

Cambridge University Press

978-0-521-88000-8 - A Mental Healthcare Model for Mass Trauma Survivors: Control-Focused Behavioral Treatment of Earthquake, War, and Torture Trauma

Metin Basoglu and Ebru Salcioglu

Excerpt

[More information](#)

Introduction

Mass trauma events, such as wars, armed conflicts, acts of terror, political violence, torture, and natural disasters affect millions of people around the world. The 'New World Order' following the collapse of the Soviet Union has seen an escalation in political violence of all kinds around the globe and a 'war on terror' leading to the invasion of Iraq and Afghanistan by the United States and its allies. According to the Office of the United Nations High Commissioner for Refugees (UNHCR, 2009) figures, the number of forcibly displaced people in the world was 42 million at the end of 2008, including 15.2 million refugees, 827 000 asylum-seekers, and 26 million internally displaced people, 20% of whom were in industrialized countries. According to World Health Organization estimates (Van Ommeren et al., 2005), 20% of people exposed to mass trauma events develop post-traumatic stress disorder (PTSD). This suggests that 8.4 million war survivors worldwide (about 1.7 million in industrialized countries and 6.7 million in developing countries) are likely to need mental healthcare. These figures do not include non-displaced civilians exposed to various war events, political violence, or torture. Although reliable estimates of the prevalence of torture are not available, it is known to be systematically practiced in at least 81 countries (Amnesty International, 2009). Torture is known to be associated with long-term mental health consequences (Başoğlu et al., 2001; Campbell, 2007; Johnson & Thompson, 2008; Steel et al., 2009).

Among natural disasters earthquakes are a major contributor to the public health problem posed by mass trauma events. Over the 30 years between 1974 and 2003 a total of 660 earthquakes occurred worldwide which resulted in the death of 559 608 people and affected more than 82 million people (Guha-Sapir et al., 2004). Earthquakes make a disproportionate impact in developing countries (Guha-Sapir et al., 2004). Indeed, of all people killed by earthquakes worldwide in the last decade, more than 72% were in

Asia (Guha-Sapir et al., 2004). Evidence (e.g. Armenian et al., 2000; Başoğlu et al., 2004b; Durkin, 1993; Lai et al., 2004; Önder et al., 2006; Wang et al., 2000) suggests that exposure to earthquakes is associated with increased psychiatric morbidity.

Currently there is no mental healthcare model that is capable of addressing the needs of millions of mass trauma survivors around the world, particularly the dispossessed populations of developing countries that often bear the brunt of these trauma events. Effective dealing with this problem requires interventions that are (1) *theoretically sound*, (2) *proven to be effective*, (3) *brief*, (4) *easy to train therapists in their delivery*, (5) *practicable in different cultures*, and (6) *suitable for dissemination through media other than professional therapists, such as lay people, self-help tools, and mass media*. Current treatments commonly used with trauma survivors do not meet more than two or three of these requirements. The last requirement is particularly important, as even the most effective treatment is of limited use if it cannot be widely disseminated to millions of people who may be in need of help.

Evolution of control-focused behavioral treatment

This book essentially tells the story of a nearly 20-year-long odyssey in search of a mental healthcare approach that satisfies the above requirements. Such a model requires a sound theoretical framework. In a previous book (Başoğlu, 1992) on *Torture and Its Consequences: Current Treatment Approaches*, we had examined the parallels between animal and human responses to unpredictable and uncontrollable stressors and presented a learning theory formulation of torture trauma (Başoğlu & Mineka, 1992) drawing on the work of Martin E. P. Seligman, Steve Maier, Bruce Overmier, Susan Mineka, and many other prominent learning theorists and anxiety researchers. As much of the

Cambridge University Press

978-0-521-88000-8 - A Mental Healthcare Model for Mass Trauma Survivors: Control-Focused Behavioral Treatment of Earthquake, War, and Torture Trauma

Metin Basoglu and Ebru Salcioglu

Excerpt

[More information](#)

Introduction

evidence in support of this formulation had originated from experimental work with animals, its relevance to human experience was not entirely clear. Accordingly, we set out on a long journey to explore the parallels between animal and human experience under extreme duress and gather evidence pointing to the relevance of this formulation to humans. First, we conducted a series of three studies in Turkey between 1993 and 1999 to examine the role of unpredictable and uncontrollable stressors in psychological responses to torture. After the cessation of hostilities in former Yugoslavia countries we launched a 5-year multi-site research program in Bosnia-Herzegovina, Croatia, and Serbia to examine the same issue in 1358 survivors of war trauma, including combat, internal displacement, refugee experience, aerial bombardment, and torture. These studies provided ample evidence in support of a learning theory model of traumatic stress. Such evidence implied that traumatic stress can be reversed by interventions that enhance sense of control over (or resilience against) traumatic stressors. This hypothesis ultimately led to the development of Control-Focused Behavioral Treatment (CFBT).

The important role of sense of control in treatment of anxiety disorders is well known to anxiety researchers. Indeed, Barlow (2002) provided an excellent review of the work on this issue in his book on *Anxiety and its Disorders*. There have been few attempts, however, to develop a behavioral intervention specifically designed to enhance sense of control over or resilience against anxiety cues or traumatic stressors. Such an intervention needs to aim for anxiety tolerance and control rather than anxiety reduction. Indeed, in a recent review of the processes of change in exposure treatment, Craske et al. (2008) found no conclusive evidence to suggest an association between treatment outcome and the extent of fear reduction during and between sessions. Craske and Mystkowski (2006) suggested that "... it is time to shift away from an emphasis on fear reduction during exposure therapy as an index of learning at the process level toward a model of exposure therapy that emphasizes ... weakening of avoidance and strengthening tolerance of aversive internal states and fear" (pp. 233).

This is indeed what we have done in the 1990s in the light of findings from our studies pointing to the important role of sense of control in the development (Başoğlu et al., 1997) as well as treatment (Başoğlu et al., 1994a; Başoğlu et al., 1994b) of anxiety disorders. We shifted treatment focus from habituation to

enhancement of sense of control over anxiety cues and anxiety tolerance. For reasons detailed in Chapter 6, we thought such a paradigm change might enhance the efficacy of behavioral treatment. This not only led to important procedural changes in the application of exposure treatment but also a broader treatment focus including but not limited to avoidance behaviors. Hence, CFBT came into existence.

In 1999 a 7.4 magnitude earthquake struck the Marmara region of Turkey, killing more than 17 000 people and exposing millions of people to severe trauma. Until then much of our experience with behavioral treatment was limited to patients with anxiety disorders in clinical settings. Our knowledge on the development and course of traumatic stress reactions in naturalistic settings was rather limited. This disaster turned out to be a major milestone for our work in providing not only an opportunity to test CFBT more extensively but also valuable insights into natural processes of recovery from trauma. We learned a great deal by simply observing how people recover from traumatic stress without any help from a therapist. Having experienced the earthquake and the after-shocks ourselves, we also learned a great deal from our own experience.

In 1999 we established a research-driven treatment delivery project and conducted fieldwork with more than 10 000 survivors in 6 years. When we set out to test CFBT in the early days of the disaster, inundated by demands for help from thousands of survivors, we quickly realized that CFBT delivered in 8 to 10 sessions was too long for post-disaster circumstances. Furthermore, due to demographic mobility in the disaster region and day-to-day survival problems, many survivors were not able to attend treatment for more than one session. Therefore, we had no choice but to deliver treatment in a single session and hope for the best. Given that not much can be squeezed into a 60-minute session, treatment was limited to instructions for self-exposure to fear-evoking trauma cues presented with a treatment rationale designed to enhance sense of control over fear. Although we knew from previous experience that much of the improvement in anxiety disorders with exposure treatment occurs within the first few weeks after a few exposure sessions (Marks et al., 1988; Marks et al., 1993), we were not certain whether the survivors would comply with self-exposure instructions in a post-disaster setting without regular monitoring of progress. In the meantime we conducted research to examine treatment outcome.

To our own surprise, an open trial (Başoğlu et al., 2003b) showed that 80% of the cases improved after a single treatment session, which was confirmed by later randomized controlled studies (Başoğlu et al., 2005b; Başoğlu et al., 2007b). Thus, single-session CFBT came into being, proving once again that necessity is the mother of invention!

We then embarked on a search for an explanation for this somewhat serendipitous discovery. Examining how survivors coped with debilitating fear of earthquakes, we discovered that many survivors, without any instructions or guidance from a mental health professional, used self-exposure in their natural environment to overcome their fear of earthquakes. This discovery was an eye opener for us in several ways. Most importantly, it suggested that self-help is not only a viable approach in survivor care but also one that carries great potential. This may not be surprising from an evolutionary point of view, considering that trauma is as old as human history and our survival could not have been possible without the secret key to trauma recovery coded in our genes. Second, it pointed to live exposure as the most potent therapeutic ingredient in behavioral treatment, thereby justifying the sharp focus of CFBT on anxiety cues and avoidance behaviors, excluding cognitive restructuring and other anxiety management strategies that characterize traditional cognitive-behavioral treatments. Furthermore, it made us realize that CFBT simply provides a motivational impetus for a naturally existing tendency in people to use self-exposure as a means of overcoming trauma-induced helplessness. In a sense the intervention merely imitated a key natural recovery process in humans. With such insight, we set out to search for other evidence pointing to exposure as an evolutionarily determined process in recovery from trauma. Indeed, such evidence eventually helped us conceive a self-help model of mental healthcare for survivors. This model incorporates several variants of CFBT, which were developed and routinely used with good results in more than 6000 earthquake survivors. Based on this experience we also developed tools designed to facilitate cost-effective dissemination of treatment knowledge to care providers as well as to survivors themselves.

This book brings together the knowledge and experience gained through two decades of work with torture, war, and earthquake survivors. Despite its broader scope, it could be regarded as a sequel to the 1992 book on torture (Başoğlu, 1992) in the sense that the hypotheses generated by a learning theory

formulation of torture in the latter guided the entire research presented in this book. Although the book may appear to concern different trauma events, its focus is on mechanisms of traumatic stress and recovery common to all forms of trauma, whether of human design or due to natural causes. As such, it is designed to facilitate understanding of traumas of an apparently different nature around a unifying theory and how they may respond to brief behavioral interventions that closely match their underlying mechanisms of traumatic stress. As research guided by learning theory focuses on universals in animal and human behavior under duress, its findings cut across not only species but also cultures. This is an important point to bear in mind in evaluating the cross-cultural applicability of the findings reviewed in this book.

In view of the fact that CFBT is an exposure-based treatment, evidence of its efficacy reviewed in this book needs to be considered in the broader context of the robust evidence base for other exposure-based treatments (reviewed in American Psychiatric Association, 2004; National Institute of Clinical Excellence, 2005). We were initially reluctant to give it a different name to avoid cluttering the literature with yet another label for exposure-based treatments. However, considering the rather radical departure from habituation paradigm to anxiety tolerance and control and various procedural differences that distinguish it from traditional exposure treatment, Control-Focused Behavioral Treatment appeared to be an appropriate name for this intervention. We do not contend that it is an entirely novel intervention and it might well be regarded as a streamlined, simplified, and enhanced version of traditional behavioral treatment.

Evidence base

In this book we review findings from more than 20 studies that contributed to the development of CFBT and a mental healthcare model based on this intervention. As we refer to these studies throughout the book, their methodology is briefly summarized in Table 1, Table 2, and Table 3 to facilitate evaluation of their findings. These tables also provide some idea about the evidence base for CFBT. As part of the work covered in the book has already been published, some findings may be familiar to the reader. Nevertheless, as this is the first time we present our work in its entirety together with a detailed account of its theoretical

Table 1 Studies of survivors of torture, war, and earthquake with similar methodology

| Study | Trauma | Sample type | Sample size | Sampling method | Time since trauma (months) | Measures | |
|--|------------|---|------------------|--|----------------------------|------------------------------|------------------------------|
| | | | | | | Assessor-rated | Self-rated |
| 1 Başoğlu, 2009; Başoğlu et al., 1997; Başoğlu et al., 1994c | Torture | Mixed group of political activists and non-activists | 202 | Consecutive referrals from human rights organizations and cases accessed using snowballing method in Istanbul, Turkey | 44 | SIST SCID CAPS | BDI |
| 2 Başoğlu et al., 2007a | Torture | Veterans and civilian survivors of war | 230 ¹ | Target sampling from two associations for war veterans and prisoners of war in Belgrade (Serbia), collective camps in Rijeka (Croatia), and community in Banja Luka (Republic of Srpska) and Sarajevo (Bosnia-Herzegovina) | 95 | SIST SCID CAPS RTSQ | SITSOW BDI DRS EBAW |
| 3 Başoğlu et al., 2005a | War | Veterans, refugees, and internally displaced civilian survivors of war | 1079 | Cross-sectional survey through target sampling in Belgrade (Serbia), Rijeka (Croatia), Sarajevo (Bosnia- Herzegovina), and Banja Luka (Republic of Srpska) | 77 | SISOW SCID CAPS | SITSOW BDI DRS |
| 4 Şalcioğlu, 2004 | Earthquake | Survivors in the community | 387 | Target sampling in the community (n = 188) and among self-referrals for treatment (n = 199) | 22 | SISE SCID CAPS RTSQ | SITSES BDI FAQ EBAT |

BDI = Beck Depression Inventory, DRS = Depression Rating Scale, CAPS = Clinician's Administered PTSD Scale, EBAT = Emotion and Beliefs after Trauma, EBAW = Emotions and Beliefs after War, FAQ = Fear and Avoidance Questionnaire, RTSQ = Redress for Trauma Survivors Questionnaire, SCID = Structured Clinical Interview for DSM-III-R/DSM-IV Disorders, SISE = Structured Interview for Survivors of Earthquake, SISOW = Structured Interview for Survivors of War, SIST = Structured Interview for Survivors of Torture, SITSES = Screening Instrument for Traumatic Stress in Earthquake Survivors, SITSOW = Screening Instrument for Traumatic Stress in War Survivors.

¹ In the original study the sample size was reported as 279, including 49 survivors whose psychological assessment was conducted in relation to a war stressor other than torture. The latter cases are excluded in the analyses reported in this book.

Cambridge University Press

978-0-521-88000-8 - A Mental Healthcare Model for Mass Trauma Survivors: Control-Focused Behavioral Treatment of Earthquake, War, and Torture Trauma

Metin Basoglu and Ebru Salcioglu

Excerpt

[More information](#)

Introduction

Table 2 Field surveys with earthquake survivors (N = 4332)

| Study | n | Sampling method | Time since earthquake (months) | Measures |
|------------------------|------|--|--------------------------------|-------------|
| Başoğlu et al., 2002 | 1000 | Consecutive screening in 5 survivor camps | 10 | SITSES |
| Başoğlu et al., 2004b | 950 | Random community sampling | 14 | SITSES, FAQ |
| Şalcıoğlu et al., 2003 | 586 | Consecutive screening in 3 survivor camps | 20 | SITSES, FAQ |
| Şalcıoğlu et al., 2007 | 769 | Consecutive screening among resettled homeless survivors | 40 | SITSES, FAQ |
| Livanou et al., 2002 | 1027 | Consecutive self-referrals for treatment | 14 | SITSES |

SITSES = Screening Instrument for Traumatic Stress in Earthquake Survivors, FAQ = Fear and Avoidance Questionnaire.

Table 3 Treatment studies

| | Trauma | n | Treatment |
|-------------------------------------|-----------------|-----|---|
| Randomized controlled trials | | | |
| Başoğlu et al., 2005b | Earthquake | 59 | Single session CFBT |
| Başoğlu et al., 2007b | Earthquake | 31 | Earthquake Simulation Treatment + Single-session CFBT |
| Open trials | | | |
| Başoğlu et al., 2003b | Earthquake | 231 | Full-course CFBT |
| Başoğlu et al., 2003a | Earthquake | 10 | Earthquake Simulation Treatment |
| Şalcıoğlu & Başoğlu, 2008 | Earthquake | 23 | Full-course CFBT with children |
| Şalcıoğlu & Başoğlu, 2008 | Earthquake | 8 | Earthquake Simulation Treatment with children |
| Başoğlu & Şalcıoğlu, this volume | Earthquake | 84 | Self-help manual |
| Case studies | | | |
| Başoğlu & Aker, 1996 | Torture | 1 | Exposure Treatment |
| Başoğlu et al., 2004a | Torture | 1 | Exposure Treatment |
| Başoğlu et al., 2009 | Earthquake | 8 | Self-help manual |
| Başoğlu & Şalcıoğlu, this volume | War and torture | 2 | Full-course CFBT |
| Başoğlu & Şalcıoğlu, this volume | Earthquake | 2 | Full-course CFBT of prolonged grief |

CFBT = Control-Focused Behavioral Treatment.

framework, the book might provide an opportunity to re-evaluate previously published findings around a unifying theory. We also present some previously unpublished findings based on pooled samples from previous studies. Table 1 shows the studies that examined mechanisms of traumatic stress in torture, war, and earthquake survivors using similar methodology.

The first study is a series of three consecutive studies designed to examine mechanisms of traumatic

stress in torture survivors. A substantial part of the empirical evidence relating to mechanisms of traumatic stress in earthquake survivors originated from a study by Şalcıoğlu (2004). Table 2 shows the field surveys that examined PTSD prevalence and symptom profile and the risk factors for traumatic stress in earthquake survivors. Table 3 lists the treatment studies with torture and earthquake survivors. Other studies that examined psychometric properties of various

Cambridge University Press

978-0-521-88000-8 - A Mental Healthcare Model for Mass Trauma Survivors: Control-Focused Behavioral Treatment of Earthquake, War, and Torture Trauma

Metin Basoglu and Ebru Salcioglu

Excerpt

[More information](#)**Introduction**

questionnaires for assessment of earthquake, war, and torture trauma are reviewed in Chapter 3 and Chapter 5.

Preview of contents**Part 1 – theory**

Chapter 1 presents a learning theory model of traumatic stress and some evidence in support of the model. It reviews the role of unpredictable and uncontrollable stressors in earthquake-related traumatic stress, cognitive and behavioral responses to earthquakes, natural recovery processes in earthquake survivors, and possible evolutionary processes that determine psychological responses to earthquake trauma. In addition, some research data are presented in support of the helplessness and hopelessness effects of earthquakes.

Chapter 2 is an updated version of a previous chapter (Başoğlu & Mineka, 1992) on the role of uncontrollable and unpredictable stressors in torture-induced traumatic stress, which appeared in our 1992 book on torture (Başoğlu, 1992). It presents a learning theory account of captivity, interrogation, and torture experiences and provides empirical evidence in support of this formulation. Also reviewed are various cognitive and behavioral coping responses during and after torture, the role of resilience and context of captivity in torture-induced distress, natural recovery processes in the post-captivity phase, and the role of cognitive factors in war and torture trauma.

Part 2 – assessment and treatment

Chapter 3 provides an assessment strategy for screening of mass trauma survivors and evaluation of intervention outcomes. The assessment instruments developed for this purpose are provided in Appendix A. We have also provided guidelines in determining treatment needs of survivors and priorities in treatment planning on the basis of data obtained using these instruments.

Chapter 4 includes a detailed description of CFBT as it would be delivered to war, torture, or earthquake survivors in a clinical or fieldwork setting. The treatment is described in a step by step how-to-do-it fashion with some case vignettes to facilitate understanding of various issues in behavioral assessment and treatment. The chapter includes a description of various

applications of CFBT in earthquake survivors, such as treatment of children, delivery of single-session CFBT individually and in groups, and using an earthquake simulator.

Chapter 5 details behavioral assessment of grief using two questionnaires developed for this purpose and describes application of CFBT in cases with prolonged grief problems. Case vignettes are provided, along with a discussion of various issues in treatment. Also presented are some evidence of treatment effectiveness from our studies and a comparison of CFBT with other treatments of prolonged grief.

Chapter 6 reviews the evidence from treatment studies that tested CFBT. This chapter is informative in demonstrating the developmental stages for CFBT and the various theoretical and practical considerations that went into development of its various applications, such as single-session CFBT, Earthquake Simulation Treatment, and self-administered CFBT. It also includes a discussion of mechanisms of improvement in CFBT (e.g. habituation versus increased sense of control) and available evidence pointing to the role of sense of control in recovery from traumatic stress. Also reviewed are various theoretical and procedural features of CFBT that distinguish it from other exposure treatments.

Part 3 – implications for care of mass trauma survivors

Chapter 7 reviews the implications of our work for a cost-effective mental healthcare model for earthquake survivors. The chapter is organized into three sections. The first section details a three-stage outreach treatment delivery program designed to deliver care to as many survivors as possible with minimal therapist involvement by utilizing single-session applications of CFBT and self-help tools. The second section reviews prospects for alternative methods of treatment dissemination through lay therapists, a self-help manual, and mass media. The third section outlines a mental healthcare model for earthquake survivors that incorporates all possible treatment dissemination methods and reviews procedures that need to be undertaken in pre- and post-disaster phases for large-scale implementation of the model in earthquake-prone countries.

Chapter 8 reviews the implications of our work for various issues concerning care of mass trauma survivors, including generally accepted guidelines regarding

Cambridge University Press

978-0-521-88000-8 - A Mental Healthcare Model for Mass Trauma Survivors: Control-Focused Behavioral Treatment of Earthquake, War, and Torture Trauma

Metin Basoglu and Ebru Salcioglu

Excerpt

[More information](#)

Introduction

aims, levels, focus, and timing of interventions and the role of antidepressants in treatment of trauma survivors. This chapter casts a critical look at the current status of knowledge in trauma treatment, mental healthcare policies for mass trauma survivors, and the controversy that surrounds the concept of PTSD in the light of evidence from our work.

Chapter 9 reviews various controversial issues in rehabilitation of war and torture survivors, including the effectiveness of and justification for current lengthy and costly torture rehabilitation programs. As it is widely believed that torture is more severe than natural disaster trauma and therefore more difficult to treat, some comparative data from our studies testing this hypothesis are presented. Also included are two recent case studies of CFBT, which point to prospects for brief treatment of tortured asylum-seekers and refugees. Finally, the possible reasons for lack of progress in the field of torture rehabilitation are reviewed with some recommendations for effective rehabilitation of war and torture survivors.

Appendices: assessment instruments and treatment manuals

Appendix A provides various assessment instruments that might be of use to care providers in screening survivors for treatment needs and evaluation of intervention outcomes. These include the adult and child versions of the *Screening Instrument for Traumatic Stress in Earthquake Survivors*, *Fear and Avoidance Questionnaire*, *Depression Rating Scale*, *Screening Instrument for Traumatic Stress in War Survivors*, *Grief Assessment Scale*, *Behavior Checklist for Grief*, *Work and Adjustment Scale*, *Global Improvement Scale*, and *Sense of Control Scale*. Available psychometric data on as yet unpublished instruments are provided in Chapter 3 and Chapter 5. These instruments can be freely translated and used in their present form without permission from the publishers or the authors and with due reference to the authors in any publications based on them.

Appendix B includes a CFBT Delivery Manual (*Helping People Recover from Earthquake Trauma*), which is designed to assist health professionals (mental healthcare providers, general practitioners, nurses, social workers, etc.), as well as lay people with an adequate educational background in delivering CFBT to survivors. It is highly structured to provide step by step guidance in assessment and treatment. It also

includes sections on treatment of children, delivery of treatment in a single session, and assessment and treatment of prolonged grief.

Appendix C includes a self-help manual (*Recovering from Earthquake Trauma*) designed to help earthquake survivors in administering CFBT by themselves. It is also highly structured to guide users at every stage of assessment and treatment. It includes sections on assessment, explanation of treatment and its rationale, overcoming earthquake-related fear and distress, evaluation of treatment progress, treating prolonged grief, and dealing with problems in treatment. This manual can be used after an initial assessment by a therapist or as a stand-alone tool with minimal or no therapist contact.

These manuals are prepared in the understanding that post-disaster circumstances, particularly in developing country settings, require psychological care dissemination to survivors in every way possible. It is worth noting here that while we piloted the self-help manual and used it in routine treatment delivery we did not yet have a chance to test the usefulness of the CFBT Delivery Manual in guiding lay therapists in delivery of the intervention. This is because we prepared this manual towards the end of the project in Turkey after we accumulated sufficient experience and observations (reviewed in Chapter 7) that made us think that such a manual may be a useful tool in treatment dissemination. Nevertheless, we decided to make the manual available so that it can be tested and used by others. At the very least it may be useful in disseminating treatment knowledge to mental health professionals involved in care of earthquake survivors. Considering the highly structured nature of the manual, it might perhaps be helpful in delivering the intervention without extensive prior training in CFBT, though this remains to be tested.

References

- American Psychiatric Association (2004). *Practice Guideline for the Treatment of Patients with Acute Stress Disorder and Posttraumatic Stress Disorder*, Arlington, VA: American Psychiatric Association Practice Guidelines.
- Amnesty International (2009). *Amnesty International Report 2009: The State of the World's Human Rights*. Accessed on May 10, 2010 at <http://thereport.amnesty.org/>.
- Armenian, H. K., Morikawa, M., Melkonian, A. K., Hovanesian, A. P., Haroutunian, N., Saigh, P. A., Akiskal, K. and Akiskal, H. S. (2000). Loss as a determinant of PTSD in a cohort of adult survivors of

Cambridge University Press

978-0-521-88000-8 - A Mental Healthcare Model for Mass Trauma Survivors: Control-Focused Behavioral Treatment of Earthquake, War, and Torture Trauma

Metin Basoglu and Ebru Salcioglu

Excerpt

[More information](#)

Introduction

- the 1988 earthquake in Armenia: Implications for policy. *Acta Psychiatrica Scandinavica*, **102**, 58–64.
- Barlow, D. H. (2002). *Anxiety and its Disorders: The Nature and Treatment of Anxiety and Panic*. New York: Guilford Press.
- Başoğlu, M. (1992). *Torture and its Consequences: Current Treatment Approaches*. Cambridge: Cambridge University Press.
- Başoğlu, M. (2009). A multivariate contextual analysis of torture and cruel, inhuman, and degrading treatments: Implications for an evidence-based definition of torture. *American Journal of Orthopsychiatry*, **79**, 135–145.
- Başoğlu, M. and Aker, T. (1996). Cognitive-behavioural treatment of torture survivors: A case study. *Torture*, **6**, 61–65.
- Başoğlu, M., Ekblad, S., Bäärnhielm, S. and Livanou, M. (2004a). Cognitive-behavioral treatment of tortured asylum seekers: A case study. *Journal of Anxiety Disorders*, **18**, 357–369.
- Başoğlu, M., Jaranson, J. M., Mollica, R. F. and Kastrup, M. (2001). Torture and mental health: a research overview. In *The Mental Health Consequences of Torture*, ed. E. Gerrity, T. M. Keane and F. Tuma. Kluwer Academic / Plenum Publishers, 35–62.
- Başoğlu, M., Kılıç, C., Şalcioğlu, E. and Livanou, M. (2004b). Prevalence of posttraumatic stress disorder and comorbid depression in earthquake survivors in Turkey: An epidemiological study. *Journal of Traumatic Stress*, **17**, 133–141.
- Başoğlu, M., Livanou, M. and Crnobaric, C. (2007a). Torture vs other cruel, inhuman, and degrading treatment: Is the distinction real or apparent? *Archives of General Psychiatry*, **64**, 277–285.
- Başoğlu, M., Livanou, M., Crnobaric, C., Frančišković, T., Suljić, E., Đurić, D. and Vranešić, M. (2005a). Psychiatric and cognitive effects of war in former Yugoslavia: Association of lack of redress for trauma and posttraumatic stress reactions. *Journal of the American Medical Association*, **294**, 580–590.
- Başoğlu, M., Livanou, M. and Şalcioğlu, E. (2003a). A single session with an earthquake simulator for traumatic stress in earthquake survivors. *American Journal of Psychiatry*, **160**, 788–790.
- Başoğlu, M., Livanou, M., Şalcioğlu, E. and Kalender, D. (2003b). A brief behavioural treatment of chronic post-traumatic stress disorder in earthquake survivors: Results from an open clinical trial. *Psychological Medicine*, **33**, 647–654.
- Başoğlu, M., Marks, I. M., Kılıç, C., Brewin, C. R. and Swinson, R. P. (1994a). Alprazolam and exposure for panic disorder with agoraphobia: Attribution of improvement to medication predicts subsequent relapse. *British Journal of Psychiatry*, **164**, 652–659.
- Başoğlu, M., Marks, I. M., Kılıç, C., Swinson, R. P., Noshirvani, H., Kuch, K. and O'Sullivan, G. (1994b). Relationship of panic, anticipatory anxiety, agoraphobia and global improvement in panic disorder with agoraphobia treated with alprazolam and exposure. *British Journal of Psychiatry*, **164**, 647–652.
- Başoğlu, M. and Mineka, S. (1992). The role of uncontrollable and unpredictable stress in post-traumatic stress responses in torture survivors. In *Torture and its Consequences: Current Treatment Approaches*, ed. M. Başoğlu. Cambridge: Cambridge University Press, 182–225.
- Başoğlu, M., Mineka, S., Paker, M., Aker, T., Livanou, M. and Gök, S. (1997). Psychological preparedness for trauma as a protective factor in survivors of torture. *Psychological Medicine*, **27**, 1421–1433.
- Başoğlu, M., Paker, M., Paker, O., Özmen, E., Marks, I., İncesu, C., Şahin, D. and Sarımurat, N. (1994c). Psychological effects of torture: A comparison of tortured with nontortured political activists in Turkey. *American Journal of Psychiatry*, **151**, 76–81.
- Başoğlu, M., Şalcioğlu, E. and Livanou, M. (2002). Traumatic stress responses in earthquake survivors in Turkey. *Journal of Traumatic Stress*, **15**, 269–276.
- Başoğlu, M., Şalcioğlu, E. and Livanou, M. (2007b). A randomized controlled study of single-session behavioural treatment of earthquake-related post-traumatic stress disorder using an earthquake simulator. *Psychological Medicine*, **37**, 203–213.
- Başoğlu, M., Şalcioğlu, E. and Livanou, M. (2009). Single-case experimental studies of a self-help manual for traumatic stress in earthquake survivors. *Journal of Behavior Therapy and Experimental Psychiatry*, **40**, 50–58.
- Başoğlu, M., Şalcioğlu, E., Livanou, M., Kalender, D. and Acar, G. (2005b). Single-session behavioral treatment of earthquake-related posttraumatic stress disorder: A randomized waiting list controlled trial. *Journal of Traumatic Stress*, **18**, 1–11.
- Campbell, T. A. (2007). Psychological assessment, diagnosis, and treatment of torture survivors: A review. *Clinical Psychology Review*, **27**, 628–641.
- Craske, M. and Mystkowski, J. L. (2006). Exposure therapy and extinction: Clinical studies. In *Fear and Learning: From Basic Principles to Clinical Implications*, ed. M. G. Craske, D. Hermans and D. Vansteenwegen. Washington, DC: American Psychological Association, 217–233.
- Craske, M. G., Kircanski, K., Zelikowsky, M., Mystkowski, J., Chowdhury, N. and Baker, A. (2008). Optimizing

Cambridge University Press

978-0-521-88000-8 - A Mental Healthcare Model for Mass Trauma Survivors: Control-Focused Behavioral Treatment of Earthquake, War, and Torture Trauma

Metin Basoglu and Ebru Salcioglu

Excerpt

[More information](#)

Introduction

- inhibitory learning during exposure therapy. *Behaviour Research and Therapy*, **46**, 5–27.
- Durkin, M. E. (1993). Major depression and post-traumatic stress disorder following the Coalinga and Chile earthquakes: A cross-cultural comparison. *Journal of Social Behavior and Personality*, **8**, 405–420.
- Guha-Sapir, D., Hargitt, D. and Hoyois, P. (2004). *Thirty years of natural disasters 1974–2003: the numbers*. Centre for Research on the Epidemiology of Disasters, UCL Presses, Universitaires de Louvain.
- Johnson, H. and Thompson, A. (2008). The development and maintenance of post-traumatic stress disorder (PTSD) in civilian adult survivors of war trauma and torture: A review. *Clinical Psychology Review*, **28**, 36–47.
- Lai, T.-J., Chang, C.-M., Connor, K. M., Lee, L.-C. and Davidson, J. R. T. (2004). Full and partial PTSD among earthquake survivors in rural Taiwan. *Journal of Psychiatric Research*, **38**, 313–322.
- Livanou, M., Başoğlu, M., Şalcioğlu, E. and Kalender, D. (2002). Traumatic stress responses in treatment-seeking earthquake survivors in Turkey. *Journal of Nervous and Mental Disease*, **190**, 816–823.
- Marks, I. M., Lelliott, P., Başoğlu, M., Noshirvani, H., Monteiro, W., Cohen, D. and Kasvikis, Y. (1988). Clomipramine, self-exposure and therapist-aided exposure for obsessive-compulsive rituals. *British Journal of Psychiatry*, **152**, 522–534.
- Marks, I. M., Swinson, R. P., Başoğlu, M., Kuch, K., Noshirvani, H., O'Sullivan, G., Lelliott, P. T., Kirby, M., McNamee, G. and Şengün, S. (1993). Alprazolam and exposure alone and combined in panic disorder with agoraphobia: A controlled study in London and Toronto. *British Journal of Psychiatry*, **162**, 776–787.
- National Institute of Clinical Excellence (NICE) (2005). *Posttraumatic Stress Disorder (PTSD): The Management of PTSD in Adults and Children in Primary and Secondary Care*. London: Gaskell and the British Psychological Society.
- Önder, E., Tural, Ü., Aker, T., Kılıç, C. and Erdoğan, S. (2006). Prevalence of psychiatric disorders three years after the 1999 earthquake in Turkey: Marmara Earthquake Survey (MES). *Social Psychiatry and Psychiatric Epidemiology*, **41**, 868–874.
- Şalcioğlu, E. (2004). *The effect of beliefs, attribution of responsibility, redress and compensation on posttraumatic stress disorder in earthquake survivors in Turkey*. PhD Dissertation. Institute of Psychiatry, King's College London, London.
- Şalcioğlu, E. and Başoğlu, M. (2008). Psychological effects of earthquakes in children: Prospects for brief behavioral treatment. *World Journal of Pediatrics*, **4**, 165–172.
- Şalcioğlu, E., Başoğlu, M. and Livanou, M. (2003). Long-term psychological outcome for non-treatment-seeking earthquake survivors in Turkey. *Journal of Nervous and Mental Disease*, **191**, 154–160.
- Şalcioğlu, E., Başoğlu, M. and Livanou, M. (2007). Post-traumatic stress disorder and comorbid depression among survivors of the 1999 earthquake in Turkey. *Disasters*, **31**, 115–129.
- Steel, Z., Chey, T., Silove, D., Marnane, C., Bryant, R. A. and Van Ommeren, M. (2009). Association of torture and other potentially traumatic events with mental health outcomes among populations exposed to mass conflict and displacement: A systematic review and meta-analysis. *Journal of the American Medical Association*, **302**, 537–549.
- United Nations High Commissioner for Refugees (UNHCR) (2009) 2008 Global Trends: Refugees, Asylum Seekers, Returnees, Internally Displaced and Stateless Persons.
- Van Ommeren, M., Saxena, S. and Saraceno, B. (2005). Aid after disasters. *British Medical Journal*, **330**, 1160–1161.
- Wang, X., Gao, L., Shinfuku, N., Zhang, H., Zhao, C. and Shen, Y. (2000). Longitudinal study of earthquake-related PTSD in a randomly selected community sample in North China. *American Journal of Psychiatry*, **157**, 1260–1266.

Part 1

Theory

Chapter

1

A learning theory formulation of earthquake trauma

Since the 1960s substantial experimental work with animals suggested that unpredictable and uncontrollable stressors play an important role in the development of anxiety and fear. Exposure to unpredictable and uncontrollable stressors is associated with certain associative, motivational, and emotional deficits in animals that closely resemble the effects of traumatic stress in humans (Mineka and Zinbarg, 2006). These deficits include learned helplessness, a phenomenon characterized by failure of animals initially exposed to uncontrollable shocks to later learn to escape or avoid shocks that were potentially controllable in a different situation (Overmier and Seligman, 1967; Seligman and Maier, 1967), and opiate-mediated analgesia (Maier et al., 1982; Maier et al., 1983). As detailed reviews of findings from experimental animal studies and their relevance to anxiety disorders are available elsewhere (Başoğlu and Mineka, 1992; Foa et al., 1992; Mineka and Zinbarg, 2006), such a review will not be attempted here. While much of the evidence concerning the role of unpredictable and uncontrollable stressors in anxiety is based on animals, evidence that emerged in the last two decades points to close parallels between animal and human responses to such stressors. In this chapter we present a learning theory model of traumatic stress and review the role of unpredictability and uncontrollability of stressors in the development of traumatic stress responses in people exposed to earthquakes. We also discuss various cognitive and behavioral responses to such stressors, which provide remarkable examples of how humans cope with unpredictable and uncontrollable stressors and recover from their effects. Finally, we present some data from our studies of earthquake survivors in support of the model.

A learning theory model of traumatic stress

Figure 1.1 illustrates how various factors or processes before, during, and after trauma lead to various post-trauma health outcomes. The model essentially reflects what we know about evolutionarily determined responses to life-threatening events in animals and humans. Animals have innate species-specific defense reactions against threatening events, such as fight, flight, or freezing (Bolles, 1970). Accordingly, during trauma exposure the model entails two types of stressor response sequences (or pathways) that broadly reflect fight and flight responses. Fight responses in humans involve various proactive cognitive, behavioral, and emotional responses aimed at removing the threat, minimizing its adverse effects, or reducing the distress associated with it. Flight responses (e.g. escape from the dangerous situation), on the other hand, are essentially avoidance processes aimed at self-protection (Bolles, 1970).

Appraisal of controllability of a threatening event determines whether a person engages in fight or flight responses. If the individual has not had previous learning of control over negative outcomes of stressor events, the event is perceived as uncontrollable, leading to flight responses. Loss of cognitive, behavioral, or emotional control over the event (e.g. inability to escape from the situation, avoid the occurrence of the event, or reduce its impact) is associated with distress, fear, or panic. Such loss of control confirms the uncontrollability of the stressor event and leads to a state of helplessness or anxiety with respect to possible future occurrences of the event. According to Alloy and colleagues (1990), individuals who are uncertain about their ability to control outcomes of future stressor events