

Traumascapes: an ecological-cultural-historical model for extreme stress

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EDITORS' INTRODUCTION

The relationship between social factors and mental well-being of individuals is well described. The individual responses to social stressors in the environment can influence outcome and the coping strategies. In addition, the social factors such as geographical distance may prevent individuals and their carers from seeking help. It is possible that the shape of distress changes as the social conditions change and mould individual's distress. The relationships between environment and the individuals are most starkly seen in post-disaster situations, whether the disasters are man-made or natural. Coping strategies in disaster settings include basic survival needs along with psychological trauma.

De Jong in this chapter builds on the concept of traumascapes, described as a landscape marked by the need for people to build memorials at sites where massive deaths have happened. The characteristics of these traumascapes are the systemic dynamics of local and international representations and actions around extreme stress. In post-disaster situations, irrespective of the causation, the stakeholders have divergent perceptions, which produce interventions, which are not necessarily related to needs and concerns of the local communities or scientific evidence-based proven professional interventions. De Jong develops an ecological-cultural-historical model for extreme stress in which person is presented as part of a hierarchy of levels of organization. Historically, collective and individual dimensions can be understood. Ecologically, corresponding historical, economic and political processes are identified. There is no doubt that historical factors influence culture. The relationship between the individual on the one hand and ecological factors on the other is significantly influenced by role expectations. De Jong illustrates these interactions by using grief as an example. Grief is universal, but dealing

with it varies across cultures and type of cultures. In low-income countries rituals may be important, whereas in high-income countries the individuals demand grief counselling, trauma counselling or terminal care. Each era and culture uses different ways of coping after loss, be it major or minor. In addition, the role of using traumascapes in managing vulnerability and resilience of individuals is of significance in managing such individuals.

Introduction

The social theorist Appadurai (1996) uses the suffix 'scape' – for example, in technoscape, mediascape, ethnoscape – as a framework for examining the 'new global cultural economy as a complex, overlapping, disjunctive order that cannot any longer be understood in terms of existing centre-periphery models'. The historian Tumarkin (2005) uses the word 'traumascapes' for a landscape marked by the need of people to build memorials at sites where massive deaths happened. She regards traumascapes not simply as locations of tragedies and trauma, but also as mediators between the living and the dead. My concept of traumascapes has a wider bearing and I propose to use the term to mean the systemic dynamics of local and international representations and actions around extreme stress. Different ecological levels can interact and produce specific traumascapes. The characteristics of these traumascapes are time bound and can be located on a globalizing vs. localizing continuum. In our current world the conceptualization of distress and

traumatic stress and the social and power relations related to the cultural construction of these concepts are in constant flux and prone to cybernetic looping. For example, a cascade of events – determined by the media, the role of UN/NGO/government/local stakeholders, funders and health professionals – will often determine the focus, the size and the nature of assistance for a group of survivors of a natural or human-made disaster. Media hypes often followed by geopolitical and voter-dependent considerations may determine whether terrorism, human rights, child rights, quality of governance, gender-based violence (GBV) or child soldiers are the main concern of the international community, and, subsequently, whether funds will go to a specific region or a specific type of disaster, often to the detriment of other catastrophes. For example, currently dozens of mini-gender-based violence projects are set up in the African Great Lakes region, especially in east Congo, making lists of rape survivors at the village level. These projects are donor driven, lack a view on more general psychosocial programming, and focus on gender-based violence (GBV) to the detriment of other problems such as GBV-related consequences in terms of HIV. International views may influence a local traumascap: after the Tsunami, several areas in Asia were invaded by psychosocial programmes – deflecting funds from areas such as Darfur or other parts of Sudan – raising the status of even daily trivialities and hassles to a ‘traumatic event’. Another example: after the genocide in Rwanda the international community for the first time in history showed interest in mental health, creating a local traumascap that resulted in a massive influx of NGOs and the invention of a local word for trauma, *guhaha-muka*. Or an example of the dynamics of a traumascap in the West: due to cybernetic looping, a refugee requesting asylum in a high-income country may get quickly conditioned to mould distress into symptoms of PTSD, since immigration officers and mental-health professionals may follow the list of DSM or ICD criteria during subsequent interviews.

In a post-war or post-disaster situation, stakeholders have divergent perceptions of the

traumascap, eliciting interventions that may be scarcely related to the needs and concerns of the local communities or to scientific evidence-based professional considerations. For example, a local UN office or the military may think that an epidemiological sensible target figure of PTSD or psychosis has to be treated per time unit, as would happen in a communicable disease such as tuberculosis. Christian or Islamic groups may propose daily prayer to solve the problem, even when the local population complains about spirits that remain unharmed by the prayers of foreigners. An NGO may feel that a 3-day training of local professionals will train suitable psychosocial counsellors. Other proponents may cherish the view that talking is a Judeo-Christian invention that does not help (Summerfield, 2000; Trickett, 1995) and should be replaced by concentrating on work, play, theatre or music-making. The stereotype that talking is a Judeo-Christian invention – which one may regard as a post-colonial guise of stating that non-Westerners are psychologically less sophisticated – is often supported by another stereotype or ‘cognitive scheme’, i.e. that non-Westerners somatize rather than psychologize their distress, even though there is a substantial body of evidence supporting the view that somatizing is universal (Üstün & Sartorius, 1995) and that cultures distinguish themselves in certain preferred patterns of somatization (Kirmayer *et al.*, 2004; De Jong, 2004). These two cognitive schemata have added a third one: the notion that it is impossible to do anything substantial or meaningful regarding massive traumatic stress. This amazing view has resulted in an avoidance of the issue of psychological suffering and its consequences, which in turn has contributed to a ‘conspiracy of silence’. There appears to be a degree of universal ambiguity that surrounds the expression of distress when dealing with a traumatic past. People are ambivalent about what they bring forward in their daily discourse and what they actually do or appreciate when it comes to coping with extreme stress. In our experience people feel relieved after verbally expressing distress when interventions are culturally congruent. They may

not want to embarrass their fellow survivors by expressing their haunting past, and yet find enormous relief in sharing their memories with others, whether through a *palaver* under the village tree, a self-help group, an individual or family session, or another form of ritualized healing. Understanding these and other factors that result in local traumas, and their interaction with other ecological levels including the writings of authors such as myself, will enable us to determine appropriate coping strategies that satisfy universal human necessities while taking the specific sociocultural context into account.

Psychiatrists, psychologists, psychiatric nurses and other mental-health professionals have to bear in mind that debates such as the one about the importance of treating PTSD vs. the relevance of dealing with all kinds of psychosocial, mental or material predicaments, are often dominated by these (inter)national dynamics of the traumascape.

An ecological-cultural-historical model for extreme stress

Within the dynamic framework of the traumascape, this chapter presents a model for understanding and studying the interaction between extreme stress, the individual, social ecology, history and culture. The model has three objectives. The first is to provide an interdisciplinary framework for scholars to study the under-researched domain of the complex interaction between trauma, culture and history. The second objective is to develop policies and practices within a culturally and historically informed public health framework. War and terror – like ‘the war on terror’ – and disasters often do not recognize national boundaries and are push factors that drive migration and thus create multiracial societies. Therefore, the third objective is to invite professionals to become competent in crossing cultural borders.

The ecological-cultural-historical model for extreme stress presents the person as part of a hierarchy of levels of organization. The person is first

presented as an organism composed of inter-related parts of the central nervous system and the body, then on to the level of the family and, finally, the community and society (Fig. 26.1). From a wider ecological perspective, the person is enveloped and interacts with corresponding historical, political and economic processes. Within the historical processes, one can distinguish a *collective* and an *individual* dimension. These two dimensions have a time perspective and interact with each other. The person is embedded in a cultural context as well. The cultural context similarly has a *collective* and an *individual* dimension interacting with each other. The *collective* dimension of culture represents schemes that guide the meaning of such processes as suffering, healing and reconciliation. The *individual* dimension represents cultural influences on traumatic stressors and their appraisal, their modification by protective and vulnerability factors, and their individual expression in suffering, distress, psychopathology, post-traumatic growth and its concomitants of disability, functioning, quality of life and well-being. History and culture are intertwined. In the past both disciplines have evoked debates about the extent in which they should be regarded as separate (Kuper, 1999). The capriciousness of history in the course of extreme stressful events such as wars or disasters warrants a separate discussion. Both collective and individual history challenge culture to an extent that it has to adapt its collective and individual survival strategies and coping styles. This chapter first describes the *individual* aspects of history and culture, followed by a description of the *collective* dimensions.

Ecology and history

Individual

The life history of an individual is embedded in the traumascape of a collective history in a specific era. Both individual and collective histories add a time component to the model outlined in this chapter. Individual and collective histories have a reciprocal

relation, as the debate about the nature and origins of PTSD shows. Shay (1991) suggested that elements of the post-traumatic stress disorder could be identified in Homer's *Iliad*. Ben-Ezra (2003) asserts that the symptoms of nightmares, sleep disturbances and increased anxiety have not changed in 4000 years. The symptoms reported in a family trapped in the Bergemolletto avalanche have been quoted as evidence for the disorder's existence in the mid-eighteenth century (Parry-Jones & Parry-Jones, 1994). Dean (1997) identified symptoms of PTSD in the accounts of veterans of the American Civil War. Trimble (1985) concluded that 'this relatively common human problem has been known for many hundreds of years, although under different names'. Young (1995), however, argued that PTSD is a culture-derived diagnosis that only existed in the late 20th century '... glued together by the practices, technologies, and narratives with which it is diagnosed, studied, treated and represented and by the various interests, institutions, and moral arguments that mobilised these efforts and resources'. Jones *et al.* (2003) in their study of UK servicemen who had fought in wars from 1854 onwards support the hypothesis that some of the characteristics of PTSD, such as intrusion and avoidance, are culture-bound and that earlier conflicts showed a greater emphasis on somatic symptoms. One may conclude that – as in many other psychiatric syndromes – the symptoms of post-traumatic stress change over time and that a historical era, to some extent, expresses itself in an idiosyncratic way in the presentation of individual suffering.

This idiosyncratic process starts before birth when individuals are equipped with genes that promote resiliency or vulnerability (see Fig. 26.1: sub *Ecology and History, Individual level*). Future studies will likely show that worldwide variations in the human genome equip individuals with different degrees of resiliency against traumatic stress. For example, despite harsh living circumstances, psychiatric epidemiological studies in Ethiopia consistently show low prevalence figures for a range of psychiatric disorders (De Jong *et al.*, 2001; Kebede *et al.*, 2003). Only 9.4% of Israelis met symptoms

criteria for PTSD, which is low when considering the nature and length of traumatic exposure, and a majority was optimistic about their personal future (Bleich, Gelkopf & Solomon, 2003). Interestingly, 62% of Ethiopians belong to a genetic subcluster that encompasses a majority of Jews, Norwegians and Armenians (Wilson *et al.*, 2001). It is theoretically possible that the low prevalence rates in Ethiopia and Israel are related to the composition of the genome of this genetic subcluster. Another example: research has identified an allele for the serotonin transporter gene that affects vulnerability to stress. People with the short allele are at increased risk for anxiety and depression. Most people of European descent carry the high-risk allele and are at higher risk of depression. However, studies also show that carriers only develop depression if they are exposed to stressful and traumatic events, especially early in life (Caspi *et al.*, 2003; Kendler *et al.*, 2005).

Similar to genetic vulnerability and protective factors, the next individual historical determinant, sex, is determined with conception. The first influences of the individual's life history start *in utero* with the interaction between a person's genetic make-up and the environment. Birth itself can be a risk factor, especially in war or disaster circumstances, where often poor prenatal and perinatal care are compounded by the collapse of the public healthcare sector. Famine, starvation, nutritional deficiency, environmental health hazards, cerebral malaria, parasites, diarrhoeal diseases and respiratory infections may further negatively influence cognitive and bodily development both *in utero* and later in life (West, Caballero and Black, 2001; Bangirana *et al.*, 2006). Family disruption, parental illness and death, possibly aggravated by the AIDS pandemic, can affect attachment, bonding, separation and socialization and contribute to anxiety, depression, PTSD, attachment disorders of childhood, and antisocial, borderline or traumatic personality development (such as Complex PTSD or DESNOS (Herman, 1992; Van der Kolk *et al.*, 1996). Prior to the onset or during episodes of political violence, the individual may be exposed to positive or negative life

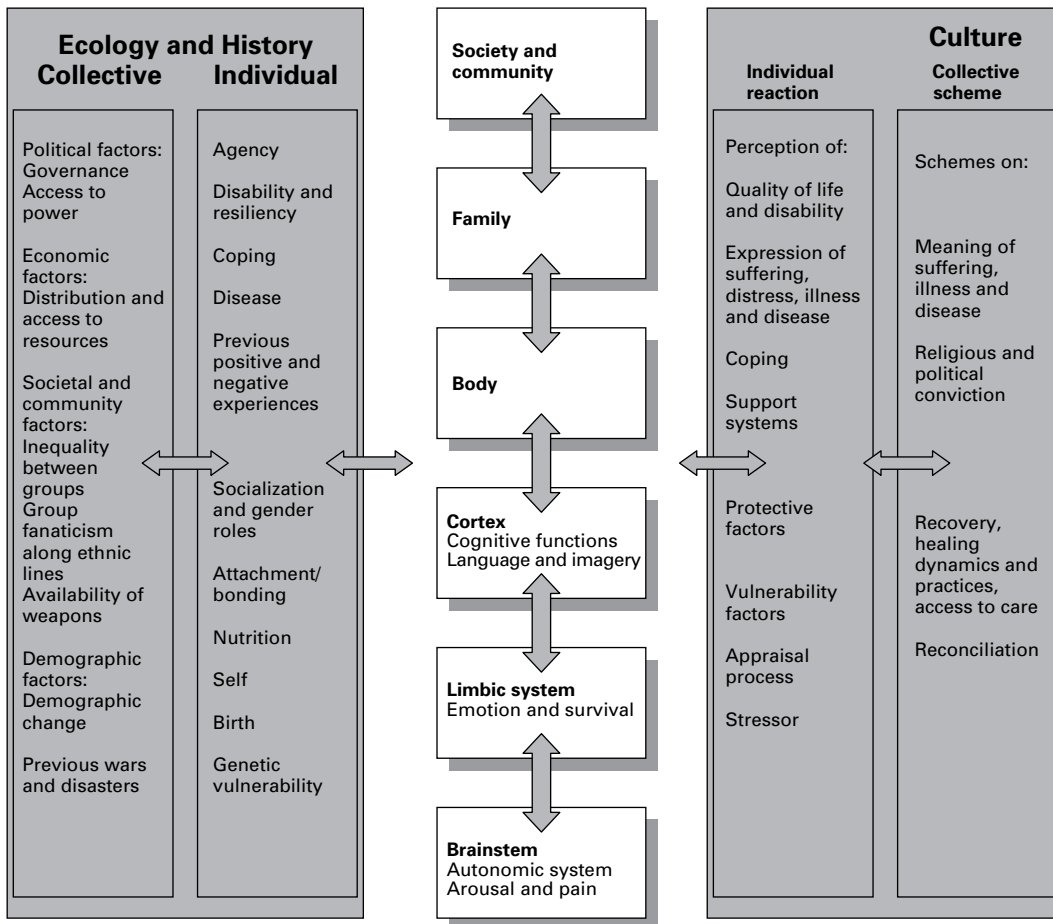


Fig. 26.1. An ecological-cultural-historical model for extreme stress.

experiences that may either contribute to resiliency and post-traumatic growth, or to further vulnerability later in life. Post-traumatic growth manifests itself in an increased appreciation for life, more meaningful interpersonal relationships, an increased sense of personal strength, changed priorities, and a richer existential and spiritual life (Tedeschi & Calhoun, 2004; Aldwin & Levinson, 2004). The interaction of these resiliency, vulnerability and growth factors may result in a proneness to disorder and the development of disability. Alternatively, it may result in a more or less diversified repertoire of coping skills. This may, in turn,

influence the ability of the individual to display agency and to survive in an adverse environment.

Culture

Individual

Within current models of stress in psychology and psychiatry, cultural factors modulate the relationship between the events, moderators, mediators and outcomes. Here, some examples of the influence of culture on an individual will be presented by

following common stress models with a cultural lens (De Jong, 2002, 2004). These stress models primarily distinguish traumatic stressors as independent variables being appraised by an individual and resulting in psychological and psychiatric problems moderated and mediated by a range of protective and vulnerability factors. Common psychological disorders or more serious mental disorders are regarded as dependent variables, that in turn affect functioning, quality of life, personality growth or disability. Although these models have universal applicability, they can be enriched when we obtain more insight into the transformation of its components by the work of culture.

The traumatic stressor, protective and vulnerability factors, coping, social support, and expression of distress and disability. Threats to survival are at the core of traumatic experiences, as clarified by the revision of the definition of post-traumatic stress disorder (PTSD) in DSM-IV (APA, 1994). However, the perception of threat as traumatic varies across individuals and across cultures. One may even doubt if stressors are ever traumatic *per se* and argue that an event can only become traumatic after appraisal (as mentioned in the second part of the DSM-IV stressor criterion). For instance, was the premeditated loss of thousands of people on a single day on the ancient battlefields perceived as traumatic, and did this differ for those ordering the battle or the individuals surviving it? Is the loss of a child a universal stressor? Based on my experience with mothers across cultures who heard about the (impending) death of their child, I tend to regard the confrontation with the death of a child as a universal traumatic event. Similarly, Einarsdóttir (2004) argues that, despite high infant mortality, there is no normalization of child death among the Papel in Guinea Bissau. Our views contrast that of Schepers-Hughes (1992), who states that high infant mortality in Brazil protects mothers from suffering as compared to countries with low infant mortality. In my view the mothers' wording of their previous loss during an anthropological encounter reflects a useful defence mechanism that may differ from their true suffering when their child died. In contrast to

the death of a child in Africa, the death of an older loved person who has children and some accumulated wealth is typically acceptable in African cultures, since it is believed that the deceased will travel to the reign of the ancestors and occupy an intermediary position between the living and the dead.

Is loss of wealth traumatic? Higher levels of socioeconomic status and education before displacement are associated with worse mental-health outcomes (Porter & Haslam, 2005). However, adult Tibetans did not perceive the loss of their personal possessions as traumatic, but the desecration of their religious symbols by the Chinese was perceived as a traumatic loss (Terheggen *et al.*, 2001). When a Middle Eastern family realizes that an unmarried female member is flirting with a man, the event can be devastating to the family honour and result in revenge killing. It is the culture-bound appraisal of the flirting, innocent in other cultures, that evokes emotions that result in culturally prescribed action. This example also illustrates how protective and vulnerability factors can depend on cultural context. The concept of honour may function as a protective factor in the context of Middle Eastern cultures by promoting endogamy, chasteness and peaceful coexistence of families and clans. The culturally prescribed revenge killing related to the appraisal of loss of honour can result in positive coping in the Middle East, while the same behaviour may be a negative coping style resulting in social exclusion or imprisonment in a multicultural setting.

Both problem-focused and emotion-focused coping are influenced by culture. Once indigenous coping strategies and resources are identified and understood, salutogenesis can be encouraged as a form of prevention or intervention.

Grief is an essential task of survivors and provides a good example of the influence of culture on coping. There are several dimensions distinguishing cultures regarding grief and bereavement. High-income countries use concepts such as grief counselling or terminal care. In contrast, in low-income countries, people's attention is especially focused on varying supernatural beliefs (a) that the dead

communicate with the living, (b) that other people's supernatural abilities such as witchcraft can cause death, (c) that the ghost of the deceased will take revenge if one does not complete proper rituals for the deceased, for example, in cases of suicide or homicide as often happens in conflict settings or ethnic cleansing (d) that verbalizing the name of the deceased is dangerous, (e) that a newborn is a reincarnation of a deceased person, (f) that hearing or seeing the deceased person is normal, and (g) that tie-breaking customs are useful to cope with loss (Rosenblatt, Walsh, & Jackson, 1976; Irish, Lundquist, & Nelsen, 1993; Parkes, Laungani & Young, 1997; De Jong & Van Schaik, 1994). Anger toward the deceased is another difference in grief between African and Euro-American cultures. The common Christian habit is to encourage saying nothing but good about the dead, possibly hindering the expression of negative feelings toward the dead. In African cultures, the expression of emotions such as anger towards the deceased is often permitted in a ritual context. This may be done in a benign and mocking way, since the family needs the help of the deceased – who just rose to the status of ancestor – to cope with life. Later, this ancestor may transmit messages through an elected person whom we might regard as hallucinating. Nevertheless, local culture often deals in a ruthless way with that same anger and despair by accusing the living of causing the death of a family member. The accusation of magic manipulation may involve parents being accused of the death of their own child. It seems that the anger caused by death is expressed in a highly ambivalent way. Both the deceased and his or her family members or co-villagers may become the target of a witchcraft or sorcery accusation. The accusation may correspond with pre-death conflicts or be in line with structural tensions such as that between generations, sexes or co-wives.

The nature of the *expression* or the *presentation* of distress and suffering in response to threats also varies across cultures. Working in post-war circumstances in West Africa, presentation of PTSD symptoms was rare, while patients regularly presented

stiff or contracting catatonic bodies, accompanied by bouts of shouting and twisting movements of body parts. I soon realized that these were local idioms of distress in the guise of dissociative reactions reminiscent of scenes of 1890s Salpêtrière. From a cross-cultural perspective, it is interesting that one often still comes across expressions of psychopathology in low- and middle-income countries that have gradually disappeared in the West over the past 100 years. The expression of repressed feelings, often related to abuse, greatly varies and evolves over time, resulting in dissociative states such as classical hysteric attacks, spirit possession, hysterical blindness or psychogenic convulsive attacks. An additional problem in diagnosing psychopathology across cultures is that the reactions to trauma are often expressed in narratives that express distress along with explanatory models. Moreover, these narratives are often intertwined with the cultural transitions and losses that confront the survivors resulting in acculturative stress, culture shock and cultural bereavement (Eisenbruch, 1984).

In low-income settings families are often the main provider of social capital and mental well-being. As such, families are a protective factor when a person is confronted with extreme stress. Norris and Kaniasty (1996) showed that, after mass trauma, initial periods of a high degree of social support are followed by a quick deterioration of the support system under the pressure of overuse and the need for individuals to get on with their lives. This problem is compounded when many adults die due to war or AIDS, or when families seek refuge in the houses of other family members, turning a large extended family into a vulnerability factor (De Jong, 2004, pp. 166–67).

Western concepts of disability and social and psychological functioning are often not appropriate in local settings. Research instruments used in high-income countries may not measure the same concepts of disability and well-being in other cultures. Bolton and Tang (2002) developed a useful method for cross-cultural and sex-specific assessment of disability and functioning.

Collective

The individual level of perceiving and dealing with threats interacts with the collective level of the traumascap. The collective level operates its influence through schemata defined as structured cognitive representations of sets of rules of human populations. Culture-based schemata are part of the traumascap. Schemata are dynamic and provide a means for cultural prototypes to be revised as a function of individual experience (Rumelhart *et al.*, 1986; Chemtob, 1996). I will limit myself here to schemes related to recovery and healing, and to religious and political conviction.

Schemes on recovery and healing

Psychiatrists and psychologists tend to apply psychodynamic or cognitive interventions based on Western concepts of autonomy and individualization. This may be out of place with patients with other views of the ego and the self, living in collective societies that promote interdependency. In these cultures, Western interventions promoting for example assertiveness may be perceived as self-ish (De Jong, 2004). Two major impediments to the implementation of appropriate psychosocial and mental healthcare programmes are the Janus faces of stigma and dogma. Stigma schemes around deviant behaviour may be a major impediment to develop interventions in the local culture, whereas dogma about the appropriateness of certain interventions among helpers may equally influence the local traumascap. For example, Western helpers may have non-founded views about the effectiveness of all kinds of interventions, ranging from culturally non-adapted versions of EMDR, CBT, family interventions or testimony methods to new-age therapies. Or, they may handle religious or other paradigms that are incompatible with the problems of those they want to assist. Over the last decade, a major step forward is the development of a series of guidelines and books on providing psychosocial and mental healthcare by the UN, WHO, consortia of NGOs and professional societies. These guidelines

are obligatory reading for anyone who wishes to enter the 'trauma field', despite the heterogeneity of traumatic events, the lack of empirical support for specific interventions, or the need for adaptations of interventions to local needs and culture (IASC, in press; De Jong & Clarke, 1996; De Jong, 2002; Green *et al.*, 2003; Weine *et al.*, 2002; Eisenman *et al.*, 2006).

An expert panel gained consensus on empirically supported intervention principles that cover the period to several months after a disaster (Hobfoll *et al.*, submitted). The principles consist of schemes of recovery and healing.

- (1) Safety on an individual, family, group and community level to prevent situations where reminders contribute to an ongoing sense of exaggerated fear. It includes safety from bad news and rumours (Bryant, 2006; Ehlers and Clark, 2000).
- (2) Calming of extreme emotions through interventions such as breathing retraining, muscle relaxation or mindfulness, through a 'normalization' of stress reactions by survivor education about reactions, and by fostering positive emotions including joy and humour.
- (3) A sense of self and community efficacy, reinforced by practising increasingly difficult situations in which increments of success build to a reality-based appraisal of efficacy which supports calming as well.
- (4) Connectedness, increasing appropriate knowledge, providing social support activities such as problem-solving, sharing of experience and emotional understanding, and mutual instruction about coping. Research indicates that social support is related to better emotional well-being and recovery. Therefore, interventions have to identify those who lack social support and who are socially isolated and promote social support networks in communities (De Jong, 2002b). However, one has to remain sensitive to the potential for social undermining based on racial, ethnic and tribal divisions.
- (5) Hope or the expectation that a positive future outcome is possible. Hope for most people in the world has a religious connotation and is

not action-orientated (Antonovsky, 1979). Antonovsky underscored that one's belief that things will work out well is based on past experience (Hobfoll *et al.*, submitted). In view of the protracted duration of several conflicts around the world one may question this statement. On the other hand, even in low-income countries where a whole generation has endured human rights violations or war (e.g. Burma, Cambodia, Kashmir, Tibet(ans), Sri Lanka, Vietnam, Angola, Sudan), people often seem to have internal resources that are beyond the imagination of middle-class Westerners.

Within the global traumascape, schemes on recovery and healing are influenced by divergent views on the value of diagnostic categories, of epidemiology and of interventions. I will briefly elaborate these views and attempt to indicate directions to bridge some of the divergent views.

Nosology and diagnostic categories

The trauma field could further its development by giving up the universalism debate about the validity of a core diagnosis of PTSD (Kleinman, 1977; Young, 1995; Summerfield, 2000). Biological adaptation to extreme stress is necessary for survival in a Darwinian sense and hence it is not surprising that these adaptive reactions are embedded in the brain (Hobfoll, 1998; Panksepp, 1998). Recent insights into the role of brain structures, such as the amygdala in fear response, both in animal models (Le Doux, 1996) and neuroimaging (Shin *et al.*, 1997; Bremner, 2002), changes in neurotransmitters such as norepinephrine (Southwick *et al.*, 1993) and neurohumoral responses such as cortisol (Yehuda, 2002), provide evidence for a biological substrate of PTSD. Moreover, respondents in a variety of countries appear to easily recognize PTSD symptoms in studies that address numerous variables, and explain those symptoms with local explanatory models without any notion of words such as trauma, stress or PTSD (De Jong, 2005). Despite these arguments in favour of a universal experience, Kendell and Jablensky (2003) have convincingly argued that

validity is flawed by a lack of boundaries in any psychiatric syndrome. Validity does not mean uniformity across the globe (De Jong *et al.*, 2005). Although scholars do find PTSD in many different cultures, the conclusion that PTSD is similar in all cultures is premature, since studies generally do not look for differences that might have yielded so-far-unknown (sub)types or variations of the disorder. Future interdisciplinary studies should enable the field to parse out the unique and interactive contributions of biology and culture to the PTSD 'syndrome' (Osterman & de Jong, 2006). It will also increase our understanding how PTSD, post-traumatic idioms of distress, traumatic personality development or DESNOS are modified by cultural beliefs and meaning systems (De Jong, 2004). Without a refined inventory of idioms of distress in a variety of cultures, diagnostic errors can occur. Either a clinician can miss the PTSD diagnosis because associated culture-related sociosomatic or socio-physiological features are most prominent, or the associated features can be overlooked because of the presence of PTSD. One of the challenges of the coming decades will be the compilation of a worldwide inventory of local expressions of unusual or 'deviant' behaviour, including traumatic stress reactions, based on a phenomenological approach employing a combination of qualitative and quantitative research methods (De Jong & Van Ommeren, 2002). We expect that such an enterprise would yield a neurobiological and universal core at the biological end of a continuum, with a large variety of culturally induced phenomena at the socio-psychological end of the continuum. In a recent paper we described a series of steps toward constructing such a universal core module to capture the consequences of extreme stress across cultures, with local modules that fit culture-specific expressions of extreme stress (De Jong *et al.*, 2005). One might even go one step further and extend this view to all psychiatric diagnoses, envisioning a global network of researchers that collect and update local expressions and idioms of distress in line with the previous anthropological Human Relations Area File. This requires intensive collaboration between

mental-health professionals and social science, especially anthropology. Clarifying the debate around diagnostic categories and nosology will also help to clarify the role of epidemiology and treatment:

Epidemiology

Although epidemiology purports to guide intervention efforts, in post-disaster contexts epidemiological figures often only capture a portion of the true need. Moreover, prevalence figures are often highly elevated and may contribute to the treatment gap that exists in many areas worldwide, even after correction for help-seeking behaviour, medication or disability (Narrow *et al.*, 2002). The post-9/11 efforts to provide services in New York were a vivid example of the discrepancy between epidemiological figures and the availability of adequate intervention models and services, especially for immigrants, in the city with the highest density of mental-health professionals worldwide (Herman & Susser, 2003). But even in normal times there is a huge discrepancy between prevalence rates and service provision. The WHO World Mental Health Survey Consortium (2004) showed that 35.5% to 50.3% of serious cases in developed countries and 76.3% to 85.4% in less-developed countries received no treatment in the 12 months before the interview. These figures are not representative for any current post-disaster area where the treatment gap impresses as invariably larger. In a cross-cultural context, psychiatric epidemiology is often further compounded by the use of non-validated instruments, by including subjects without disability in prevalence counts, or by maintaining algorithms and exclusionary skip rules in epidemiological instruments that produce skewed and often extremely unreliable prevalence rates. Moreover, one has to carefully test a diagnostic or research instrument developed in one culture before applying it another culture. This helps to bring understanding of the concepts underlying the items of the instrument, testing them for their content, semantic, conceptual and technical validity. How to properly adapt instruments has been described elsewhere (Van Ommeren *et al.*, 1999; De Jong & van Ommeren,

2002). Psychiatry and psychology are also flawed by the discrepancy between the wealth of epidemiological figures and the scarcity of attempts to translate these figures into secondary and tertiary preventative efforts. The use of epidemiology in post-disaster settings is further complicated by discussions on focusing interventions when there is a scarcity of means and of evidence-based trained human resources (De Jong *et al.*, 2003b).

Interventions

Disaster-affected populations show high prevalence rates of mental-health problems including acute stress disorder, PTSD, depression, anxiety, incident-specific fears, phobias, somatization, traumatic grief and sleep disturbances. These reactions typically show a gradual reduction over time, yet negative post-trauma reactions including adverse coping styles such as substance abuse or family violence tend to persist in a variety of cultures. The past few years show a growing consensus for the need to include common mental disorders such as depression and other anxiety disorders instead of focusing solely on the treatment of PTSD (Weine *et al.*, 2002; De Jong *et al.*, 2003, Eisenman *et al.*, 2006; De Jong, 2005; Osterman & de Jong, 2006). When selecting priorities for interventions, professionals have to consider to what extent they focus on the needs and concerns of the local population in comparison to 'scientific' epidemiological figures (De Jong, 2002b, pp. 51–52). This will often result in balancing psychiatric needs with public-health and psychosocial needs, such as access to general healthcare, poverty, daily hassles, substance abuse, spirit possession, gender-based and family violence or access to human rights resources. It implies developing intervention models that include mental health within primary care. It simultaneously implies addressing local psychosocial needs by building upon local strength such as family networks, upon resources such as village and women associations or commemoration ceremonies, and by building upon key figures such as community and religious leaders and complementary and

alternative medicine (CAM). Whereas prevalence rates remain fairly constant, the overall burden of a population group is related to the ever-changing longer-term psychosocial needs that are often compounded by cycles of violence and its sequelae. Because it is impossible to provide services to all people in need, programmes must assess high-risk groups and track potential modifications in vulnerability over time. Moreover, one has to decide how to allocate funds and human resources to universal, selective or indicated preventive interventions (United States Committee on Prevention of Mental Disorders, 1994). This process may be complicated by stigma, which in turn may shift over time. For example, in the past decade stigmatizing witchcraft accusations in Central Africa have shifted to children who were subsequently killed, because they allegedly machinated the plight of the local population. Massive conversion to healing churches that articulate with previous mass-possession cults must be taken into account in the process of service delivery. Moreover, although healers are regarded as a potential source of psychosocial support, there exists widespread ambivalence towards collaboration, especially among professionals with an academic background who distance themselves from what they consider 'primitive thinking'.

Political and religious conviction

Political and religious convictions are part of the traumascape and moderate the processing of distress. Political conviction can mediate grief or mourning, as has been described in, for example, Gaza (De Jong, 2004; Qouta, 2000; Qouta & El-Sarraj, 2002). Similarly to Albanian Kosovar families who lost a family member in the war in 1999, Palestinians often regard their deceased family members as martyrs. These views can, on the one hand, alleviate loss, while, on the other hand, complicate the mourning process since the family that is applauded for having given a martyr for the common cause may find it difficult to sense its loss and express its grief. A child soldier may be regarded as a human-rights violator, or, alternatively, as a hero who helps

his family to survive in harsh economic times. A rehabilitation programme must formulate its objectives and interventions depending on the child soldier's local context. For instance, vocational skills training appears to be a suitable strategy to reintegrate child soldiers in Burundi but not in northern Uganda where their newly acquired skills are already widely available in the local economy. Exposure to the grotesque can be mediated by religious convictions, such as the role of karma in Buddhism in Asia, explaining, for example, the plight of the Cambodian people under the Khmer Rouge regime as the punishment for previously generated karma, or by divine persecution during the Holocaust (Abramson, 2000; Van de Put & Eisenbruch, 2002).

To summarize, culture-based schemata protect the group by moderating the impact of disaster. They provide guidelines for appraisal of potentially traumatic events in local or Western cultural terms. They also guide expected behaviour in terms of response to survival threats such as mobilizing social support or stimulating help-seeking among local or allopathic healers or ritual contexts.

Ecology and history

Collective

Population growth, economic interdependence and ecological vulnerability, combined with the availability of weapons and the contagion of hatred and incitement to violence, make it urgent to find ways to prevent disputes from turning massively violent. In the post-Cold War, wars within states vastly outnumber wars between states. Internal conflicts commonly are fought with conventional weapons and rely on ethnic expulsion or even annihilation. The UN, governments and the non-governmental (NGO) sector use a public-health paradigm to prevent the (re)emergence of violent conflicts. Effective preventive strategies rest on a few public-health principles: uncovering basic knowledge about violence and reacting early to signs of trouble; a comprehensive approach to alleviate the pressures or risk factors

that trigger violent conflict; address the underlying root causes of violence; and implement, monitor and evaluate interventions that appear promising (Carnegie Commission, 1997). The World Health Organization (WHO, 2002) divides violence into self-directed violence, interpersonal violence and collective violence. Collective violence is subdivided into social, economic and political violence. Political violence includes war and violent conflicts, state violence, terrorist acts and mob violence. Economic violence includes attacks by larger groups motivated by economic gain, such as attacks carried out with the purpose of disrupting economic activity. Collective violence often is the outcome of steps along a continuum of antagonism (Staub, 1993). Within a historical context, progression of mutual retaliation may start with small acts that escalate, resulting in a 'malignant social process' (Deutsch, 1983). The escalation of conflict is often the result of 'us' – 'them' differentiation (e.g. Aryan–Jew, Tutsi–Hutu, Israeli–Palestinian, Indian–Pakistani, Arab world–US). If the societal self-concept is based on superiority, self-doubt or their combination, it may give rise to war-generating motives (e.g. Germany after the Treaty of Versailles, the Khmer Rouge dreaming of restoring the old Khmer empire). A societal self-concept often designates the territories that are part of a nation and may include some that the nation has not possessed for a long time (China claiming Tibet; Israelis and Palestinians claiming Jerusalem; Iraq claiming Kuwait; Argentina reclaiming the Falklands). Alternatively, a part of the territory may want to split off from a country to which it 'belongs', while the concept of belonging is disputed by those seeking liberation as compared to the country that defines it within its borders (Biafra from Nigeria; East from West Pakistan, Eritrea from Ethiopia; South Sudan from the North; Kurdistan from Turkey, Iran, Iraq and Syria). Groups, like individuals, project unacceptable aspects of themselves onto others; those who are repudiated become 'bad', whereas the group that projects remains pure and good (Pinderhughes, 1979) (the genocide of the Armenians in Turkey; the tensions in Africa/Kinshasa leading to witchcraft accusations and

murder; the accusations of 'parasitism' to the Jews in pre-WW-II Europe, to Indians in Uganda, or the Chinese in Indonesia; Mozambique's Renamo claiming to restore traditional values that were felt to be derogated by Frelimo).

Leaders have great power to shape relations between nations. They have the capacity to enlist the loyalty of their citizens, may initiate a cycle of hostility, but they are also the products of the history of their societies. Citizens rarely criticize hostile acts of their own country, but they are aroused to patriotic fervor by hostile acts against their country, even retaliatory ones (Staub, 1993). The process of leadership may produce faulty decision making, such as groupthink (former Yugoslavia).

Risk factors for collective violence

Prevention requires identifying risk factors and determinants of collective violence and developing approaches to resolve conflicts without resorting to violence. A range of risk factors for major political conflicts has been identified and has been listed in Table 26.1 (Carnegie Commission, 1997; Esty *et al.*, 1995; Baker & Ausink, 1995).

An accumulation of risk factors or a critical mass of these symptoms increases the likelihood of collective violence.

The relations between risk factors shown in Table 26.1 are circular and the different categories of indicators influence each other in a systemic way. Although the ingredients of collective violence are universal and global, its prevention and resolution are particular to a local traumascapes, context and culture. Preventive policies to reduce the potential for violence conflicts should address civil society and the quality of policy making decisions. Moreover, it should develop legal standards; reduce inequality between groups; develop regimes for controlling destructive weaponry, embrace development strategies that reduce poverty; and develop public (mental)-health strategies to deal with the sequelae as illustrated elsewhere (De Jong, 2002b; Green *et al.*, 2003).

Table 26.1. Indicators of states at risk of collapse and internal conflict with examples and sequelae

Indicators	Signs	Examples	Consequences
Inequality	Widening social and economic inequalities, both between and within population groups. Globalization, failed states, privatization, decline of social safety nets, deprivation, competition for resources, increased availability of weapons and landmines Struggle over access to resources such as oil, diamonds, gems, timber and rivers Struggle over access to drugs	Former URRS and Yugoslavia Angola, Congo, S Leone, Chad, Nigeria, Sudan, Cambodia, Indonesia Afghanistan, Columbia, Myanmar	The state is unable to manage political challenges and to maintain control over the use of force Increased mortality and physical disability, high death rates among civilians National army and rebel/ guerilla forces engage in armed conflicts to secure access to the resources. Manipulation of resource shortages for hostile purposes (e.g. using water as a weapon) Competition for income from narco-traffic
Rapidly changing demographic characteristics	Rapid changes in population structures including large-scale movements of refugees and IDPs High rates of (infant) mortality Excessively high population densities High levels of unemployment, especially among youth Insufficient supply of food or access to safe water Disputes over territory or environmental resources claimed by distinct ethnic groups or governments	Darfur Uganda, Angola, Mozambique, Zepa (Balkans), Rwanda, Burundi Liberia, S Leone, S Lanka, Sudan, Tigray, Eritrea Ethiopia, Eritrea	Pre/post-conflict massive population movements (e.g. refugees, IDPs) and competition for resources in areas into which people move. Environmental degradation Decline vaccination coverage, increase infectious diseases, reduced access to health services Overcrowding, resource depletion, environmental degradation, high exposure to vectors, high risk of HIV infection, poor nutrition, increased risk diseases Discontent, recruitment into rebel forces Conscription or looting of farmers, destruction water and sanitation infrastructure Create a climate of warfare and involve civilian populations
Lack of democratic processes	Violations of human rights Criminalization or deligitimization of the state Corrupt governments, faulty leaders	Bhutan, Cambodia, Iran, Yugoslavia, Guatemala, Iraq, Mozambique, Sierra Leone, Ethiopia	Torture, imprisonment, mutilation High military expenditures Use of violence to survive or to achieve their aims

Table 26.1. (cont.)

Indicators	Signs	Examples	Consequences
Political instability	Rapid changes in regimes Ethnic composition of the ruling elite differing from the majority A legacy of vengeance – seeking group grievance	Somalia, Zaire/Congo, Liberia, S Leone, Angola, Mozambique, Rwanda, Burundi Balkans (Bulgaria, Hungary, Romania, Slovakia)	Failed states Protracted cycles of violence and eruptions of ethnic clashes
Ethnic composition of ruling ethnic group different from the population at large or ethnic groups straddling interstate boundaries	Political and economic power exercised – and differentially applied – according to ethnic or religious identity Desecration of ethnic or religious symbols	Rwanda, Burundi, S Lanka, Balkans, Caucasus, Nagorno-Karabakh/Azerbaijan, Afghanistan	Inter-ethnic strife
Deterioration of public services	A decline in the scope and effectiveness of social safety nets designed to ensure minimum universal standards of service		Poverty, deprivation, discontent and subsequent involvement in armed struggle
Severe economic decline	Uneven economic development Grossly unequal gains or losses between population groups or geographical areas resulting from large economic changes Massive economic transfers or losses over short periods of time	West Africa, Great Lakes Region, Africa	Reduces public expenditure on e.g. health and education

Conclusions

From prehistoric times onwards cultures have developed coping strategies to deal with extreme stress. Each era and culture expresses the consequences in semantics, explanatory models and idioms of distress, and develops ways of healing that fit its cosmology. Ever-changing traumascape show that there are universal similarities and major differences that constitute the 'human' responses to trauma. The concept of a traumascape is presented as the scaffolding to explore the complex global and local interactions among vital systems that define how an individual, a society and a culture respond

to emergencies that make up the daily life of many. The model presented in this chapter provides a framework for scholars to study the dynamic interactions of culture, history and social ecology. The factors described in the model contribute to the understanding of vulnerability and resiliency of population groups and individuals. The components of the model will guide us in describing the variety of expressions of human suffering and the way cultures, and individual and families within those cultures, try to cope. The model may also guide us to develop policies and practices and effective interventions to deal with extreme stress.

References

- Abramson, H. (2000). The esh kodesh of rabbi Kalonimus Kalmish Shapiro: a Hasidic treatise on communal trauma from the Holocaust. *Transcultural Psychiatry*, **37**(3), 321–335.
- Aldwin, C. M., Levinson, M. R. (2004). Posttraumatic growth: a developmental perspective. *Psychological Inquiry*, **15**(1), 19–52.
- American Psychiatric Association (APA) (1994). *Diagnostic and Statistical Manual of Mental Disorders*, 4th edn. Washington DC: American Psychiatric Association.
- Antonovsky, A. (1979). *Health, Stress and Coping*. San Francisco: Jossey-Bass.
- Appadurai, A. (1996). *Modernity at Large: Cultural Dimensions of Globalization*. Public Worlds Volume 1. Minneapolis: University of Minnesota Press.
- Baker, P. H. & Ausink, J. A. (1995). State collapse and ethnic violence: toward a predictive model. *Parameters*, **26**(1), 19–36.
- Bangirana, P., Idro, R., John, C. C. & Boivin, M. J. (2006). Rehabilitation for cognitive impairments after cerebral malaria in African children: strategies and limitations. *Tropical Medicine and International Health*, **11**(9), 1–9.
- Ben-Ezra, M. (2003) Flashbacks and PTSD. *The British Journal of Psychiatry*, **183**, 75.
- Bleich, A., Gelkopf, M. & Solomon, Z. (2003). Exposure to terrorism, stress related health symptoms, and coping behaviours among a nationally representative sample in Israel. *Journal of the American Medical Association*, **290**(5), 612–620.
- Bolton, P. & Tang, A. M. (2002). An alternative approach to cross-cultural function assessment. *Social Psychiatry and Psychiatric Epidemiology*, **37**, 537–543.
- Bremner, J. D. (2002). *Does Stress Damage the Brain? Understanding Trauma Related Disorders from a Mind-Body Perspective*. New York: W. W. Norton.
- Bryant, R. A. (2006). Cognitive behavior therapy: Implications from advances in neuroscience. In *PTSD: Brain Mechanisms and Clinical Implications*, ed. N. Kato, M. Kawata, & Pitman, R. K. Tokyo: Springer, pp. 255–270.
- Carnegie Commission on Preventing Deadly Conflict. (1997). *Preventing Deadly Conflict: Final Report*. New York, NY: Carnegie Corporation.
- Caspi, A., Sugden, K., Moffitt, T. E. *et al.* (2003). Influence of life stress on depression: moderation by a polymorphism in the 5-HTT gene. *Science*, **301**, 386–389.
- Chemtob, C. M. (1996). Posttraumatic stress disorder, trauma and culture. In *International Review of Psychiatry*, ed. F. Mak & C. Nadelson, Vol II. Washington: American Psychiatric Press, pp. 257–292.
- Dean, E. T. (1997). *Shook over Hell: Post-traumatic Stress, Vietnam, and the Civil War*. Cambridge, MA: Harvard University Press, pp. 101–114.
- De Jong, J. T. V. M., ed. (2002a). *Trauma, War and Violence: Public Mental Health in Socio-Cultural Context*. New York: Plenum-Kluwer.
- De Jong, J. T. V. M. (2002b). Public mental health, traumatic stress and human rights violations in low-income countries: a culturally appropriate model in times of conflict, disaster and peace. In *Trauma, War and Violence: Public Mental Health in Sociocultural Context*, ed. De Jong, J. T. V. M. New York: Plenum-Kluwer. pp. 1–91.
- De Jong, J. T. V. M. (2004). Public mental health and culture: disasters as a challenge to Western mental health care models, the self, and PTSD. In *Broken Spirits: The Treatment of Asylum Seekers and Refugees with PTSD*, J. P. Wilson & B. Drozdek. New York: Brunner/Routledge Press, pp. 159–179.
- De Jong, J. T. V. M. (2005). Deconstructing critiques on the internationalization of PTSD. *Culture, Medicine and Psychiatry* **29**, 361–370.
- De Jong, J. T. V. M. & Clarke, L., eds. (1996). *Mental Health of Refugees*. World Health Organisation, Geneva. (On the net: <http://whqlibdoc.who.int/hq/1996/a49374.pdf>) (Available in, e.g. Arabic, Dutch, English, French, Khmer, Nepali, Portuguese, Spanish, Tamil, Tigrinha.)
- De Jong, J. T. V. M. & Van Ommeren, M. H. (2002). Toward a culture-informed epidemiology: combining qualitative and quantitative research in transcultural contexts. *Transcultural Psychiatry*, **39**, 422–433.
- De Jong, J. T. V. M. & Van Schaik, M. M. (1994). Cultural and religious aspects of coping with trauma after the Bijlmer disaster (in Dutch). *Tijdschrift voor Psychiatrie*, **36**(4), 291–304.
- De Jong, J. T. V. M., Komproe, I. H., Van Ommeren, M. *et al.* (2001). Lifetime events and posttraumatic stress disorder in four postconflict settings. *Journal of the American Medical Association*, **286**, 555–562.
- De Jong, J. T. V. M., Komproe, I. & Van Ommeren, M. (2003a). Common mental disorders in post-conflict settings. *Lancet*, **361**(6), 2128–2130.
- De Jong, J. T. V. M., Komproe, I. & Van Ommeren, M. (2003b). Terrorism, human-made and natural disasters

- as a professional and ethical challenge to psychiatry. *International Psychiatry*, **1**(7), 8–9.
- De Jong, J.T.V.M., Komproe, I. H., Spinazzola, J., van der Kolk, B. & van Ommeren, M. (2005). DESNOS in four post conflict settings: cross-cultural construct equivalence. *Journal of Traumatic Stress*, **18**(1), 13–23.
- Deutsch, M. (1983). The prevention of WW-III: a psychological perspective. *Political Psychology*, **4**, 3–31.
- Ehlers, A. & Clark, D. M. (2000). A cognitive model of PTSD. *Behaviour Research and Therapy*, **38**, 319–345.
- Einarsdóttir, J. (2004). *Tired of Weeping. Mother Love, Child Death, and Poverty in Guinea Bissau*. 2nd edn. Wisconsin: University of Wisconsin Press.
- Eisenbruch, M. (1984). Cross-cultural aspects of bereavement: I, II. A conceptual framework for comparative analysis. *Culture, Medicine and Psychiatry*, **8**(3), 283–309 and (4) 315–347.
- Eisenman, D. P., Green, B. L., de Jong, J. *et al.* (2006). Guidelines on mental health training of primary care providers for trauma exposed populations. *Journal of Traumatic Stress*, **19**(1), 5–17.
- Esty, D. E., Goldstone, J. A., Gurr, T. R., Surko, P. T. & Unger, A. N. (1995). *Working Papers: State Failure Task Force Report*; November 30, 1995.
- Green, B., Friedman, M., Jong, de J. *et al.*, eds. (2003). *Trauma Interventions in War and Peace: Prevention, Practice, and Policy*. New York: Plenum-Kluwer.
- Herman, J. (1992). Complex PTSD. *Journal of Traumatic Stress*, **5**, 377–391.
- Herman, D. B. & Susser, E. S. (2003). The World Trade Center attack: mental health needs and treatment implications. *International Psychiatry*, **1**(7), 2–4.
- Hobfoll, S. E. (1998). *The Ecology of Stress*. New York: Hemisphere.
- Hobfoll, S. E., Watson, P., Bell, C. C. *et al.* (2007). Five Essential Elements of Immediate and Mid-Term Mass Trauma Intervention: Empirical Evidence. In press.
- Inter-Agency Standing Committee (IASC). *IASC Guidance on Mental Health and Psychosocial Support in Emergency Settings*. Geneva: IASC. In press.
- Irish, D. P., Lundquist, K. F. & Nelsen, V. J., eds. (1993). *Ethnic Variation in Dying, Death and Grief: Diversity in Universality*. Washington, DC: Taylor & Francis.
- Jones, E., Hodgins Vermaas, R., McCartney, H. *et al.* (2003). Flashbacks and post-traumatic stress disorder: the genesis of a 20th-century diagnosis. *British Journal of Psychiatry*, **182**, 158–163.
- Kebede, D., Alem, A., Shibre, T. *et al.* (2003). Onset and clinical course of schizophrenia in Butajira-Ethiopia. *Society, Psychiatry and Psychiatric Epidemiology*, **38**, 625–631.
- Kendell, R. & Jablensky, A. (2003). Distinguishing between the validity and utility of psychiatric diagnoses. *American Journal of Psychiatry*, **160**, 4–12.
- Kendler, K. S., Kuhn, J. W., Vittum, J., Prescott, C. A. & Riley, B. (2005). The interaction of stressful life events and a serotonin transporter polymorphism in the prediction of episodes of major depression. *Archives of General Psychiatry*, **62**, 529–535.
- Kirmayer, L. J., Danielle, G., Looper, K. J. & Dao, M. D. (2004). Explaining medically unexplained symptoms. *Canadian Journal of Psychiatry*, **49**, 663–672.
- Kleinman, A. (1977). Depression, somatization, and the ‘new’ cross-cultural psychiatry. *Social Science in Medicine*, **11**, 3–10.
- Kuper, A. (1999). *Culture. The Anthropologists’ Account*. Cambridge: Harvard University Press.
- LeDoux, J. (1996). *The Emotional Brain*. New York: Simon and Schuster.
- Narrow, W. E., Rae, D. S., Robins, L. N. & Regier, D. A. (2002). Revised prevalence estimates of mental disorders in the United States. *Archives of General Psychiatry*, **59**, 115–123.
- Norris, F. H. & Kaniasty, K. (1996). Received and perceived social support in times of stress: a test of the Social Support Deterioration Deterrence Model. *Journal of Personality and Social Psychology*, **71**, 498–511.
- Osterman, J. & de Jong, J. T. V. M. (2006). Cultural issues. In *PTSD: Science and Practice – A Comprehensive Handbook*, ed. M. J. Friedman, Keane, T. M., Resick, P. A. In press.
- Panksepp, J. (1998). *Affective Neuroscience: the Foundations of Human and Animal Emotions*. New York: Oxford University Press.
- Parkes, C. M., Laungani, P. & Young, B., eds. (1997). *Death and Bereavement Across Cultures*. London: Routledge.
- Parry-Jones, B. & Parry-Jones, W. L. L. (1994). Post-traumatic stress disorder: supportive evidence from an eighteenth century natural disaster. *Psychological Medicine*, **24**, 15–27.
- Pinderhughes, C. A. (1979). Differential bonding: toward a psychophysiological theory of stereotyping. *American Journal of Psychiatry*, **136**, 33–37.
- Porter, M. & Haslam, N. (2005). Predisplacement and post-displacement factors associated with mental health of refugees and internally displaced persons: a meta-analysis. *Journal of the American Medical Association*, **294**(5), 602–612.
- Qouta, S. (2000). *Trauma, Violence and Mental Health: the Palestinian Experience*. Published doctoral dissertation, Vrije Universiteit, Amsterdam.

- Qouta, S. & El-Sarraj, E. (2002). Community mental health as practiced by the Gaza community mental health programme. In *Trauma, War and Violence: Public Mental Health in Socio-cultural Context*, ed. de Joop, T. V. M. New York: Plenum/Kluwer, pp. 317–337.
- Rosenblatt, P. C., Walsh, R. P. & Jackson, D. A. (1976). *Grief and Mourning in Cross-cultural Perspective*. New Haven, CT: HRAF Press.
- Rumelhart, D. E., Smolensky, P., McClelland, J. L. *et al.* (1986). Schemata and sequential thought processes in PDP models. In *Parallel Distributed Processing: Explorations in the Microstructure of Cognition*, ed. J. L. McClelland & D. E. Rumelhart. Cambridge: MIT Press, pp. 7–57.
- Schepers-Hughes, N. (1992). *Death Without Weeping: The Violence of Everyday Life in Brazil*. Berkeley: University of California Press.
- Shay, J. (1991). Learning about combat stress from Homer's *Iliad*. *Journal of Traumatic Stress*, **4**, 561–579.
- Shin, L. M., Kosslyn, S. M., McNally, R. J. *et al.* (1997). Visual imagery and perception in posttraumatic stress disorder: a positron emission tomographic investigation. *Archives of General Psychiatry*, **54**, 233–241.
- Southwick, S. M., Krystal, J. H., Morgan, C. A. *et al.* (1993). Abnormal noradrenergic function in posttraumatic stress disorder. *Archives of General Psychiatry*, **50**, 266–274.
- Staub, E. (1993). *The Roots of Evil: The Psychological and Cultural Origins of Genocide and Other Forms of Group Violence*. Cambridge: Cambridge University Press.
- Summerfield, D. (2000). Childhood, war, refugeedom and 'trauma': three core questions for mental health professionals. *Transcultural Psychiatry*, **37**(3), 417–435.
- Tedeschi, R. G. & Calhoun, L. G. (2004). Posttraumatic growth: conceptual foundations and empirical evidence. *Psychological Inquiry*, **15**(1), 1–18.
- Terheggen, M. A., Stroebe, M. S. & Kleber, R. J. (2001). Western conceptualizations and Eastern experience: a cross-cultural study of traumatic stress reactions among Tibetan refugees in India. *Journal of Traumatic Stress*, **14**(2).
- Tricket, E. J. (1995). The community context of disaster and traumatic stress: An ecological perspective from community psychology. In *Extreme Stress and Communities: Impact and Intervention*, ed. S. E. Hobfoll & M. W. De Vries. Boston: Kluwer, pp. 11–25.
- Trimble, M. R. (1985). Post-traumatic stress disorder: history of a concept. In *Trauma and Its Wake, The Study and Treatment of Post-Traumatic Stress Disorder*, ed. C. R. Figley. New York: Brunner/Mazel, p. 5.
- Tumarkin, M. (2005). *Traumascapes: The Power and Fate of Places Transformed by Tragedy*. Carlton: Melbourne University Press.
- United States Committee on Prevention of Mental Disorders. (1994). *Reducing Risks for Mental Disorders: Frontiers for Preventive Intervention Research*. Washington, DC: National Academy Press.
- Üstün, T. B. & Sartorius, N., eds. (1995). *Mental Illness in General Health Care*. Chichester, UK: Wiley.
- Van der Kolk, B., Pelcovitz, D., Roth, S., Mandel, F., McFarlane, A. & Herman, J. (1996). Dissociation, somatization, and affect dysregulation: the complexity of adaptation to trauma. *American Journal of Psychiatry*, **153** (7 Festschrift Supplement), 83–93.
- Van de Put, W. A. C. M. & Eisenbruch, M. (2002). The Cambodian experience. In *Trauma, War and Violence: Public Mental Health in Socio-cultural Context*, ed. J. de Jong T. V. M. New York: Plenum/Kluwer: pp. 93–157.
- Van Ommeren, M., Sharma, B., Thapa, S. *et al.* (1999). Preparing instruments for transcultural research: use of the translation monitoring form with Nepali-speaking Bhutanese refugees. *Transcultural Psychiatry*, **36**(3), 285–301.
- Weine, S., Danieli, Y., Silove, D., Van Ommeren, M., Fairbank, J. A. & Saul, J. (2002). Guidelines for international training in mental health and psychosocial interventions for trauma exposed populations in clinical and community settings. *Psychiatry*, **65**, 156–164.
- West, K. P., Caballero, B. & Black, R. E. (2001). Nutrition. In *International Public Health: Diseases, Programs, Systems and Policies*, ed. Merson, M. H., Black, R. E. & Mills, A. J. Maryland: Aspen Publishers, pp. 207–270.
- The WHO World Mental Health Survey Consortium (2004). Prevalence, severity, and unmet need for treatment of mental disorders in the World Health Organization world mental health surveys. *Journal of the American Medical Association*, **291**, 2581–2590.
- WHO (2002). *World Report on Violence and Health*. Geneva: WHO.
- Wilson, J. F., Weale, M. E., Smith, A. C. *et al.* (2001). Population genetic structure of variable drug response. *Nature Genetics*, **29**(3):265–269.
- Yehuda, R. (2002). Current concepts: post-traumatic stress disorder. *New England Journal of Medicine*, **346**, 108–114.
- Young, A. (1995). *The Harmony of Illusions: Inventing Post-traumatic Stress Disorder*. Princeton, NJ: Princeton University Press, p. 5.