this happened to you (N = 36F; 17M)	28 (10)	35 (6)

N indicates the number of respondents endorsing the symptom, while n indicates the number of respondents with a rating of 3 or 4

Table 6 illustrates symptoms reported as very distressful (3 quite a lot or 4 extremely) for at least 25% or more of both females and males. Symptoms in the table are grouped according to DSM criteria for PTSD and non-DSM criteria. Of the 19 symptoms shown in the table 58% correspond to DSM criteria while 42% do not.

Finally, four symptoms were rated as *not* distressful by a majority of both females and males: feeling as if you are split into two people and one of you is watching what the other is doing (females 72%, males 63%), feeling that someone you trusted has betrayed you (females 54%, males 53%), feeling that you are the only one who suffered these events (females 67%, males 65%), and feeling a need for revenge (females 92%, males 77%).

When we compare the average distress ratings by gender, it appears that males experienced more severe trauma (M = 2.12, SD = .74) than females (M = 1.93, SD = .62), but this difference was not statistically significant: $t(51) = -1.00$, $p > .32$.Given that only the first 16 of the HTQ symptoms correspond to the DSM criteria for PTSD, we compared the symptom severity for males and females for thefirst 16 symptoms. Again, the average symptom severity for the males (2.25, SD = .68) was higher than that for the females (2.01, SD = .65), but this difference still was not statistically significant: $t(51) = -1.25$, $p > .21$.A score greater than 2.5 on the first 16 symptom items is a reasonable indicator of a clinical diagnosis of PTSD. Using the cutoff of greater than 2.5, 12 out of 36 (33.33%) of the females and 6 out of 17 (35.29%) of the males may be likely cases of PTSD.

3.2.3 Relationships between Events and Symptoms

The relationship between the number of events reported and ratings of symptom severity was explored by correlational analyses. The correlation between number of events and symptom severity was significantly positive for both females, $r(34) = .33$, $p < .05$, and males, $r(15) = .57$, $p < .05$. We repeated these correlational analyses for the first 16 DSM symptoms only. We found that the correlation between number of events experienced and symptom severity was significant for males: $r(15) = .57$, $p < .05$, but not females: $r(34) = .07$, $p > .70$. With this single exception of the females, generally those participants who experienced the greatest number of traumatic events also experienced the highest levels of overall distress.

4. Discussion

Results of the trauma frequency analysis revealed that East African refugees in this study experienced a high number of PTEs, with half of the events experienced by a majority of either males, females or both. Although difficult to compare to other studies because of differences in sampling and use of measurement instruments, participants in our study reported on average, a greater number of PTEs than reported by other authors (e.g., Bhui, et al., 2003; Karunakara, et al., 2004; Schweitzer et al., 2006). Similar to the finding of Bhui et al. males reported experiencing more PTEs than females. However, in our study a higher percentage of males than females reported experiencing all but one event (murder or death of spouse). With respect to the type of PTE, our findings were similar to those reported by others (e.g. Bhui et al.; Jaranson et al., 2004; Schweitzer et al.). A majority of both males and females reported experiencing a loss of basic needs such as food, water, shelter, and medical care. Forced evacuation and hiding, serious physical injury and loss of a friend or family member to violence were also reported by a majority of participants. A higher percentage of males (50% or more) than females directly experienced and witnessed acts of violence such as combat, beatings, torture, kidnapping and imprisonment. In agreement with other studies (Bhui et al., Karunakara et al.; Schweitzer et al.) rape and sexual humiliation were among the most infrequently reported events. In contrast to Bhui et al., more males than females in our sample reported these events. The low overall response rate may be a result of cultural taboos about disclosing such experiences (e.g. Tempany, 2009).

The frequency analysis of symptom severity (distress) ratings revealed the following: (a) at least half of female and male participants experienced at least some distress for 23 of the 40 symptoms, (b) of these, males experienced more distress than females for symptoms related to guilt, shame, humiliation, hopelessness and powerlessness; females experienced more distress than males for inability to feel emotions, concentrate, pay attention, and carry out daily activities, (c) 18 symptoms were rated as very distressful by at least 25% of the participants with 58% of them corresponding to DSM criteria while the remaining did not, and (d) there was no significant difference in the overall severity ratings for women and men.

The general conclusion from the frequency analysis and the following correlational analysis is that females and males both experience many traumas (males more so than females), with relatively high levels of distress. Moreover, those individuals who experience more trauma events also tend to experience more severe symptoms across the board, although the level of distress does not appear to be significantly greater for one gender compared to the other. A similar dose response relationship in Sudanese and Somali refugees has been reported by other authors using only the first 16 HTQ symptoms (Schweitzer et al., 2006) the Post-traumatic Stress Scale (Karunakara et al., 2004; Neuner et al., 2004) , and the PTSD Checklist (Jaranson et al., 2004).

An approximately equal of percentage of females (33.33%) and males (35.29%) reported symptoms at a level indicating the potential development of PTSD, figures similar to those reported for Sudanese nationals living in southern Sudan, and Ugandan nationals and Sudanese refugees living in northern Uganda (Neuner et al., 2004).

Although prevalence rates were higher, gender equivalence was also reported by Omyut et al. (2009) for Somali refugees in an African resettlement camp. Neither Schweitzer et al. (2006; Sudanese resettled in Australia) or Gerritsen et al. (2006; Somali resettled in the Netherlands) specified gender differences, and both reported much lower possible PTSD prevalence rates of 13% and 4% respectively,as well as comparatively fewer traumatic events.

When using DSM criteria only about one third of our sample would likely be diagnosed with PTSD, although at least 50% reported a severity of 2 or above on a total of 23 symptoms. Importantly, since we included all 40 HTQ symptoms in our study (we know of no comparable studies) we were able to compare, within the same sample, DSM to non-DSM symptoms. Overall, participants rated DSM symptoms as highly distressful at rates equivalent to non-DSM symptoms. This finding seems to underscore the need for the use of instruments such as the HTQ when assessing trauma in non-Western populations and the development of an expanded diagnostic criteria for PTSD for individuals from different cultures. For example, there was a high rate of somatic symptoms in our sample but the DSM-5 does not include those as symptoms of PTSD (American Psychiatric Association [APA], 2013). Although data are scant for East African populations, there is increasing recognition that refugees from non-Western countries exhibit somatization at rates higher than Western populations (e.g. Rohlof, Knipscheer, & Kleber, 2014).In our study, males in particular also experienced intense feelings of shame, humiliation, guilt, and powerlessness (see review by Tempany, 2009). A failure to recognize cultural and gender-specific idioms of distress may result in misdiagnosis thus excluding individuals from a PTSD diagnosis when in fact they may experience multiple clinically significant trauma symptoms.

It also appears important that clinicians be alert to the presence of trauma symptoms in any immigrants who are from war-torn countries, who have had to reside in refugee camps, or who have entered the country illegally given the tactics that must be employed to do so. This would seem to include a significant number of immigrants currently entering the United States and thus have implications for community and mental health providers and funding.

5. Limitations

The present study does have some limitations. First, the small sample size and purposive sampling may limit generalizing to the larger East African refugee community, although types of trauma and symptoms were comparable to other studies. Second, our participants were heterogeneous and from various indigenous East African ethnic groups and countries. A larger sample would permit comparisons between countries of origin. However, African countries are of such great ethnic diversity that even restricting comparisons to one country would not solve the problem. Third, the use of questionnaires with non-standard translations to identify trauma symptoms may introduce transcultural error. Although we did use Native translators when necessary, future studies would benefit by adapting the HTQ to each country of origin. Finally, future studies with larger samples would benefit from analyses of post-migration factors such as employment, length of residence, etc. that may exacerbate or induce trauma symptoms in these populations.

6. Conclusion

This study contributes to the sparse literature on the types of pre-migration trauma experienced as well as the frequency and severity level of trauma symptoms in East African refugees in the Unites States, particularly in Southern California. We demonstrate that many such individuals experience clinically significant levels of trauma symptoms, although not necessarily diagnosable as PTSD, and that symptom logy varies by gender. The prevalence and severity of the trauma symptoms reported on the HTQ indicate the need for both more research into how individuals from different cultures express those symptoms and for an expanded clinical assessment of diagnosable levels of PTSD as found in those cultures. Variables such as how people from collectivistic cultures experience trauma, what populations may tend to somaticize trauma experiences, and the differences between what men and women experience as traumatic events all warrant future study. The results of this study also indicate the need to develop community-based, short-term treatment approaches to assist individuals who have limited or no access to community or mental health services.

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Appendix A

Percent of female and male sample selecting trauma events: Yes vs. No

Event No	Description	Female	Male
1	Lack of Shelter	69 (36)	88 (17)
2	Lack of food and water	78 (36)	94 (17)
3	Ill health without access to medical care	66 (35)	94 (17)
4	Confiscation or destruction of personal property	43 (35)	65 (17)
5	Combat situation (e.g., shelling and grenade attacks)	43 (35)	77(17)
6	Forced evacuation under dangerous conditions	60 (35)	91 17)
7	Beating to the body	33 (36)	65 (17)
8	Rape	9 (35)	25 (16)
9	Other types of sexual abuse or sexual humiliation	22 (36)	35 (17)
10	Knifing or axing	6 (33)	35 (17)
11	Torture (i.e., while in captivity you received deliberate and systematic infliction of physical or mental suffering)	31 (35)	53 (17)
12	Serious physical injury from combat situation or landmine	23 (35)	47 (17)
13	Imprisonment	26 (35)	65 (17)
14	Forced labor (like animal or slave)	32 (34)	41 (17)
15	Extortion or robbery	50 (36)	77 (17)
16	Brainwashing	44 (36)	29 (17)
17	Forced to hide	61 (36)	82 (17)
18	Kidnapped	26 (35)	47 (17)
19	Other forced separation from family members	47 (36)	71 (17)
20	Forced to find and bury bodies	26 (35)	47 (17)
21	Enforced isolation from others	40 (35)	50 (16)
22	Someone was forced to betray you and place you at risk of death or injury	19 (36)	59 (17)
23	Prevented from burying someone	22 (36)	41 (17)
24	Forced to desecrate or destroy the bodies or graves of deceased persons	0 (36)	31 (16)
25	Forced to physically harm family member or friend	14 (35)	29 (17)
26	Forced to physically harm someone who is not family or friend	6 (36)	35 (17)
27	Forced to destroy someone else' property or possessions	11 (36)	35 (17)
28	Forced to betray a family member, or friend, placing them at risk of death or injury	14 (36)	35 (17)
29	Murder, or death due to violence, of spouse	25 (36)	18 (17)
30	Murder, or death due to violence, of child	28 (36)	47 (17)
31	Murder, or death due to violence, of other family member or friend	58 (36)	69 (16)
32	Disappearance or kidnapping of spouse	6 (36)	29 (17)
33	Disappearance or kidnapping of child	6 (36)	24 (17)
34	Disappearance or kidnapping of other family member or friend	36 (36)	53 (17)
35	Serious physical injury of family member or friend due to combat situation or landmine	58 (36)	65 (17)
36	Witness beating to head or body	36 (36)	77 (17)
37	Witness torture	33 (36)	82 (17)
38	Witness killing/murder	33 (36)	60 (15)
39	Witness rape or sexual abuse	25 (36)	33 (15)
40	Any other situation that was very frightening or in which you felt your life was in danger	42 (31)	53 (17)

Appendix B

Percent of the female and male samplesrating trauma symptoms: None (Rating = 1) versus Some (Ratings = 2-4)

		Female		Male	
Symptom No.	Symptom Description	None	Some	None	Some
1	Recurrent thoughts or memories of the most hurtful or terrifying events (N = 35F; 17M)	23	77	6	93
2	Feeling as though the event is happening again (N = 35F; 17M)	43	57	24	77
3	Recurrent nightmares (N = 35F; 17M)	29	72	18	83
4	Feeling detached or withdrawn from people (N = 36F; 17M)	47	52	41	59
5	Unable to feel emotions (N= 36F; 17M)	50	50	59	41
6	Feeling jumpy, easily startled (N = 34F; 17M)	50	50	35	65
7	Difficult concentrating (N = 36F; 17M)	25	75	35	65
8	Trouble sleeping (N = 36F; 17M)	25	75	6	93
9	Feeling on guard (N = 36F; 17M)	44	56	24	77
10	Feeling irritable or having outbursts of anger (N = 36F; 17M)	39	61	47	54
11	Avoiding activities that remind you of the traumatic or hurtful event (N = 35F; 17M))	31	69	0	100
12	Inability to remember parts of the most traumatic or hurtful events (N = 35F; 17M)	43	57	29	71
13	Less interest in daily activities (N = 36F; 17M)	42	58	35	65
14	Feeling as if you don't have a future (N = 35F; 17M)	55	46	47	54
15	Avoiding thoughts or feelings associated with the traumatic or hurtful events (N = 34F; 17M)	38	63	18	73
16	Sudden emotional or physical reaction whenreminded of the most hurtful or traumatic events (N = 35F; 17M)	23	78	6	94
17	Feeling that you had less skills than you had before (N = 34F; 16M)	35	66	44	57
18	Having difficulty dealing with new situations (N = 36F; 17M)	28	72	24	77
19	Feeling exhausted (N = 36F; 17M)	31	69	18	82
20	Bodily pain (N = 36F; 16M)	27	72	31	69
21	Troubled by physical problem(s) (N = 36F; 17M)	39	62	47	54
22	Poor memory (N = 35F; 17M)	66	35	41	59
23	Finding out or being told by other people that you have done something that you cannot remember (N = 35F; 17M)	46	54	41	59
24	Difficulty paying attention (N = 35F; 17M)	40	60	65	36
25	Feeling as if you are split into two people and one of you is watching what the other is doing (N = 35F; 16M)	72	28	63	39
26	Feeling unable to make daily plans (N = 36F; 17M)	39	59	53	48
27	Blaming yourself for things that have happened (N = 36F; 17M)	67	34	29	71
28	Feeling guilty for having survived (N = 35F; 17M))	86	12	35	65
29	Hopelessness (N = 36F; 17M)	61	40	41	59
30	Feeling ashamed of the hurtful or traumatic events that have happened to you (N = 36F; 17M)	53	47	18	83
31	Feeling that people do not understand what happened to you (N = 36F; 17M)	28	72	29	71
32	Feeling others are hostile to you (N = 36F; 17M)	50	50	47	53
33	Feeling that you have no one to rely upon (N = 35F; 17M)	54	46	35	65
34	Feeling that someone you trusted betrayed you (N = 35F; 17M)	54	46	53	47
35	Feeling humiliated by your experience (N = 36F; 17M)	56	45	47	54
36	Feeling no trust in others (N = 35F; 17M)	56	43	35	65
37	Feeling powerless to help others (N = 35F; 17M)	61	37	35	65
38	Spending time thinking why these events happened to you (N = 36F; 17M)	50	50	35	64
39	Feeling that you are the only one who suffered these events (N = 36F; 17M)	67	33	65	36
40	Feeling a need for revenge (N = 36F; 17M)	92	9	77	24

Note: Total percentages do not always add to 100 due to rounding. N is the number of participants who addressed the item.