Chapter 11

Posttraumatic Stress in Asylum Seekers from Chechnya, Afghanistan, and West Africa: Differential Findings Obtained by Quantitative and Qualitative Methods in Three Austrian Samples

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INTRODUCTION

In the present chapter, we will give an account of the culture-specific facets of traumatic stress and of posttraumatic symptomatology in their respective societal contexts as they have been reported by asylum seekers belonging to different ethnic groups. We also intend to highlight the multiple and culture-dependent strain, asylum seekers are suffering from while trying to adjust to a foreign society and while being left in uncertainty about being granted asylum. We will also examine the pathogenetic impact that societies can have on individuals as well as the differential coping styles, resulting from divergent evaluations of traumatic events by people stemming from various parts of the world. From these findings, we will derive recommendations for diagnosing posttraumatic stress and for developing culturally sensitive treatment concepts when dealing with asylum seekers and refugees from non-Western societies. Special emphasis will be laid on differences between the three cultures under consideration.

Asylum seekers from Chechnya, Afghanistan, and West Africa were the strongest ethnic groups among 24,676 foreigners who applied for political asylum in Austria in 2004 (Department of the Interior, 2004) and

therefore we were particularly interested in them. The mostly deplorable situation of estimated 40 million refugees and asylum seekers worldwide, which is accompanied by a lack of scientific knowledge about them, has been outlined comprehensively in Wilson and Drozdek's (2004) edited book "Broken Spirits." Experiences of mutilation, rape, or torture, as well as being witness of one's relatives or friends being assassinated, are quite common among them and thus, not surprisingly, psychiatric disorders, especially symptoms of posttraumatic stress, have been found frequently in asylum seekers and refugees. Various contributions to a book edited by Bracken and Petty (1998) stress the importance of including social, political, and cultural factors into diagnosis and therapy. They also pointed out that the concept of PTSD not only is derived from Western psychiatry (trying to categorize mental diseases) but also criticized that trauma – in this approach – is seen as an event affecting an individual person and thus having to be dealt with individually – in diagnosis as well as in therapy and although some symptoms seem to be universal, their significance and importance may vary considerably across different cultures.

Focusing on Chechnya, an extremely high incidence of traumatization has been reported, for example, by Médecins Sans Frontières (2004), Politkovskaja (2003), and Zelenova, Lazebnaia, and Tarabrina (2001). Mghir, Freed, Raskin, and Katon (1995), Palmer (1998), and Wardak (1993) reported posttraumatic symptomatology in displaced persons from Afghanistan, and Fox (2003), Fox and Tang (2000), and Tang and Fox (2001) did so with respect to West African refugees and asylum seekers. These as well as similar findings have been coherently and complementarily interpreted by Isaenko and Petschauer (1999) for Chechnya, and by Peddle, Monteiro, Guluma, and Macaulay (1999) for West Africa.

By Western psychiatry and clinical psychology, sequelae of traumatization usually have been described in terms of the diagnostic criteria of posttraumatic stress disorder (PTSD), provided by the current version of the diagnostic and statistical manual of mental disorders (DSM-IV-TR, American Psychiatric Association, 2000). Silove (2004) argued that symptoms of posttraumatic stress like sleep disturbance, heightened arousal, or hypervigilance can be interpreted as biologically useful adaptive mechanisms and these symptoms seem to share a common biological basis (Elbert & Schauer, 2002). Still, even in descriptions by Western medicine, posttraumatic symptoms can vary and the phenomenon of comorbidity has been emphasized. Apart from the conventional Diagnostic Criteria of PTSD, e.g., depression, conversion disorder, substance abuse, or symptoms of other anxiety disorders frequently occur in survivors of psychological trauma (Ehlers, 1999). Baron, Jensen, and DeJong (2003) illustrated the specific problems of refugees in regard to presentation of symptoms as well as the possible aggravation of their situation by lack of knowledge in respect to cultural issues.

When focusing on non-Western populations, the diagnostic categories of PTSD are clearly insufficient. With respect to Western diagnostic instruments being transferred to other cultures and pointing to the caveats formulated by Marsella's (1998) Global-Community Psychology, Marsella, Dubanoski, Hamada, and Morse (2000) warned about possible ethnocentric bias and called for important aspects of cross-cultural equivalence of psychometric measures:

- 1. *Cultural equivalence* means that the concepts and definitions used must be culturally meaningful and valid for the ethnic group investigated.
- 2. *Linguistic equivalence* pertains to adequate techniques of translation and back-translation.
- 3. *Conceptual equivalence* means that the concepts used must have an equivalent meaning in the foreign culture, e.g., modesty may be interpreted as inappropriate shyness and as a lack of social security in a Western culture while being culturally highly desirable in Eastern Asia (Shweder & Haidt, 2000).
- 4. Scale equivalence demands that the measurement procedures be comparable between cultures. For example, according to Marsella et al. (2000), people from non-Western cultures sometimes have difficulties in dichotomizing reality by giving "True-" and "False-" answers.
- 5. *Normative equivalence* means that comparable norms should be available for all populations under consideration.
- 6. Aspects of *factorial validity* across cultures were highlighted.
- 7. The specific problems arising from *self reports* were highlighted.

Berry, Poortinga, Segall, and Dasen (1992) addressed part of these points when they named three prerequisites for a diagnostic instrument to be transferred to another culture and to be translated into another language: (1) behavior addressed by the assessment instrument must have equivalent meanings in both cultures, (2) the factorial structure and itemintercorrelations have to be similar in both versions of the instrument and among both samples, and (3) the quantitative results obtained by the instrument must be equivalent, i.e., in the case of a psychometric instrument, its norms must be comparable in both populations. These desiderata make it quite clear that the DSM-IV-TR, allegedly universal, diagnostic criteria cannot sensibly be applied to indigenous populations by simply translating them to foreign languages.

Considering these arguments, with respect to clinical problems, the DSM-IV-TR diagnostic criteria may be suspected that they do not adequately account for the specific needs of non-Western societies, although some culture-specific syndromes have been included in the DSM-IV-TR appendix. This is quite evident from the viewpoint of Cultural Psychology, which emphasized the diversity of human emotions among different ethnic groups (Shweder & Haidt, 2000; Shweder, 2001) as well as from Pike's (1954) considerations, who distinguished an *emic* from an *etic* procedure in cross-cultural comparisons. While the emic approach examines a culture's phenomena from an "inward" perspective, i.e., in terms of the investigated culture itself, the etic approach aims at developing universal or generic categories, which meet the requirements of all cultures. Triandis (1972) pointed out that

The one who adopts the etic can easily miss the most important aspects of the phenomena which he wishes to study. Either of these approaches, however, is preferable to the *pseudoetic* approach used by many psychologists doing cross-cultural research. The pseudoetic approach is in fact an emic approach developed in a Western culture (usually the United States) which is assumed to work as an etic approach. Thus instruments based on American theories, with items reflecting American conditions, are simply translated and used in other cultures. Only rarely does this approach yield useful results. (Triandis, 1972, S. 39)

With respect to psychiatric diagnoses applied to foreign cultures, Kleinman (1977) wrote

Here we have the evidence of a category fallacy, perhaps the most basic [...] error one can make in cross-cultural research. [...] studies of this kind go on to superimpose their own cultural categories on some sample of deviant behavior in other cultures, as if their own illness categories were culture-free. (Kleinman, 1977, p. 4).

Similarly, Berry et al. (1992) criticized an "imposed etic approach" (p. 233), which is equivalent to Triandis' "pseudoetic." In order to enable Western researchers to investigate non-Western cultures, Berry et al. suggested with respect to Berry (1989) and to Hui and Triandis (1985) to conduct emic studies both in one's own and in the foreign culture examining similarities and differences and, in a next step to adapt one's research paradigm to the new culture ("*derived etic*," Berry et al., p. 233). Thus cross-cultural comparisons are made possible on a sound basis.

Marsella and Yamada (2000) argued against an oversimplified medical model in psychiatry and clinical psychology, advocating a culturally sensitive view. They stated "that our realities, including our scientific realities, are all culturally constructed" (p. 7), a fact that implies the danger that people who hold the power, e.g., the representatives of Western biologically oriented psychiatry, dictate reality, at the expense of ethnic minorities whose specific needs are not adequately recognized. Summerfield (1999), with respect to Kirmayer (1989), pointed toward the increasing medicalization of traumatic stress by Western society, while in non-Western, collectivistic societies, trauma-related distress is commonly understood as a consequence of a disrupted "social and moral order" (Summerfield, 1999, p. 1455). As Kirmayer (1996) pointed

out, non-Western societies do not share the dualism of body versus mind, which is characteristic of the Western medical worldview, emphasizing somatic, as opposed to psychological complaints. This fact frequently has been addressed as "somatization" of psychological symptoms, but Kirmayer (2006), in accordance with Marsella, Kaplan, and Suarez (2002), correctly pointed out that somatic components are known worldwide as essential elements of the symptomatology pertaining to anxiety and affective disorders. It should be noted, however, that patients from collectivistic societies used to place a very high value on interpersonal balance with an emphasis on avoiding interpersonal conflict. Therefore, to non-Westerners, somatic symptoms may seem more acceptable and easier to communicate than psychological symptoms, which might imply accusing other people of having contributed to them by interpersonal conflict and disharmony.

The limitations of the PTSD concept in non-Western cultures have been emphasized by numerous authors (e.g., Bracken, Giller, & Summerfield, 1995; de Silva, 1993; Frey, 2001; Friedman, 1997; Kirmayer, Young, & Hayton, 1995; Marsella, Friedman, Gerrity, & Scurfield, 1996; Mezzich, Kleinman, Fabrega, & Parron, 1996; Mollica & Caspi-Yavin, 1992; Summerfield, 1999, 2002) and ample empiricial evidence supports their conceptual considerations. In survivors of torture from the Sudan and from Malawi, Peltzer (1998) and in those from Khmer, Hinton, Hinton, Um, Chea, and Sak (2002) found that PTSD only partly accounted for traumatic symptomatology. Ford (1997) found that conventional symptoms of PTSD were replaced by somatic ones in people from non-Western cultures as a result of a different conception of self. Similar results were reported by Matkin, Nickles, Demos, and Demos (1966) with respect to patients from Vietnam, by Mattson (1993), referring to people from Cambodia and Loas, and by Vontress and Ebb (2000) for Northern African immigrants in France. Mumford et al. (1991) reported that somatic symptoms frequently replaced conventional symptoms of PTSD in different ethnic groups from India, China, and Africa.

Thus, diagnoses employing the rigid Diagnostic Criteria suggested for PTSD by DSM-IV-TR frequently grossly underestimate the incidence of traumatic stress in people from non-Western populations (de Girolamo & McFarlane, 1996). Stamm and Friedman (2000) argued that intrusion and hyperarousal seem to appear in all cultures, while other conventional diagnostic elements of PTSD, namely dissociation and avoidance, obviously are specific to Western society.

Considering these limitations with respect to established methods of clinical diagnoses, it is quite obvious that qualitative approaches should be employed in order to assess symptoms of trauma in a culture-sensitive way. In this case, assessments should be conducted without theoretical assumptions and should be open toward culture-specific symptoms not known to Western science. Most importantly, diagnostic interviews should be carried out by clinicians knowledgable about the culturespecific peculiarities of the population involved.

In addition, as a promising psychometric alternative, a number of questionnaires have been developed toward assessing psychological trauma symptoms without relying solely on the PTSD diagnostic criteria provided by DSM-IV-TR. Some of these instruments have been developed specifically for non-Western populations. To name only two examples, the Hopkins symptom checklist-25 (HSCL-25, Mollica, Wyshak, de Marneffe, Khuon, & Lavelle, 1987) and the Harvard trauma questionnaire (HTQ, Mollica et al., 1992) were developed specifically for an Indochinese population of trauma survivors. It should be taken into account, however, that "non-Western" cultures can be expected to be anything but homogenous and therefore diagnostic instruments have to be validated for each ethnic group even when they proved to be reliable and valid in other non-Western populations.

Therefore, one aim of the research program presented here was to determine culture-specific reliability and validity with participants from Chechnya, Afghanistan, and West Africa for the Hopkins symptom check-list-25 (HSCL-25, Mollica et al., 1987), the Harvard trauma questionnaire (HTQ, Mollica et al., 1992), the impact of event scale (IES-R; Weiss and Marmar, 1997), the Bradford somatic inventory (BSI, Mumford et al., 1991), the clinician-administered PTSD Scale (CAPS-1, Blake et al., 1990), and the social adaptation self-evaluation scale (SASS; Bosc, Dubini, & Polin, 1997). These findings, pertaining to the psychometric properties of the diagnostic instruments in each culture, were reported by Renner, Salem, & Ottomeyer, 2006 and are only summarized below.

By contrast, in the present chapter we will focus on the differences found by interviews and by psychometric measures between asylum seekers from Chechnya, Afghanistan, and West Africa. Following the assumption that people from non-Western societies by no means pose a homogenous population, we hypothesized that between the three ethnic groups there would be significant differences with respect to trauma events as well as to posttraumatic symptomatology. Moreover, we expected to find cross-cultural differences with respect to cultural influences contributing to traumatic stress as well as to coping mechanisms resulting from the individuals' cultural background.

The present research also takes into consideration the theoretical view formulated by Eisenbruch (1991) who argued that the conventional diagnosis of PTSD should be replaced by the notion of "cultural bereavement" pointing to the fact that for people stemming from collectivistic societies, the mere separation from their extended families and support groups constitutes a traumatic event conducive to clinical symptoms. Thus, even without a relationship to preceding traumatic events, cultural differences between the three ethnic groups, with respect to their problems in adapting to the host country will be considered.

Most importantly, aiming at an assessment as comprehensive as possible, we employed both quantitative and qualitative methods. By quantitative methods, i.e., psychometric measures, we inquired about a number of given symptoms, while by qualitative methods, i.e., diagnostic interviews, we asked participants to report spontaneously.

METHOD

Participants

One hundred fifty asylum seekers in Austria, 50 from Chechnya, 50 from Afghanistan, and 50 from West Africa participated. The participants' demographic statistics are summarized in Table 1.

The majority of Chechen (96%) and all Afghan participants were Muslims. Two (4%) Chechens were Christians. Fourty-four West Africans, i.e, 88% of them, were Christians, four were Muslims, and one African participant did not belong to a religious community. One West African did not report his religious denomination.

The prevailing part of the West African participants came from Nigeria (N = 37). Three participants came from Cameroon and two from Gambia. There was one participant from Ghana, Guinea, Liberia, and Sierra Leone, respectively. Four West Africans refused to report their countries of origin.

We intended to recruit a sample that should be characteristic of Chechen, Afghan, and West African asylum seekers in Austria. Participants were recruited by personal contacts, partly with the help of authorities and extreme care was taken to exclude selection bias. In order to have a sample typical for the population of asylum seekers, we decided not to follow a suggestion to exclude those with a high degree of

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	Chechnya (N = 50)	Afghanistan (N = 50)	West Africa (N = 50)		
Proportion of women	25 (50%)	11 (22%)	4 (8%)		
Age: Mean (SD)	32.4 (10.7)	32.5 (9.0)	27.5 (7.1)		
Age range (years)	18–63	18–53	18–48		
Proportion married	33 (66%)	34 (68%)	6 (12%)		
Proportion of urban (vs. rural) origin	27 (54%)	31 (62%)	27 (54%)		
Proportion granted asylum	19 (38%)	23 (46%)	2 (4%)		

Table 1. Demographic Statistics of Participants

Westernization. As can be seen from Table 1, approximately half of the participants stemmed from rural regions and it can be expected that the highest degree of Westernization can be found in the cities. With respect to religion, the high proportion of Christians among West Africans does not exclude a high degree of affiliation to traditional African culture. In fact, we found a high incidence of body sensations among them, which are known to be clinical symptoms characteristic for African patients (Renner, Peltzer, Salem, & Ottomeyer, 2007).

Quantitative Methods: Psychometrics

A set of psychometric measures, partly trauma-specific and partly assessing general psychopathology, was employed. These instruments proved to be reliable and valid when used with trauma survivors from non-Western societies but previously had not been examined with respect to their reliability and validity with participants from Chechnya, Afghanistan, and West Africa. We reported the results pertaining to the instruments' psychometric properties in another publication (Renner et al., 2006), and will summarize them below.

Trauma-Specific Measures

The Harvard trauma questionnaire (HTQ) was developed by Mollica et al. (1992). Its first section comprises a list of frequent trauma events that can be supplemented by additional items for a specific culture. The second section asks about the most serious traumatic event including a detailed description of it. Section three pertains to head or brain injuries that might contribute to the clinical symptomatology. The fourth section is the psychometric part of the HTQ assessing posttraumatic symptoms. Items 1-16 are intended to be used universally (e.g., "recurrent thoughts or memories of the most hurtful or terrifying events," "unable to feel emotions," or "less interest in daily activities"). Items 17-30, in the original version of the HTQ, have been formulated specifically for Indochinese participants and thus should be modified when used with other cultures. Therefore, we replaced part of these items according to our previous studies and to literature. In the present chapter, which is aimed at *comparing* the three cultures with respect to symptomatology, only items 1-16 will be considered as they were the same for all three subsamples. The items of the HTQ Sect. 4 have to be answered by "not at all" (1), "a little" (2), "quite a bit" (3), or "extremely" (4).

In the present research, on the basis of internal consistencies (Cronbach's α) we found the HTQ (Item 1–16) to be highly reliable in all three subsamples (Chechens α = 0.91, Afghans α = 0.90, West Africans

 α = 0.87). For all the instruments, convergent validity was assessed¹ employing diagnostic interviews as a criterion on the basis of ROC ("receiver operating characteristic") curves. For the Chechen subsample, by ROC analysis, an area under the curve (AUC) of 0.88 with a 95% confidential limit (CL) of 0.77–0.99 was obtained. For the Afghan subsample, an AUC = 0.85 (CL 0.75–0.96) and for the West African subsample, a rather poor AUC = 0.75 (CL 0.61–0.88) was obtained.

The revised version of the *impact of event scale* (IES-R) was introduced by Weiss and Marmar (1997) (see also Chap. 8 in the present volume). It comprises the subscales, pertaining to intrusion (eight items like "I thought about it when I didn't mean to"), avoidance (eight items like "I tried to remove it from my memory"), and hyperarousal (six items like "I had trouble concentrating"), respectively. In the present sample, however, the subscales were not replicated. The IES-R items are keyed "not at all" (0), "a little bit" (1), "moderately" (2), "quite a bit" (3), and "extremely" (4).

In all three subsamples, reliabilities were satisfactory (Chechen subsample α = 0.93, Afghan subsample α = 0.96, and West African subsample α = 0.91). Convergent validity, as assessed by the AUC, was 0.75 (CL 0.61–0.89) for the Chechen, 0.87 (CL 0.77–0.97) for the Afghan, and 0.81 (CL 0.69–0.93) for the West African subsample. The original factorial structure, however, was not replicated in our sample.

In contrast to the HTQ and the IES-R, which are questionnaires on a self-report basis, the *clinician-administered PTSD scale* (CAPS-1, Blake et al., 1990, 2000) is a structured interview. Basically, the CAPS-1 is designed to assess the diagnostic criteria of PTSD and, as a result, provides a "yes" or "no" diagnosis of traumatization following DSM-IV. This is done on the basis of 17 items that assess the "frequency" and the "intensity" (both ranging from 0 to 4) of each PTSD symptom. A symptom is counted as positive, if a minimum frequency of 1 and a minimum intensity of 2 was reported.

With respect to the convergent validity of DSM-IV criteria of PTSD, our previous study has yielded extremely poor results. In the Chechen subsample, PTSD-criteria yielded 16 (32%), in the Afghan subsample 17 (34%), and in the West African subsample 12 (24%) false-negative diagnoses, which mostly were due to the avoidance and arousal criteria not being completely fulfilled (Renner et al., 2006).

As suggested by Blake et al. (2000), however, the CAPS-1 can also be used as a psychometric instrument by summing up the frequency

¹ An instrument's power to predict the result of the diagnostic interview was assessed for each of the three subsamples by "receiver operating characteristic" (ROC) curves. The larger the "area under the curve" (AUC), the better the instrument's validity. An AUC > 0.90 is interpreted as "excellent" and an AUC > 0.80 as "good" (for details see, Tape, 2005 and Renner et al., 2006).

and intensity ratings without taking the DSM-IV diagnostic criteria into account. When using the "frequency plus intensity" sums for each symptom, the CAPS-1 yielded very good reliabilities (Chechen subsample $\alpha = 0.90$, Afghan subsample $\alpha = 0.91$, West African subsample $\alpha = 0.91$) and outstanding convergent validities were achieved (Chechen subsample AUC = 0.98, CL 0.95–1.01; Afghan subsample AUC = 0.90, CL 0.80–0.99; West African subsample AUC = 0.91, CL 0.83–0.99). These validities, however, could be partly interpreted as a method artifact, because in this case, a structured interview, the CAPS-1, was validated against a diagnostic interview.

Measures Assessing General Psychopathology

The *Hopkins symptom checklist-25* (HSCL-25) was devised for Indochinese respondents by Mollica et al. (1987) as a shortened version of the American form of the Hopkins Symptom Checklist. Thirteen of its items pertain to depressive symptoms (e.g., "crying easily"), ten to symptoms of anxiety (e.g., "feeling fearful"), and two items address somatic symptoms (e.g., "poor appetite"). There are the following response categories: "not at all" (0), "a little" (1), "quite a bit" (2), and "extremely" (3).

In our previously published research, for the HSCL-25 satisfactory reliabilities were found (Chechen subsample α = 0.92, Afghan subsample α = 0.96, West African subsample α = 0.91). While measuring general psychopathology quite well, the HSCL-25 predicted a clinical diagnosis of traumatization only in Afghans (Chechen subsample AUC = 0.78, CL 0.65–0.91; Afghan subsample AUC = 0.82, CL 0.71–0.94; West African subsample AUC = 0.70, CL 0.55–0.84). The original scales were not replicated in the present sample by factor analysis.

Mumford et al. (1991) developed the *Bradford somatic inventory* (BSI) with the goal to assess body-related symptoms primarily in non-Western participants. For women, there are 44 items and for men there are 2 additional ones. Respondents are asked to indicate the frequency of symptoms during the past month ("absent" = 0, "present on less than 15 days during past month" = 1, "present on more than 15 days during past month" = 2). Again, we found excellent reliabilities in all three subsamples (Chechen subsample α = 0.96, Afghan subsample α = 0.95, West African subsample α = 0.97). Just like the HSCL-25, however, the BSI predicted traumatic symptoms in Chechen and West African participants less well than in Afghans (Chechen subsample AUC = 0.75, CL 0.62–0.89; Afghan subsample AUC = 0.82, CL 0.71–0.94; West African subsample AUC = 0.73, CL 0.58–0.87).

The social adaptation self-evaluation scale (SASS, Bosc et al., 1997) yielded extremely poor reliabilities and validities in our previous research and thus was not included in the present study (cf. Renner et al., 2006 for details).

As many Chechens did not learn to read and write their mother tongue at school, for them, all the questionnaires were translated to Russian. The Afghan participants received a Farsi translation, while West Africans responded to the English version of the questionnaires.

Qualitative Methods: Diagnostic Interviews

With the help of interpreters, Chechen participants were interviewed in Russian and Afghan participants in Farsi. Interviews with the West African participants were conducted in English. All participants were informed about the confidential nature of the research and asked to give their informed consent orally. In recognition of their cooperation, participants were paid 20 euros after conducting the interviews and filling in the questionnaires.

The primary application of the diagnostic interviews was using them as the criterion for the convergent validity of the psychometric instruments utilized in this research.

Taking into consideration, that the response to traumatic experience can not only vary in terms of symptoms or syndromes emerging and disturbing the individual concerned but also the fact that the cultural background may contribute to a considerable extent to the quality, severity, and duration of bodily or mental suffering, we decided to choose a second approach to appraise the interviews led with our sample of people from Chechnya, Afghanistan, and West Africa. To gain more insight into cultural factors influencing well-being or the lack of it, we searched the interviews for spontaneous statements that might shed light on the following questions²:

- 1. Which are factors mentioned by the interview partners themselves, preventing, enhancing, or moderating the outbreak of symptoms or supporting health and well-being in their own perception?
- 2. Which are factors mentioned by the interview partners themselves, that are considered strainful, thus onsetting or worsening symptoms and/or preventing well-being?
- 3. Which symptoms from the range of PTSD are stated spontaneously (without looking at a psychometric instrument and thus getting "ideas" about possible symptoms)?
- 4. Which factors are mentioned that can be considered culturespecific symptoms of malaise (posttraumatic symptoms within the broader context of cultural influence) – perceived by the clients in

² In doing so, we were keeping Anthony Marsella's advice about ethnocultural studies and the words of a Bosnian refugee working with him – in mind: "no more MPPQRS (sic MMPI) and that stuff. You want to help me, you want to know what is wrong, listen to my story." (Personal Communication, A. J. Marsella, 17th August, 2004).

the aftermath of traumatic experience and conceived as negative change in comportment or well-being?

5. Which are the traumatic events most frequently mentioned and conceived as particularly agonizing: (a) from a personal point of view (b) from a cultural point of view, and is there a connection between the personal and the cultural point of view?*

In addition, we searched for spontaneous³ statements suggesting that traumatic experience led to positive change in terms of, e.g., increased sense of spirituality, personal growth, or feeling stronger after the crisis (cf., Tedeschi & Calhoun, 1996).

RESULTS

Quantitative Results

In order to find out which measures or single symptoms differentiate the individuals most effectively according to their provenance, discriminant analyses were computed. Aiming at reducing the information obtained to a manageable size, the stepwise procedure, as provided by SPSS 11.5, was employed.

In a first step, the scores of each group obtained on each of the psychometric instruments were entered in the analysis. By the stepwise procedure, the total scores of the HTQ, the BSI, and the CAPS-1 were retained in the analysis, whereas the HSCL-25 and the IES-R scores were excluded. Two discriminant functions were obtained. The first function had an eigenvalue of 0.671 and the second one had an eigenvalue of 0.148. For the first function, the canonical correlation was 0.634 and for the second one 0.359. For function 1, Wilks' Lambda was 0.521 (p < 0.000) and for function 2, it was 0.871 (p < 0.000). The first discriminant function correlated with high scores on the BSI and low ones on the HTQ and the CAPS, i.e., it pertained to somatization. The second function correlated with high scores on the HTQ, the BSI, and the CAPS-1. Function 1 discriminated West Africans (low values) from Chechens (high values), function 2 Afghans (low values) from Chechens (high values), but altogether only 62.0% of cases were classified correctly.

Therefore, we decided to compute further analyses on the item level. Those 76 variables that differentiated on the 1%-level among the groups were entered into the analysis. By the stepwise procedure, 15 variables were extracted, the descriptive statistics of which are shown in Table 2.

^{*} We thank an anonymous reviewer for these suggestions.

³ Our psychotherapeutic experience with asylum seekers kept us from directly addressing the possibility of positive change as a consequence of traumatic experience, as some people tend to misunderstand such questions as cynical.

	Chechnya		Chechnya		Afgha	nistan	West A	Africa
	М	s	М	S	М	s		
Blaming yourself	0.62	0.92	0.36	0.80	1.08	1.19		
Faintness	1.28	0.83	1.06	1.06	0.66	0.98		
Trapped	0.94	0.77	0.54	1.01	1.16	1.17		
Jumpy	1.94	0.89	1.52	0.79	1.46	0.76		
On guard	2.38	0.97	1.16	0.55	1.72	0.95		
Avoiding activities	2.22	0.97	1.26	0.53	2.58	1.36		
Numb	1.74	1.19	0.40	0.83	0.88	1.24		
Trouble concentrating	0.96	1.21	1.40	1.18	0.82	1.34		
Watchful	1.86	1.14	0.38	0.92	0.90	1.23		
Feeling tired	1.00	0.64	0.80	0.57	0.46	0.61		
Sick in the stomach	0.80	0.70	0.12	0.39	0.16	0.47		
Heart felt weak	1.08	0.67	0.28	0.61	0.10	0.36		
Avoidance of thoughts or feeling $(F + I)^{b}$	3.38	1.77	1.40	1.71	4.16	2.76		
Detachment $(F + I)^{b}$	0.52	1.09	0.78	1.42	2.12	2.64		
Restricted range of affect $(F + I)^{b}$	0.94	1.63	0.42	1.14	2.30	2.74		

 Table 2. Descriptive Statistics of the Test Items Discriminating among the

 Three Ethnic Groups

 ${}^{\mathrm{b}}F + I =$ Frequency plus Intensity (CAPS).

The eigenvalues of the two discriminant functions were 2.211 and 1.730, explaining 56.1% and 43.9% of the variance, respectively. For function 1, the canonical correlation was 0.830, and for function 2 it was 0.796. For function 1 through 2, Wilk's Lambda was 0.114 (p < 0.000), and for function 2, it was 0.366 (p < 0.000).

The canonical discriminant function coefficients are shown in Table 3. As can be seen from Table 3, function 1 is characterized by somatic complaints like being "sick in the stomach" or feeling weakness in the heart as well as by the conception of "feeling on guard" and "watchful," whereas cognitive symptoms ("trouble concentrating") tend to be absent. Function 2, on the other hand, pertains to symptoms of avoidance, of feeling trapped and of a restricted range of affect, while feelings of tiredness and faintness tend to be absent.

Figure 1 shows the values of the canonical discriminant functions for each subject as well as the group centroids for participants from Chechnya, Afghanistan, and West Africa.

From Fig. 1, it can be seen that, by the two discriminant functions, the three ethnic groups can be differentiated quite well. Discriminant function

	Function 1	Function 2
Blaming yourself (HSCL-25, Item 3)	-0.18	0.29
Faintness (HSCL-25, Item 6)	0.19	-0.49
Trapped (HSCL-25, Item 17)	0.09	0.43
Jumpy (HTQ, Item 6)	-0.12	-0.54
On guard (HTQ, Item 9)	0.53	0.46
Avoiding activities (HTQ, Item 11)	-0.04	0.44
Numb (IES-R, Item 13)	0.29	0.02
Trouble concentrating (IES-R, Item 18)	-0.49	-0.36
Watchful (IES-R, Item 21)	0.32	0.05
Feeling tired (BSI, Item 27)	-0.06	-0.80
Sick in the stomach (BSI, Item 29)	1.12	0.01
Heart felt week (BSI, Item 42)	0.98	0.06
Avoidance of thoughts or feeling $(F + I^{a})$ (CAPS-1, Item 6)	-0.04	0.22
Detachment $(F + I)$ (CAPS-1, Item 10)	-0.23	0.07
Restricted range of affect (F + I) (CAPS-1, Item 11)	-0.07	0.24
Constant	-1.25	-1.04

Table 3. Canonical Discriminant Function Coefficients (Quantitative Data)

 ${}^{\mathrm{a}}F + I =$ Frequency plus Intensity.

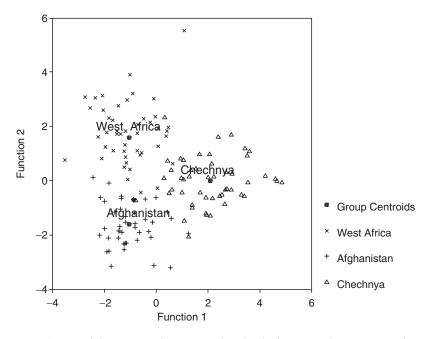


Figure 1. Canonical discriminant functions with individual scores and group centroids (quantitative data)

1 separates the Afghan and West African from the Chechen subsample, while function 2 separates the Afghan subsample from the West African one. Table 4 gives the classification results. Altogether, 92% of the cases were classified correctly.

Qualitative Results

As reported in detail by Renner et al. (2006), in the course of the diagnostic interviews, in the Chechen subsample there were 31 (62%), in the Afghan subsample there were 22 (44%), and in the West African subsample there were 24 (48%) participants showing symptoms of posttraumatic stress. The groups do not differ significantly with respect to the proportion of participants showing symptoms of traumatic stress.

Shown in Tables 5–9 are the topics, the frequencies of spontaneous remarks counted in this domain, and the statistical significance of the difference between the ethnic groups as determined by χ^2 -tests (highest number of counts printed in italics).

(1) Factors that can prevent, enhance, or moderate the outbreak of symptoms or support health and well-being (factors considered helpful in coping with trauma): We derived 23 topics that alluded to factors focusing on this domain and are shown in Table 5.

After having fled war, violence, and unstable political situations at home, the participants emphasized the positive effect of living in a safe country, without having to fear for their lives. A Chechen appreciating this safety said "When we first came here, my kids crept under the table at the slightest sound of a sirene or at any bang and even the popping of a cork would send them flying off under the next piece of furniture. This weekend there was a display of fireworks in town and we all went to watch – you don't know what it means to us to feel safe." In fact, nearly all participants gave tribute to the safe surroundings in respect to an amelioration in their existential orientation: "The first impression that really changed my life was when I realized – I am in a land where people recognize the rights of another one."

	Predicted Group Membership			
Actual Group Membership	Chechnya	Afghanistan	West Africa	Total
Chechnya	47 (94%)	1 (2%)	2 (4%)	50
Afghanistan	1 (2%)	48 (96%)	1 (2%)	50
West Africa	1 (2%)	6 (12%)	43 (86%)	50

Table 4. Classification Results (Quantitative Data)

Factors Considered Helpful	Chechnya	Afghanistan	West Africa
Feeling safe in Austria ($p < 0.01$)	49	42	27
Relief by asylum being granted ($p < 0.01$)	38	40	17
Socializing/meeting with people ($p < 0.01$)	38	12	13
Language course ($p < 0.01$)	32	11	5
Concentrating on the children ($p < 0.01$)	30	13	5
A flat of one's own ($p < 0.01$)	26	11	3
Vocational training or schooling(own or children's) ($p < 0.01$)	22	9	3
Family reunion ($p < 0.01$)	3	20	1
Keeping in touch with family at home ($p < 0.01$)	19	14	4
Integration in Austria ($p < 0.01$)	15	17	3
Hobby (read, listen to music, tinker, cook) ($p < 0.01$) 12	4	1
Religion (<i>p</i> < 0.01)	2	1	11
Any kind of exercise (e.g., sports, taking walks) $(p < 0.01)$	3	10	0
No news from home ($p < 0.01$)	2	9	0
Smoking ($p < 0.01$)	2	1	4
Grouptherapy (women) ($p < 0.05$)	4	0	0
Illegal drugs or alcohol ($p < 0.05$)	0	0	3
Work permit (n.s.)	19	30	22
Forgetting about the past (n.s.)	3	7	5
Support given by Austrians (n.s.)	5	0	4
Information on Austrian culture (n.s.)	4	2	1
Peace in my home country (n.s.)	4	3	2
Thoughts of revenge (n.s.)	2	0	1

Table 5. Factors Considered Helpful in Coping with Trauma

Being granted or having been granted asylum was a major issue as well – West Africans, primarily single men – bearing the time they had to wait with more patience than the Afghans and Chechens, who also had their families to look after and felt responsible for the decision to have left home: "I was so relieved, we could stay – I don't want to think what would have happened if we had to leave right when the children were just starting to settle in a bit." Chechens emphasized the importance of learning the language more than Afghans, who mostly had already some basic knowledge of German, or West Africans, who found it quite easy to communicate in English.

Meeting with other members of the own ethnic group seemed especially important to Chechens: exchanging experiences, having a chat in

their mother tongue, or just socializing made them feel less homesick, lonely, and left out. They also stressed the positive effect of concentrating on their children the most: "When I take care of the kids, I forget where I am, what happened to me and what may still lie ahead – I'm just happy to be able to be with them and take care of them," said a young Chechen woman who had lost her husband and parents in the war. The hopes for an improvement of well-being or given reasons for the amelioration were mostly connected to family issues as far as Afghans and Chechens were concerned. A flat of their own, schooling for the children, intergration in Austria, or family reunion – once asylum would be granted – seemed of major importance to those two ethnic groups. Hope was also kept up by keeping in touch with family and friends back home: "The only time I can forget about my ordeal and my problems is when I talk to my daughter on the phone," said a Chechen woman who had fled her war-torn country with four of her children, having had to leave her eldest daughter behind because she lived in another part of the country and had been unable to join with her family.

Some West Africans found relief in religion ("God will make it well for me," "I know one day God can make things better for me," "We have prayer partners and discuss matters, we go to the same church, so we are like brothers here") – sometimes regardless of their religious denomination "My father is a Moslem, while my mother is a Christian – so I pray in a Moslem line every morning and every Sunday I go to church," and they felt better by taking walks and trying not to hear any news from home that might strain them.

The importance of being allowed to work was stressed by all three ethnic groups concerned and especially the men seemed eager to care for their families ("I would feel like a different person, if I could work and upkeep my family," "If I got a job, I would feel like a man again"), as well as to get away from the inactive part they played at home (this accounted for Afghans and Chechens) or they thought that being allowed to work might help to ensure their personal well-being: "I would even work without money, just to pay for what they feed me, it's not good to stay idle, it makes a man unhappy and starts you thinking about the past," "You know I like to work, to busy myself, in Africa I didn't stay at home a single day of my life, I got up and went to work. Here I am idle and sitting, if I could find something to do, I would feel better," "We get up and eat, then we sit, then we eat again and then we sit again – to work means to be alive to me, to sit is like an old person, ready to die," was the way some West Africans emphasized this topic.

(2) Factors that are considered strainful – thus onsetting or worsening symptoms, preventing well-being, or both: We derived 24 topics that alluded to factors focusing on this domain, which are shown in Table 6. As can be seen in Table 6, a multiple variety of things considered as strain-

Factors Considered Strainful	Chechnya	Afghanistan	West Africa
Worrying about relatives and friends back home $(p < 0.01)$	16	32	6
No occupation ($p < 0.01$)	2	17	19
Conversations about home country ($p < 0.01$)	4	18	0
Getting news from home ($p < 0.01$)	7	16	2
Fear of deportation ($p < 0.01$)	3	13	4
Feeling lonely ($p < 0.01$)	3	3	12
Worrying about perspectives for the future $(p < 0.05)$	12	22	9
Waiting for asylum ($p < 0.05$)	9	21	17
Feeling of guilt because someone was hurt/ killed ($p < 0.05$)	1	6	1
Death of a relative during absence ($p < 0.05$)	0	6	2
Feel badly treated by Austrians ($p < 0.05$)	4	0	6
Fearing own aggressiveness ($p < 0.05$)	0	4	0
Hurt pride, feeling as a suppliant ($p < 0.05$)	3	0	0
Communication problems (language) (n.s.)	10	5	3
Feeling homesick (n.s.)	7	4	6
Lack of understanding for sufferings at home (n.s.)	3	3	6
Children annoying me (n.s.)	5	3	0
Worrying about integration (n.s.)	5	0	2
Mistrust of fellowmen (n.s.)	5	2	2
Unfamiliar food (n.s.)	1	0	4
No possibility to visit some relative's grave (n.s.)	3	3	0
Fearing vendetta (n.s.)	2	3	0
Feeling of shame for being raped (n.s.)	2	2	0
Restricted freedom of movement (n.s.)	1	2	1

Table 6. Factors Considered Unhelpful and Strainful

ful and upsetting were mentioned by the participants. The factors leading to discomfort and unease though had varying impact on people of different ethnic background – in quality of perception as well as in reported frequencies.

Far more Afghans than Chechens were worried about their relatives back home, sometimes to the extent of fearing phone calls from home and constantly listening to news programs in order to be informed about possible incidents in the vicinity of their neighborhood at home. The aggrieving impact of conversations about their home country as well as the emotional effect of (mostly bad) news from home was a further

stumbling block in respect to aspired recovery and well-being especially for Afghans. West Africans seldom had the opportunity to contact their relatives and many had adopted an "out of sight – out of mind" attitude for the sake of their own peace of mind. A woman from Cameroon said that she believed God would watch over her loved ones and a man from Nigeria said that he was busy taking care of himself and "hoped and prayed his family would do the same." Afghan and Chechen women often said that conversations reminded them of trivial things like vegetables only available at home or customs they missed.

Some Afghans did feel homesick, but as the major part of them are living in Austria with their families, this complaint came from unmarried men or from those having left their entire family back home.

Waiting for the official notification in the course of the application and the fear of not being granted asylum with the potential of a pending deportation was a great threat to many participants and made them feel helpless and depressed. Especially, Afghans sometimes had been waiting for many months and were sick and tired of the uncertainty. Some participants reported a higher level of aggression in everyday life and said that they feared losing their temper and felt ashamed when this happened.

Of course, communication problems due to lack of language skills were sometimes mentioned but mostly by Chechens who only recently had arrived in Austria. Another very common complaint was the lack of occupation due to the fact that asylum seekers are denied a work permit and even after having been granted asylum, chances of finding a job stay slim. Especially, West Africans felt bad about having no occupation and not at all astoundingly mostly men felt negatively affected since women were well occupied with their daily chores of cooking, cleaning, taking care of the children, and trying to appease their husbands. West Africans stated that "it's difficult living without something to do," that "I'm not used to sit around idle," or that "an idle man is an evil man." The lack of occupation probably also accounts for some of the other statements about strainful factors in life like feeling annoyed with the children and obviously the reported higher level of aggression also roots in the enforced idleness.

Some participants – mostly Afghans – talked about their feelings of guilt because someone had been hurt or killed through their fault. Some had participated actively in the war, some felt they had not sufficiently protected relatives or friends, and one woman felt guilty because her younger sister had been killed during a visit to her house. Although quite a few Chechens talked about their participation in the fighting, they seemed rather proud of their commitment than expressing regret or guilt.

The negative impact of being restricted in moving around (e.g., because accommodations were situated in remote areas or by lack of financial means to travel) was mentioned, mainly because this reduced the possibilities of meeting with peers, visiting friends, and keeping in touch with the ethnic community within the surroundings.

Missing perspectives for their future life in Austria (their own or their children's) was a point brought up by all ethnic groups.

Judged by the frequencies of complaints and worries, the Afghans were the most strained and discomforted of the three ethnic groups involved.

(3) Symptoms stated spontaneously, as far as they are assignable to PTSD: Table 7 shows the symptoms assignable to some of the PTSD diagnostic criteria and mentioned spontaneously by the participants in the course of the interview. The interviews took place prior to the administration of the psychometric instruments and thus we avoided to bias the participants by giving them "ideas" on possible symptoms.

The symptoms most often mentioned in all three ethnic groups were sleep disturbances and nightmares, although West Africans seemed less affected than Afghans and Chechens. The Chechens were more irritable and seemed tense and rather thin skinned, whereas the Afghans were more disturbed by an overall depressed mood, perpetual thoughts about the bad experiences they had made, or the situation of war back home and came across as anxious and uneasy. Even the difference in tone was

Symptoms	Chechnya	Afghanistan	West Africa
Nervousness/jumpiness ($p < 0.01$)	22	20	6
Irritable / exitable ($p < 0.01$)	17	6	2
Alert/watchful ($p < 0.01$)	11	1	2
Sleep disturbance ($p < 0.05$)	26	20	13
Loss of interest/missing vitality ($p < 0.05$)	12	9	2
Thin-skinned/tetchy ($p < 0.05$)	6	3	0
Nightmares (n.s.)	19	24	15
Perpetual thoughts about war/trauma experience (n.s.)	10	18	12
Fearfulness (n.s.)	9	10	6
Problems concentrating (n.s.)	9	7	2
Restlessness/unease (n.s.)	5	8	2
Avoiding places, activities, or people (n.s.)	7	4	1
Withdrawal from family/friends (n.s.)	2	5	4
Flashbacks (n.s.)	2	6	1
Forgetfulness (n.s.)	4	5	0

 Table 7. Spontaneously Stated Symptoms (Assignable to Diagnostic Criteria of PTSD)

remarkable: Chechens spoke out loudly and with quite a fair amount of emotion while Afghans were soft-spoken and gentle. What they had in common was considering withdrawal from other people as breach of manners. A Chechen woman said she felt ashamed because she could not stand the company of other people and preferred to stay home and a man from Afghanistan said he perceived himself as chicken-hearted because "only a coward would avoid social contacts."

West Africans reported fewer symptoms than the two other groups and also seemed to be more robust and stable.

(4) Factors that can be considered as culture-specific reaction after traumatic experience: Interestingly, a number of symptoms were mentioned only by West African participants. Although we scanned the interviews closely for similar statements by Afghans or Chechens, we did not find comparable remarks about emotions or sensations in the other groups. We will report details about body sensations characteristic for West African people in a forthcoming publication (Renner et al., 2007).

The characteristic symptoms reported spontaneously by African participants were "thinking too much" (six times), "occupied brain, brain not working" (three times), "thinking you go crazy" (twice), "blood is running" (two times), and "heart flies off" (once).

The remaining somatic symptoms as well as the signs of depression expressed by the participants and considered culture-specific are shown in Table 8.

Heart troubles were mentioned mainly by Chechens and conceived as life threatening by some ("When my heart starts to burn and sting, I have the impression I am going to die any minute"), whereas others formulated their physical strain in a double sense: "My heart is one single sore spot" or "It's a scortching feeling inside my chest, as if my heart was on fire." Asked if they actually meant a broken heart rather than physical pain, a man from Chechnya said that he meant both his grief and sorrow and his real pains. Headaches too were primarily reported by Chechens but the amount of suffering varied greatly, ranging from "unbearable constant pain" to "throbbing in the head" or "headaches, when I think of home."

Astoundingly Chechens did not refer to hopelessness at all. These remarks nearly always came from Afghans, some of whom had been granted asylum and still felt depressed and hopeless. A middle-aged Afghan man said "One always says – hope dies last – for me it's different, I'm safe, I'm alive but I still have no hope left, hope just died and it never came back."

Specific somatic symptoms like pins and needles, a feeling of pressure on the chest or in the head or sensing a lump in the throat were expressed mainly by Chechens – whereupon it is worth mentioning that the major part of those who talked about such symptoms said that these feelings were restricted to one side of the body (mostly the left side).

Symptoms	Chechnya	Afghanistan	West Africa
Heart troubles (pain, pangs, scorching feeling) $(p < 0.01)$	10	1	2
Headaches ($p < 0.01$)	17	3	4
Hopelessness ($p < 0.01$)	0	11	3
Want of confidence in other people ($p < 0.01$)	8	1	1
Sexual disorder ($p < 0.01$)	6	0	0
Feeling of pression (chest, head) ($p < 0.01$)	6	0	0
Pins and needles (hands, arms, legs) ($p < 0.01$)	5	0	0
Feeling depressed or sad (n.s.)	8	8	3
Aggressiveness (n.s.)	9	2	0
General pains (n.s.)	3	6	4
Trembling hands (body) (n.s.)	4	5	1
Shortness of breath (n.s.)	3	2	1
Physical weakness (n.s.)	3	1	1
Feeling of heat/congestions (n.s.)	2	1	2
Lack of appetite (n.s.)	1	3	0
Grinding one's teeth (n.s.)	2	1	0
Dizziness (n.s.)	2	1	0
Stomach ache (n.s.)	1	1	0
Lump in your throat (n.s.)	2	0	0
Feeling cold (n.s.)	0	1	0
Symptoms characteristic for Africa (see text)	0	0	14

Table 8. Culture-Specific Symptoms

Afghans were more impaired by general pain (also very often limited to the right or left side of the body) or an overall sad mood, although also some of the Chechen men felt depressed by their situation – especially in regard to their inability to take better care of their families. Afghan and Chechen women were more distressed by homesickness, loneliness, and the separation from their friends, families, and homes.

Aggressive comportment was sometimes described in a very vivid way: "I often feel explosive and can only calm myself down by breaking something apart," "Sometimes I have this irrepressable anger, I have to get up and leave every time it happens," and "I'm quarrelsome and aggressive, one wrong sentence and I'm up in arms" were some of the depictions given by Chechens. They did not seem to feel uncomfortable about their behavior though, some even said that a Chechen had to fortify his emotions by a dash of aggression.

The West African participants were inconspicuous in respect to most symptoms but mentioned culture-specific problems like "thinking too much," not only on their own behalf but also when describing the condition of relatives back home. A West African who seemed very worried about his mother said that he had the impression she was "thinking too much" and that this had made her fall ill.

(5) Which are the traumatic events most frequently mentioned and conceived as particularly agonizing from a personal or a cultural point of view and does culture influence the person's perception of severity? Listed in Table 9 are the traumatic events most frequently mentioned by the participants. As could be expected, the loss of a close relative (sometimes even the loss of several relatives or of the entire family) was named by the participants as the most harassing experience in their lives. The stories told were sometimes heartbreaking – even to listen to. Chechen women had often lost their husbands, brothers, or fathers and the circumstances frequently had similarities. Many men had been abducted or arrested and were found dead in the streets shortly after. In some cases, the body had even been deposited in front of the family's doorstep. Shelling or shooting had taken its toll and many participants had lost their relatives in warfare. The issue of abduction did not turn up in the two other groups. Afghans had mostly lost their relatives in warfare or by those persons being involved in fights themselves. One man had lost his four brothers on a single day, his father dying of a heart attack at the breaking of this news. The majority of West Africans reported losing their family members in riots, armed assaults, or tribal fights.

Very often, i.e., in 81 cases (54%), the participants associated the traumatic events with political reasons. Chechens and Afghans had a lot in common in this respect – the former bond with Russia had evoked troublesome events under subsequent political changes in the leaderships. Having studied or worked in Moscow or having relatives living in Russia had led to surveillance, arrest, abduction, torture, rape, or even murder in both Afghanistan and Chechnya. Fights between opposed groups and political

Events	Chechnya	Afghanistan	West Africa
Loss of close relative (n.s.)	28	28	20
Events related to political reasons (n.s.)	26	26	29
Events related to religious or gender-specific reasons ($p < 0.01$)	21	33	19
Loss of remote kin ($p < 0.05$)	13	11	4
Relatives missing (e.g. abducted, arrested) (n.s.)	3	6	4
Forced or in danger of being forced to enter combat (n.s.)	2	5	2

Table 9. Trauma Events

parties and being with the wrong side proved to be life threatening for many participants. West Africans also assigned many of the traumatic events to political situations in their respective home countries. A common reason was the animosities between rivaling political parties. Fights over oil and destruction of property by the oil companies in the Niger delta and political involvement in those fights led to riots and arrests. The support of oppositional groups or pressure to join a certain political party often led to terrible acts of revenge like, e.g., setting houses on fire or killing friends or relatives. His brother's involvement in a coup led to pressure, arrest, and torture of a man from Gambia and another man's father was jailed and his brother stabbed in court for involving actively in politics. Fights between French- and English-speaking groups in Cameroon were named as cause in some cases and the Biafran freedom movement was quoted in others.

Although the reported traumatic events did not differ from sufferings and hardship found in other studies, it was remarkable to find out that many participants were more tormented by the lack of knowledge and interest in this part of their story that they had often experienced with authorities or other dialog partners than by the traumatic event itself. Many spent time and effort in the interview to emphasize their political affiliation and some even perceived the traumatic experience as a consequence worth while bearing.

Religious or gender-specific reasons for the participants' ordeal were also brought up frequently. Afghan women were affected mainly by the Taliban regime and a bashed nose or broken arm were considered terrible - but nothing in comparison to losing a child because of not being allowed to see a doctor or being confined to the house for months. An Afghan woman said she still felt happy every time she left the house on her own, even if it was just to shop around the corner and many participants were overwhelmed with grief about the situation of female relatives and friends back home. Two women reported about their ordeal after refusing a proposed marriage – in one case, the woman already had been married and her husband was nearly beaten to death when he declined the proposal to divorce her (they already had three children at that time), the other did not want to get married to a Taliban fighter – 30 years older than her and well known for his aggressive and violent nature. Her father was attacked and beaten and her whole family got under pressure in the weeks that followed. A Chechen was nearly killed by a family who did not want him to court their daughter and an Afghan man was shot in the leg because he was made responsible for women singing and dancing (segregated from the men of course) at a wedding ceremony.

Chechen women felt less discriminated by their gender, although those who reported rape or sexual abuse of course suffered seriously – especially because additionally they were so terribly frightened someone could find out about it – but they were stricken by the way they had been treated by

Russian troops on one side and Chechen rebels on the other. A Chechen woman (who was raped as "ransom" after her child had been abducted) said that it was all the worse because it had been Chechens.

Religious reasons were also mentioned – such as being Sunni or Shii Muslim or of Christian or Muslim faith. West Africans told hair-raising stories of ritual killings or being pressed to take the father's place who "worshipped the gods" or was "head of an oracle." This domain as well turned out to be very strainful for some of the participants – to be persecuted and find your life endangered because, e.g., you refuse to "steal" baby boys for ritual killings from a delivery ward is beyond comprehension to most of us. One participant's wife had been murdered because she had misused pages of the Koran to clear up some mess on the floor – being illiterate she had just grabbed the next book available because her parents-in-law were at the doorstep and she was afraid to be considered untidy. A neighbor saw the dirty pages in the rubbish bin and she was shot a few hours later.

The loss of a remote kin seemed to aggrieve people from collectivistic, non-Western cultures very much. Especially Chechens were sometimes heartstricken by the loss of quite remote relatives if these persons belonged to the same clan.

Although the abduction of persons is said to be typical for Chechnya, only few Chechens had relatives missing - many though told us that they either had been abducted themselves and gone free after a ransom had been paid or that the person in question had been found dead. The ones concerned missing by relatives were a woman whose husband had been arrested and never came back but whose body had not been found either although she was forced to pay ransom, another woman who had been raped (while five months pregnant) and whose husband and brother had been abducted by the rebels because they wanted to keep them from harming her, and a man whose wife had vanished while she was shopping. He never found out what happened to her and fled the country with his four children shortly after. Afghans had often "lost" their relatives on their flight although they also told stories of relatives who never came back home. West Africans reported that their relatives had "fled in another direction and never been seen again" or that they had gone to some political demonstration and vanished from there. The West Africans and Afghans still seemed to be hopeful that their relatives were still alive, whereas the Chechens did not believe that there was any chance of their missing family members being safe somewhere.

Only a couple of participants mentioned that they had been forced to enter combat or that this request had been made to them and we got the overall impression that combat was something others took part in and that they felt awkward talking about it.

Statements suggesting that traumatic experience had led to positive change in terms of, e.g., an increased sense of spirituality, personal growth, or feeling stronger after the crisis were not made by any of the participants. In order to summarize the qualitative data in a clearly arranged way, we computed a discriminant analysis. We coded each symptom, coping strategy, etc., as stated in Tables 5–9, by "1" when it was present and by "0" when it was absent in a single case. Only those 32 variables, whose group means differed on the 1% level of significance, were entered into the analysis. Subsequently, we entered these dichotomous data as independents into a discriminant analysis, while country of origin was the dependent variable. Although some statisticians advocate that independent variable. Although some statisticians advocate that independent variables in discriminant analysis should be interval scaled, others concede that conclusions drawn from discriminant analysis are not affected by the use of dichotomous variables (Garson, 2005). Klecka (1980) pointed out that in this discriminant analysis the violation of assumptions "was not very harmful" (p. 62), as long as a high number of cases were classified correctly.

The eigenvalues of the discriminant functions were 1.693 and 1.472 and explained 53.5% and 46.5% of the variance, respectively. The canonical correlation of function 1 was 0.793, while for function 2 it was 0.772. For function 1 through 2, Wilk's lambda was 0.105 (p < 0.000), while for function 2 it was 0.405 (p < 0.000).

Table 10 gives the canonical discriminant function coefficients. As can be seen from Table 10, function 1 stresses feelings of tension or pressure in

	Function 1	Function 2
Relief by asylum being granted ^a	0.04	1.16
Socializing/meeting with people ^a	1.03	0.14
Language course ^a	1.19	0.20
Vocational training or schooling (own or children's) ^a	-0.34	1.00
Family reunion ^a	-1.38	0.98
Keeping in touch with family at home ^a	1.23	0.01
Religion ^a	0.20	-1.47
Any kind of exercise ^a	-1.10	1.09
Worrying about relatives and friends back home ^b	-0.67	0.91
No occupation ^b	-0.80	-1.00
Conversations about home country ^b	-0.75	1.45
Irritable/excitable ^c	1.62	0.49
Feeling of pression (chest, head) ^d	1.99	0.23
Events related to religious or gender specific reasons ^e	-0.62	0.45

Table 10. Canonical Discriminant Function Coefficients (Qualitative Data)

^aFactors considered helpful in coping with trauma.

^bFactors considered unhelpful and strainful.

°Spontaneously stated symptoms (assignable to PTSD).

^dCulture-specific symptoms.

eTrauma events.

the body going along with being easily irritated, while meeting people, learning German, and getting in contact with one's relatives left back home are considered helpful; as far as function 1 is concerned, there is little concern for reuniting the family or finding an occupation. Conversations about one's home country are not considered strainful. As can be seen from Fig. 2, function 1 differentiates people of Chechnya from those of Afghanistan, with the former achieving higher values on the function and the latter lower ones. Function 2 is characterized by a preoccupation with vocational training, family reunion, physical exercise, conversations about one's home country, and expecting relief from being granted asylum, while having no occupation and religious issues are considered less important. As Fig. 2 shows, Afghan and Chechnyan people achieved high values on this function, while West African participants achieved low ones.

Overall, 87.3% of the individuals were classified correctly by the discriminant functions. The details of the classification results can be seen from Table 11.

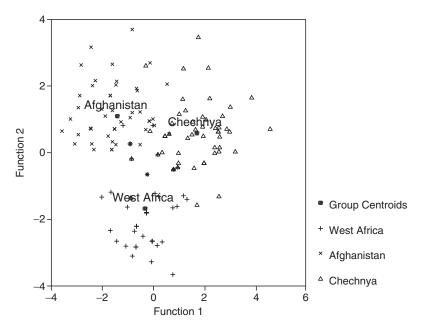


Figure 2. Canonical discriminant functions with individual scores and group centroids (qualitative data)

	Predicted Group Membership			
Actual Group Membership	Chechnya	Afghanistan	West Africa	Total
Chechnya	45 (90%)	3 (6%)	2 (4%)	50
Afghanistan	3 (6%)	45 (90%)	2 (4%)	50
West Africa	3 (6%)	6 (12%)	41 (82%)	50

Table 11. Classification Results (Qualitative Data)

DISCUSSION

We have shown that people from Chechnya, Afghanistan, and West Africa can be differentiated successfully with respect to posttraumatic symptomatology and to moderating factors as well as to coping mechanisms. By quantitative and qualitative methods, we found that all these factors, being to a considerable extent the result of cultural influences, vary systematically between the three cultures.

The quantitative results of the discriminant analysis converge with our experience in psychotherapy, according to which Chechens often suffer from feelings of suspiciousness, fearing conspiracy against them, especially by their own compatriots, thus fostering feelings of helplessness, which in turn promote somatic symptoms like feeling "sick in the stomach." It should be noted that male Chechens have been socialized in a belligerent culture, where showing emotions would be considered cowardly and effeminate. Thus, negative feelings are not shown openly, but find their somatic expression in symptoms of the digestive system. Afghan and West African people, on the other hand, tend to express their feelings of depression and anxiety without reservation.

With respect to the second discriminant function derived from the quantitative results, it is quite clear that people from Afghanistan, as opposed to West Africans, show less avoidant behavior, but tend to complain about faintness and tiredness as well as of feeling "jumpy." We have shown previously (Renner et al., 2006) that people from Muslim societies tend to show far less avoidant behavior than Westerners. This can be explained by the fact that, according to their religion, Muslims attribute all their life events to the will of Allah. Thus, taking for granted that their lives are predetermined, Muslims only rarely try to change their fate by avoiding activities, places, or thoughts. In this respect they also differ grossly from West Africans, who, in our sample, were almost exclusively Christians and who reported distinct symptoms of avoidance. This is consistent with the fact that Christianity emphasizes the importance of free will.

With respect to the first discriminant functions derived from the qualitative findings, the results again are in line with our therapeutic experience: Chechens described themselves as being easily irritated and as finding contacts to their extended families, left back home, important and helpful. According to their socialization emphasizing toughness and self-assertion – and vendetta rather than feeling depressed – in contrast to Afghans, Chechens less frequently describe it as strainful to think about their home country and about their relatives and friends left back home. Under living conditions of asylum seekers and refugees, with an extremely restricted freedom of action, the high level of assertion, and sometimes aggression, of course goes along with feelings of pression in the body. Chechens are well known to place a high value on learning their host country's language, to socialize with others, and to keep in touch with their relatives left back home by frequent telephone conversations. As most Chechens live in Austria together with their nuclear families, not surprisingly, they normally are not concerned with issues of family reunion. In these respects, Chechens differ markedly from Afghans, who tend to behave in a more introverted and cautious way and who are characterized by a typical Asian type of modesty and courtesy.

With respect to the second discriminant function derived from the qualitative data, which discriminates Afghans and Chechens on the one hand, and West Africans on the other, again in accordance with our everyday experience, we have found that West Africans place a very high value on Christian religiosity as a coping mechanism, while they find it extremely strainful to be without an occupation and to be forced to stay idle. As compared to Afghans and Chechens, West Africans reported a lower degree of stress when talking about their home countries, and, mostly being single, they were less concerned about their children's or relatives' vocational training or schooling. They also reported to be less irritable than participants from Afghanistan and Chechnya, which may reflect the easygoing nature resulting from the African kind of socialization, even after the experience of traumatic stress and in the light of an extremely insecure future. The finding that West Africans typically do not expect relief from being granted asylum may result from the regrettable fact that they are granted asylum by the Austrian authorities only in extremely rare cases (Department of the Interior, 2004).

The differential findings characterizing the three ethnic groups converge with each other and are consistent with our therapeutic experience. Still, as we did not start from hypotheses derived from theory, the present research is exploratory by nature and replication studies are encouraged before the detailed findings can be generalized. As we outlined above, a sample as representative as possible for asylum seekers and refugees from Chechnya, Afghanistan, and West Africa in Austria was selected. Still, the composition of refugee populations may vary systematically between one country and another. Thus, replication studies with Chechens, Afghans, and West Africans who have fled to other parts of the world would be of special interest.

In spite of these caveats with respect to generalizing the specific findings reported, far more importantly, we found that posttraumatic symptomatology varies grossly between the three ethnic groups considered. There is no such thing as a cross-culturally valid posttraumatic syndrome. Not only are Western categories like the diagnostic criteria of DSM-IV-TR insufficient in non-Western parts of the world, not surprisingly, among non-Western people, tremendous differences must be taken into account with respect to symptomatology, but also concerning possible coping mechanisms and moderating factors that are based on culture-specific factors.

Thus, for people from non-Western cultures, there is an urgent need for culture-specific diagnostic instruments. Renner et al. (2006) have shown that psychometric instruments can be selected successfully on the basis of their culture-specific reliability and validity and, in accordance with the findings presented here, they have found that different instruments are valid in different cultures. Another option worth considering is developing new psychometric instruments for specific populations. (Renner et al. (2007) described a step toward this goal on the basis of body sensations reported by West African refugees and asylum seekers.)

Qualitative methods, if implemented correctly, are less biased by the preconceptions of Western medicine and clinical psychology than psychometric instruments are. By the use of open questions there is space for spontaneous reports about culture-specific symptoms not known before by the interviewer. Still, in order to understand and evaluate the symptoms reported adequately, also in the case of qualitative methods, a sound knowledge of culture-specific symptomatology is important.

Having culture-sensitive, reliable, and valid diagnostic instruments at hand is of extreme importance, because otherwise, e.g., by applying the diagnostic criteria of PTSD to non-Western patients, the frequency of cases of traumatization would be grossly underestimated. The sequelae are manifold. One consequence may be that therapeutic interventions are erroneously denied to patients who do not fulfill diagnostic criteria. Even worse, in some countries, the presence of posttraumatic symptomatology can positively influence the decision of being granted asylum. Thus, if posttraumatic symptomatology is underdiagnosed, in the worst case, this may lead to asylum being denied to a trauma survivor on the basis of the false diagnosis, with deportation resulting. In the light of these dire circumstances, we explicitly recommend that for purposes of medical or psychological certification only empirically tested, culturally reliable and valid, psychometric instruments should be employed and that these instruments should be combined with extensive diagnostic interviews

conducted by experts knowledgable about the respective culture and the expressions of traumatic stress that are specific for this culture.

We have also shown that culture-specific ways of coping with trauma exist. This raises the question whether conventional "Western" approaches of psychotherapy as well as pharmacotherapy can be sensibly transported to non-Western cultures. Interventions must be "culturally congruent" (de Jong, 2004, p. 171), taking into account the different evaluation of grief as well as important religious differences between cultures. Therapy must take into consideration not only different diagnostic (Eisenbruch, 1992) and cultural (Kirmayer, 1989) backgrounds but also ethnic identity and specific practices (Jablensky et al., 1994), culturerelated expectancies (McIvor & Turner, 1995), illness metaphors (Coker, 2004), as well as the existence of culture-specific symptoms and meanings of symptoms (Chakraborty, 1991). Referring to torture victims from non-Western cultures, McIvor and Turner emphasized

A reductionist medical model cannot fully encompass the complexity of the torture concept. Significant social and political sequelae, affecting survivors, families and whole communities, need to be considered [...]. Only a minority will actually reach the door of the health professional. The majority become survivors without treatment [...]. Community, political and religious groups probably provide the majority of support and treatment. (McIvor & Turner, 1995, p. 709; cf. Mollica, 2004).

Thus, not surprisingly, refugees and asylum seekers frequently are reluctant to use psychotherapy offered by practitioners of their host country, deny to be suffering from a medical or psychological disorder, or are afraid to speak about their symptoms openly. They may be embarrassed by showing emotions and they may tend to express psychological problems only in terms of physical symptoms (Brody, 1994; de Jong, 2002). Additional problems can arise from the use of interpreters (Westermeyer, 1990).

From these considerations, it becomes quite clear that conventional psychotherapy conducted by Westerners with the help of interpreters is not the only method of choice for traumatized asylum seekers and refugees. Culture-sensitive treatment approaches, activating resources, encouraging self-management and empowerment, and making use of traditional systems of support should be taken into account, thus minimizing dependency and feelings of helplessness (de Jong, 2002; Jablensky et al., 1994; Mollica, 2004). Brody (1994) argued along the same lines stating that "the most stable receiving mechanism may be the ethnic enclave, the community of migrants already transplanted into the host community" (p. 59).

It should also be noted that non-Western cultures tend to be grouporiented. Thus group interventions can be expected to be more adequate for them than individual ones (Jaranson, Martin, & Ekblad, 2005). This is especially true for women who are often isolated at their homes, being restrained by their culture from seeking contacts outside (Lipson, 1991). In accordance with general knowledge, our therapeutic experience has shown that, in Muslim cultures, current concerns of everyday life are predominantly discussed in same-sex groups, women exchanging with women, and men with men (cf. Patai, 1973, for social roles of men and women in the Muslim world). A culture-sensitive approach to coping with trauma should take this into account and offer gender-homogenous interventions.

Eisenbruch, de Jong, and van de Put (2004) have introduced a culturesensitive nine-step program conducted by indigenous paraprofessionals and practiced successfully by the Transcultural Psychosocial Organization (TPO), for example, in Northern Uganda and Cambodia. De Jong (2002) gave additional examples of the TPO approach, including traditional healing techniques as well as spiritual issues, e.g., in Sri Lanka, Nepal, Tibet, Congo, and the Middle East. In Australia, by the Service for the Treatment and Rehabilitation of Torture and Trauma Survivors (STARTTS), highly effective, community-based interventions have been developed (Families in Cultural Transitions, FICT, as well as different kinds of support groups) and designed to facilitate the process of settlement, to aleviate traumatic symptoms, to enhance psychological well-being, and to help with practical issues of everyday life (Aroche & Coello, 2004; STARTTS, 2005). On the basis of positive experiences with survivors of war in Nicaragua (Métraux & Fleury, 1995), Meier and Perren-Klingler (2002) and Perren-Klingler (2001) have installed a community-based program in Switzerland, designed to instigate self-help activities among refugees from former Yugoslavia.

Although culture-sensitive, community-based interventions are still scarce, there is growing empirical evidence showing their effectiveness. For example, J. T. V. M. de Jong (Personal Communication, 7 February 2005) reported satisfactory effect sizes of 0.8 – 1.2 for indigenous counselors in post-war areas. Accordingly, in a forthcoming publication, Renner and Peltzer (in preparation) will report that culture sensitive peer-groups offered to Chechen refugees and asylum seekers in Austria achieved average effect sizes which equaled those reported by de Jong.

Just like culture-sensitive assessment procedures, culturally congruent interventions are urgently needed. In the light of some promising steps toward implementing such programs in various parts of the world, there is a high potential toward developing them further and toward installing them on a large scale basis.

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