

Edited by Petra Buchwald, Kathleen A. Moore and Tobias Ringeisen

Stress and Anxiety

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Application to Education and Health

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2011

Bibliografische Information der Deutschen Nationalbibliothek

Die Deutsche Nationalbibliothek verzeichnet diese Publikation in der Deutschen Nationalbibliografie; detaillierte bibliografische Daten sind im Internet über <http://dnb.d-nb.de> abrufbar.

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ISBN 978-3-8325-2886-7

Logos Verlag Berlin GmbH
Comeniushof, Gubener Str. 47,
10243 Berlin
Tel.: +49 (0)30 42 85 10 90
Fax: +49 (0)30 42 85 10 92
INTERNET: <http://www.logos-verlag.de>

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CHAPTER NINE

PARENTAL CRUCIBLES: FAMILIES COPING WITH DISASTER

Krzysztof Kaniasty, Indiana University of Pennsylvania, United States and Institute of Psychology, Polish Academy of Science, Poland

Disasters that are brought about by force of nature (e.g., floods, hurricanes, earthquakes) or human agents (e.g., toxic contamination or spills, industrial accidents, terrorism) constitute a large set of stressors that undeniably exert strong impact on social relationships. This particular aspect is a constant in all definitions of these very diverse stressful events: "A disaster is defined as a basic disruption of the social context within which individuals and groups function" (Fritz, 1961, p. 651). The purpose of this paper is to offer a brief catalog of psychological complexities reported by studies examining coping with natural and human-induced disasters within the most fundamental social entity: a family with children.

Parents coping poorly

It has been long recognized that one of the most important predictors of psychological functioning of children and adolescents following potentially traumatic events is the efficacy with which their caregivers cope with trauma. Parents who act, and/or are being perceived, as able to cope successfully with challenges of disaster recovery, convey calm and confidence to their children that translate into a greater sense of coping efficacy by the children themselves (Charuvastra & Cloitre, 2008; Scheering & Zeanah, 2001). In one of the first empirical studies of emotional reactions of youth to natural disasters, Bloch, Silber, and Perry (1956) presented an intriguing finding concerning the dependence of a child's reactions on parental coping efforts. The two lead authors conducted semi-structured interviews with children, their parents and other key-informants about how children coped within 2 weeks of the tornado that killed 38 people and destroyed nearly 1,000 buildings in a small community in Mississippi in December, 1953. The researchers identified a pattern of parental coping that they labeled "dissociative-demanding parental response" characterized by "an indirect or direct plea for the child to assume the supportive and protective role" (p. 420). Block et al. reported that their analyses revealed a significant association between this "going to pieces" parental response and the children's emotional difficulties.

Swenson et al. (1996) assessed the duration of maternal reactions to disaster fourteen months after a hurricane. They found that the longer the period of time that mothers denied

what had happened, in addition to enduring feelings of depression and shock, significantly predicted the longevity of children's postdisaster behavioral and emotional problems. Mothers' and fathers' discordance in the intensity of their own reactions 18 months after a technological disaster was predictive of children's distress (Handford, et al., 1986). In other words, children whose both parents exhibited high psychological distress following the Three Mile Island nuclear accident were less negatively affected than children with one parent showing a low and the other high intensity of postdisaster reactions. Kelley et al. (2010) presented complex mediational analyses modeling the impact of a child's disaster exposure on their shorter- (3 to 7 months) and longer-term (14 to 17 months) PTSD symptomatology. Participants were mother-child dyads from New Orleans and surrounding areas affected by Hurricane Katrina in August, 2005. Greater levels of life threatening experiences, tangible losses, and life disruptions were associated with the mother's greater reliance on coping that was labeled by the authors as maladaptive (e.g., use of alcohol or drugs, giving up). In turn, these parents were more likely to use corporal punishment that increased their children's risk for PTSD. Among child and adolescent victims of a variety of other potentially traumatic events, hostile and coercive parenting behaviors have emerged as a strong predictor of symptoms of PTSD as well as of internalizing (Valentino, Berkowitz, & Stover, 2010). Although not frequently empirically studied, there is some alarming evidence that disasters may lead to an increase in violence against children (e.g. Curtis, Miller, & Berry, 2000; Keenan, Marshall, Nocera, & Runyan, 2004).

Parents experiencing psychological distress

Another finding reported by Kelley et al. (2010) was that both the child's exposure to hurricane and mother's inadequate coping were associated with greater levels of parental psychopathology. Numerous studies that used a variety of samples, measurement strategies, and methodologies (e.g., very young children, adolescents, general distress measures, assessments of depression, anxiety, PTSD, child self-reports of distress, parental reports of child's distress, mothers' distress, fathers' distress, shorter and longer-term follow-ups, prospective designs, etc.) reliably showed that increased levels of postdisaster parental symptomatology predicted higher levels of distress in their children (e.g., Green et al., 1991; Jones, Ribbe, Cunningham, Weddle, & Langley, 2002; Kiliç, Özgüven, & Sayil, 2003; McFarlane, 1987b; McLaughlin et al., 2009; Proctor, Fauchier, Oliver, Ramos, Rios, & Margolin, 2007; Gil-Rivas, Kilmer, Hypes, & Roof, 2010; Scheeringa & Zeanah, 2008; Spell et al., 2008; Swenson et al., 1996).

The influence of parents' psychological reactions on their children's mental health is in part due to their shared trauma exposure and their distress symptoms inadvertently rubbing off on

each other, but other factors contribute to this relational effect as well (see Scheeringa & Zeanah, 2001; Smith, Perrin, Yule, & Rabe-Hasketh, 2001). Notwithstanding the issues of reciprocal or reverse causation, it is often suggested that distressed parents become less effectual in their parenting and less available for their children. Clinical laboratory studies that investigated parent-child interactions of caregivers with varying degrees of PTSD symptomatology showed that distressed mothers, as compared to control caregivers, exhibited negative cognitions about their children and engaged in insensitive (i.e., avoidant, withdrawn, disorganized, stress-inducing) caregiving behaviors (Cohen, Hien, & Batchelder, 2008; Schechter et al., 2008). Schechter et al. (2010) reported that children of mother's suffering from PTSD spent a greater amount of time unsuccessfully attempting to engage their mothers' attention. In a study of victims and nonvictims of Hurricane Katrina, Scaramella, Sohr-Preston, Callahan, and Mirabile (2008) documented a negative link between mothers' depression and parenting efficacy (e.g., perceptions of being able to handle children's problems, change or correct their behavior). As expected, mother's poor parenting efficacy was associated with more problem behaviors among their 2-years old children.

Scheeringa and Zeanah (2001) discussed several potential mechanisms accounting for how parental PTSD symptomatology might impinge on a child's adaptation. For example, the symptomatic behavior of the parent could moderate the strength of the impact of traumatic event on their child's symptomatic responses. Implicit in this stress-buffering model of parental psychological functioning is the notion that the magnitude of harmful consequences of trauma should be augmented by high levels of parental distress or reduced by low levels of parental distress. Spell et al. (2008) examined the role of maternal well-being on children's psychological well-being in a sample of families displaced from their homes by Hurricane Katrina. The authors predicted that low maternal postdisaster symptomatology (global psychological distress and PTSD) would buffer (i.e., protect against) the impact of the hurricane on their children's distress (i.e., symptoms of externalizing and internalizing reported by mothers). Indeed, maternal distress moderated the effect of disaster exposure on children's well-being but not in the hypothesized fashion. Unexpectedly, the children with low distressed mothers and high disaster exposure presented similarly elevated levels of distress as those reported for children whose mothers were experiencing high distress regardless of the extent of their losses. In other words, high levels of parental symptoms were a risk factor irrespective of disaster exposure. However, why could low parental distress (assumed to be an asset) not protect children from greater mental health consequences of hurricane impact?

Parents overly protective of their children

Similarly disconcerting findings were reported by a prospective study of two-parent families with small children after the Northridge (Los Angeles, 1994) earthquake (Proctor, et al., 2007). As part of a large ongoing community investigation of familial conflicts, prior to the earthquake, parent-child play interaction was videotaped to assess for positive (i.e., responsiveness, positive reinforcement, and positive mood) and negative (i.e., pressure, impatience, and negative mood) parental behaviors. Eight-months after the disaster, mother's reports of her and child's distress were collected. The extent of disaster losses was associated with children poorer mental health but its impact was also moderated by the appraisals of pre-earthquake parental practices. Children of parents with poor parenting styles, regardless of the extent of earthquake damages, showed high levels of distress. Again unexpectedly, similarly high levels of distress were ascribed to high disaster exposure children whose parents exhibited greater propensity to display constructive and encouraging parental styles (i.e., high positive behaviors of mothers, low negative behaviors of fathers). The least psychologically affected were those children who experienced both the positive parental behaviors and low disaster losses. Thus, the routinely expected disaster exposure (dose) effect, that is, a linear positive relationship between the extent of damages and symptomatology, was observed in children of parents demonstrating desirable parenting practices. Additional analyses indicated that the total impact of the earthquake on children's distress was mediated by mothers' reports of their own and their husbands perceived postdisaster stress and distress (e.g., symptoms of PTSD, depression, somatization, marital conflict). An intriguing question arises once more: Why were parents with "good" parenting styles unable to protect their children from deleterious impact of high exposure?

It is simply possible that the stress-buffering potential of resources, such as a low parental distress (Spell et al., 2008) or positive parental practices (Proctor et al. 2007), was insufficient to shield against harmful forces of high exposure to disasters (see Hobfoll, 1998; Kaniasty & Norris, 2009). Yet, it is also plausible that seemingly reasonable ways of parental measures get caught in the relational crossfire of familial coping and, in some instances, inadvertently fail or even backfire. Following exposure of their child to a traumatic event, parents may become overly vigilant and protective, preoccupied by the fear that their child might be traumatized again (Scheering & Zeanah, 2001). In fact, such parental responses could be most ubiquitous because they are likely to occur in any context of exposure to disasters, direct or indirect (e.g., Henry, Tolan, & Gorman-Smith, 2004).

Overprotective behaviors were significantly correlated with posttraumatic symptomatology of mothers (but not fathers) in McFarlane's now classic reports (1987a, 1987b) of family func-

tioning in the aftermath of an Australian bushfire disaster. Perhaps this over-vigilant expression of parental care during recovery from a severe stressor “boomerangs,” because it conveys a continuing sense of threat and vulnerability that is “easily perceived by children, making it more difficult for them to resolve their own anxieties and heightening their own sensitivity to further trauma” (McFarlane, 1987b, p. 768). Bokszczanin (2008) investigated a number of family factors, including parental overprotectiveness, in a study of posttraumatic distress in grammar school and high school students 28 months after flooding in Poland. Excessive parental control statistically interacted with the level of disaster exposure and amplified (i.e., moderated) the flood’s impact on youth mental health. Cohen and Eid (2007) reported that higher levels of global distress in response to chronic threat of terrorism were observed among Israeli Jewish and Arab adolescents whose parents educated them more about the risks and forbade them to go out because of these dangers. Another study of Katrina victims with a fortuitous prospective design (Costa, Weems, & Pina, 2009) documented that the predisaster assessment of propensities to exert firm control in parenting augmented postdisaster anxiety reactions for youth with chronic anxiety problems (also predisaster assessed). In Kelley et al.’s (2010) previously mentioned Katrina study, the results showed that parents with high levels of distress engaged more in maintaining or reinstating child routines, which unexpectedly, was predictive of more symptomatology in their children. The authors suggested that distressed parents may attempt to restore constructive everyday routines in an exceedingly restrictive and punitive manner that inadvertently might result in elevations of their children’s anxiety and a delay of the onset of recovery.

Overprotective and avoidance-driven parenting behaviors can deter all family members from sharing their fears, concerns, and experiences associated with the event itself, as well as with the process of coping with its consequences. Parents and children might avoid talking about the experience for fear of upsetting each other. Gil-Rivas et al. (2010) showed that one year after Hurricane Katrina, children who perceived their caregivers as unwilling or as too upset to talk, experienced higher levels of self-reported posttraumatic stress symptoms. In a study with a sample of families indirectly exposed to the September 11 attacks (Gil-Rivas, Silver, Holman, McIntosh, & Poulin, 2007), higher posttraumatic stress symptoms were reported by adolescents who chose not to talk about the event because they did not want to upset their parents and/or doubted that talking about it would help. Ironically, the psychological cost of their aspiration to protect their parents from becoming worried was amplified for those young people who perceived their parents as very supportive in general.

Empirical findings with survivors of diverse events strongly document that the inhibition of talking and thinking about traumatic experiences impedes their subsequent cognitive processing, thus their psychological and social recovery (see Lepore, 2001). In their pioneering 1956

report, Bloch et al. already noted that once the parents and children begin to communicate openly about their feelings, fears and apprehensions, the family' coping shifts "from one of trying to forget about the experience to one of learning to live with it" (p. 421). Yet, in the Cohen and Eid's (2007) study of adolescents living under constant threat of terrorism, a greater frequency of talking about their terrorism worries was associated with greater distress among Jewish adolescents, but not among Arab adolescents who reported a high number of global distress symptoms regardless of their level of sharing. Disclosing concerns and talking in the context of some collective upheavals may paradoxically lead to oversaturation or over-sharing of emotions resulting in a sense of "being in a pressure cooker" (e.g., Hobfoll & London, 1986; Pennebaker & Harver, 1993) that, in turn, could exacerbate symptoms of distress (see Kaniasty & Norris, 1999; 2004).

Parents burdened by responsibility for family recovery

Being a parent, a mother in particular, adds to the stressfulness of disaster recovery, and it has been identified as a risk factor for experiencing greater psychological toll (Norris et al., 2002). In Gleser, Green, and Winget's (1981) comprehensive study of the Buffalo Creek dam collapse, the presence of children correlated positively with distress symptoms among all studied survivors with the exception of unmarried women. Investigations of nuclear accidents at Three Miles Island and in Chernobyl showed that mothers of young children were particularly distressed and concerned about the uncertainty of long-term health consequences due to radiation exposure (Bromet, Parkinson, Schulberg, Dunn, & Gondeck, 1982; Havennar et al., 1997). Solomon, Bravo, Rubio-Stipec, and Canino (1993) examined floods and dioxin contamination in St. Louis and reported that most symptomatology was observed among single parents, regardless of their exposure status, and among exposed married parents. The authors concluded that single parents are chronically overburdened by parental responsibilities, whereas exposed married parents face new familial burdens after disasters and therefore become as vulnerable as single parents on an everyday basis.

Several investigations provide compelling evidence that disasters may incite family distress, disharmony, and animosities. Norris and Uhl (1993) showed that Hurricane Hugo led to increases in marital stress, parental stress and filial (caretaking) stress. McFarlane (1987a) reported that the extent of property loss after fires predicted levels of family irritable distress (e.g., fight more with each other, more irritable with each other, avoid discussing upsetting issues). Consistent with many family dynamics already described, the levels of family distress were predicted by mothers' fears of future disasters, her inability to cope well, and her intrusive symptoms. Green et al. (1991) assessed the relational climate in families with children 2

to 15 years old who survived a catastrophe of dam collapse two years earlier. A depressed-gloomy and irritable home atmosphere, along with parental distress and other factors, predicted children's PTSD symptoms. Wasserstein and La Greca (1998) reported that greater levels of parental conflict were associated with more PTSD symptoms 3 months after Hurricane Andrew but only for Hispanic children. Frankly, there is no paucity of studies showing that assessments of family conflicts and negativity in a family's relations predict higher levels of distress in child and adolescent victims of natural and human-induced disasters (e.g., Bokszczanin, 2008; Laor, Wolmer, & Cohen, 2001; Roussos, et al., 2005; Tuicomepee & Romano, 2008; Wasserstein & La Greca, 1998; Wickrama & Kaspar, 2007).

Not surprisingly, some parents must rely on external sources for helping their children. The 9/11 study by Gil-Rivas et al. (2007) reported that both the symptoms of PTS and general psychological distress were also higher for teenagers whose parents encouraged them to seek help/advice from others on how to cope with their reactions to the tragedy. Possibly, an adolescent appraised their parents' sensible behavior of recognizing their own child's psychosocial needs as parental unavailability or their parents' own coping incompetence. An even greater irony of this finding is that there are also studies suggesting that, in the context of disasters, parents may deny, be reticent, or even unable to recognize their children's elevated psychological symptoms (e.g., Burke, Bonus, Burns, Millstein, & Beasley, 1982; Earls, Smith, Reich, & Jung, 1988; Handford et al., 1986, Kar et al., 2007).

Vigil and Geary (2008, 2009) investigated the influence of family coping on psychological health and compared a group of adolescents who were displaced by Katrina with a matched group of adolescents who were not affected by the hurricane. Katrina adolescents exhibited higher psychological distress and depression, in addition to lower self-esteem. The two groups did not differ on several family coping measures (i.e., seeking social support, reframing) with the exception that the Katrina adolescents reported that their families relied more on community-based assistance. Of course, poorer mental health and greater need for extra-familial support mobilization among disaster survivors should be expected given the extent of their material losses (e.g., relocation) and the potentially traumatic experiences they most likely incurred. What was striking about the results was the fact that mobilizing community-based assistance reliably mediated the relation between the adolescents' hurricane experience (the group category variable) and their poorer well-being and lower self-esteem. Granted, these findings may simply mean that, in general, reliance on community support may be stigmatizing and demoralizing. Yet, seeking and accepting community support is often necessary, and it is advocated after disasters as an appropriate coping strategy. Vigil and Geary (2008, 2009) offered some reasonable conjectures for why a frequent turning to external support sources may result in unintended negative consequences. The mobilization of community-

based assistance may make the extent of family losses more salient for young people. It may also engage their parents' time and energies outside the family, therefore, limiting their availability to provide intimate support (e.g., sharing feelings, talking) for their children.

**Crucible: 1) a vessel in which substances are heated to high temperatures,
2) a severe trial, test or ordeal**

Studies of individuals, families, and communities coping with disasters highlight the significance of interdependent coping. Recovery from natural and human-induced disasters may transform itself into relational "crucibles" that swelter with challenging dilemmas for caring individuals whose needs, choices and intentions may inevitably add to the collective experience of stress. Many of the studies described in this review vividly exemplify that generally reasonable actions of "all in the family" can make coping with disasters thorny and nonlinear. However, in parting words, it must be underscored that for every study showing how postdisaster parental functioning may hinder children's recovery there are several studies that show the salutary effects of parental social support (see La Greca, Silverman, Vernberg, & Roberts, 2002). Furthermore, it is also important to note that although disasters often cause serious harm, severe levels of psychological problems are typically observed in a relatively small minority of exposed individuals (Bonanno, Brewin, Kaniasty, & La Greca, 2010). In general, most child and adult survivors of disasters show resilience or quick return from initial (short-term) elevations of psychological symptoms. Postdisaster familial and social relationships are important predictors of disaster coping success.

References

- Bloch, D., Silber, E., & Perry, S. (1956). Some factors in the emotional reaction of children to disaster. *American Journal of Psychiatry*, *113*, 416-422.
- Bokszczanin, A. (2008). Parental support, family conflict, and overprotectiveness: Predicting PTSD symptoms of adolescents 28 months after a natural disaster. *Anxiety, Stress, and Coping*, *21*, 325-335.
- Bonanno, G., Brewin, C., Kaniasty, K., & La Greca, A. (2010). Weighting the costs of disaster: Consequences, risks, and resilience in individuals, families, and communities. *Psychological Science in the Public Interest*, *11*(1), 1-49.
- Bromet, E. J., Parkinson, D., Schulberg, H., Dunn, L., & Gondek, P. (1982). Mental health of residents near the Three Mile Island reactor: A comparative study of selected groups. *Journal of Preventive Psychiatry*, *1*, 225-276.
- Burke, J., Borus, J., Burns, B., Millstein, K., & Beasley, M. (1982). Changes in children's behavior after a natural disaster. *American Journal of Psychiatry*, *139*, 1010-1014.
- Charuvastra, A. & Cloitre, M. (2008) Social bonds and PTSD. *Annual Review of Psychology*, *59*, 301-328.
- Cohen, M., & Eid, J. (2007). The effect of constant threat of terror on Israeli Jewish and Arab adolescents. *Anxiety, Stress, and Coping: An International Journal*, *20*, 47-60.
- Cohen, L.R., Hien, D., & Batchelder, S. (2008). The impact of cumulative maternal trauma and diagnosis on parenting behavior. *Child Maltreatment*, *13*, 48-61.

- ta, N., Weems, C., & Pina, A. (2009). Hurricane Katrina and youth anxiety: The role of perceived attachment beliefs and parenting behaviors. *Journal of Anxiety Disorders*, 23, 935-941.
- is, T., Miller, B., & Berry, E.H. (2000). Changes in reports and incidence of child abuse following natural disasters. *Child Abuse and Neglect*, 24, 1151-1162.
- s, F., Smith, E., Reich, W., & Jung, K. (1988). Investigating psychopathological consequences of a disaster in children: A pilot study incorporating a structured diagnostic interview. *Journal of the American Academy of Child & Adolescent Psychiatry*, 27, 90-95.
- z, C.E. (1961). Disasters. In R.K. Merton & R.A. Nisbet (Eds.), *Contemporary social problems* (pp. 651-694). New York: Harcourt.
- Rivas, V., Kilmer, R., Hypes, A., & Roof, K. (2010). The caregiver-child relationship and children's adjustment following Hurricane Katrina. In R. Kilmer, V. Gil-Rivas, R. Tedeschi, & L. Calhoun (Eds.), *Helping families and communities recover from disaster: Lessons learned from Hurricane Katrina and its aftermath* (pp. 55-76). Washington, DC: American Psychological Association.
- Rivas, V., Silver, R.C., Holman, E.A., McIntosh, D.N., & Poulin, M. (2007). Parental response and adolescent adjustment to the September 11, 2001 terrorist attacks. *Journal of Traumatic Stress*, 20, 1063-1068.
- ser, G., Green, B., & Winget, C. (1981). *Prolonged psychosocial effects of disaster: A study of Buffalo Creek*. New York: Academic Press.
- en, B.L., Korol, M., Grace, M.C., Vary, M.G., Leonard, A.C., Gleser, G.C., & Smith-Cohen, S. (1991). Children and disaster: Age, gender, and parental effects on PTSD symptoms. *Journal of the American Academy of Child and Adolescent Psychiatry*, 30, 945-951.
- dford, H. A., Mayers, S.D., Mattison, R., Humphrey, F., Bagnato, S., Bixler, E., et al. (1986). Child and parent reaction to the Three Mile Island nuclear accident. *Journal of the American Academy of Child & Adolescent Psychiatry*, 25, 346-356.
- enaar, J., Rumyantzeva, G., Brink, W., Poelijoe, N., Bout, J., Engeland, H., et al. (1997). Health effects of the Chernobyl disaster: Illness or illness behaviour? A comparative general health survey in two former Soviet regions. *Environmental Health Perspectives*, 105, 1533-1537.
- ry, D.B., Tolan, P.H., & Gorman-Smith, D. (2004). Have there been lasting effects associated with the September 11, 2001, terrorist attacks among inner-city parents and children? *Professional Psychology: Research and Practice*, 35, 542-547.
- ifoll, S. E. (1998). *Stress, culture and community: The psychology and philosophy of stress*. New York: Plenum Press.
- ifoll, S. E., & London, P. (1986). The relationship of self-concept and social support to emotional distress among women during war. *Journal of Social and Clinical Psychology*, 12, 87-100.
- es, R., Ribbe, D., Cunningham, P., Weddle, J.D., & Langley, A. (2002). Psychological impact of fire disaster on children and their parents. *Behavior Modification*, 26, 163-186.
- iaasty, K., & Norris, F.H. (1999). The experience of disaster: Individuals and communities sharing trauma. In R. Gist & B. Lubin (Eds.), *Response to disaster: Psychosocial, community, and ecological approaches* (pp. 25-61). Philadelphia: Brunner/Maze.
- iaasty, K., & Norris, F.H. (2004). Social support in the aftermath of disasters, catastrophes, and acts of terrorism: Altruistic, overwhelmed, uncertain, antagonistic, and patriotic communities. In R. Ursano, A. Norwood, & C. Fullerton (Eds.), *Bioterrorism: Psychological and public health interventions* (pp. 200-229). Cambridge, England: Cambridge University Press.
- iaasty, K., & Norris, F.H. (2009). Distinctions that matter: Received social support, perceived social support, and social embeddedness after disasters. In Y. Neria, S. Galea, & F.H. Norris (Eds.), *Mental health and disasters* (pp. 175-200). New York: Cambridge University Press.
- , N., Mohapatra, P., Nayak, K. Pattnaik, P., Swain, S., & Kar, H. (2007). Post-traumatic stress disorder in children and adolescents one year after a super-cyclone in Orissa, India: Exploring cross-cultural validity and vulnerability factors. *BMC Psychiatry*, 7 (8), 1-9.
- nan, H., Marshall, S., Nocera, M., & Runyan, D. (2004). Increased incidence of inflicted traumatic brain injury in children after a natural disaster. *American Journal of Preventive Medicine*, 26, 189-193.
- ley, M.L., Self-Brown, S., Le, B., Bosson, J., Hernandez, B., & Gordon, A. (2010). Predicting posttraumatic stress symptoms in children following Hurricane Katrina: A prospective analysis of the effect of parental distress and parenting practices. *Journal of Traumatic Stress*, 23, 582-590.

- Kiliç, E.Z., Özgüven, H.D., & Sayil, I. (2003). The psychological effects of parental mental health on children experiencing disaster: The experience of Bolu earthquake in Turkey. *Family Process, 42*, 485-495.
- La Greca, A.M., Silverman, W. K., Vernberg, E.M., & Roberts, M.C. (2002). (Eds.). *Helping children cope with disasters*. Washington, DC: American Psychological Association.
- Laor, N., Wolmer, L., & Cohen, D. (2001). Mothers' functioning and children's symptoms 5 years after a SCUD missile attack. *American Journal of Psychiatry, 158*, 1020-1026.
- Lepore, S. J. (2001). A social-cognitive processing model of emotional adjustment to cancer. In A. Baum & B. Andersen (Eds.), *Psychosocial interventions for cancer*. Washington, DC: APA.
- McFarlane, A.C. (1987a). Family functioning and overprotection following a natural disaster: The longitudinal effects of post-traumatic morbidity. *Australian and New Zealand Journal of Psychiatry, 21*, 210-218.
- McFarlane, A.C. (1987b). Posttraumatic phenomena in a longitudinal study of children following a natural disaster. *Journal of the American Academy of Child and Adolescent Psychiatry, 26*, 611-820.
- McLaughlin, K.A., Fairbank, J.A., Gruber, M.J., Jones, R.T., Lakoma, M.D., Pfefferbaum, B., et al. (2009). Serious emotional disturbance among youths exposed to Hurricane Katrina 2 years postdisaster. *American Academy of Child and Adolescent Psychiatry, 48*, 1069-1078.
- Norris, F.H., Friedman, M.J., Watson, P.J., Byrne, C.M., Diaz, E., & Kaniasty, K. (2002). 60,000 disaster victims speak: Part I. An empirical review of the empirical literature, 1981-2001. *Psychiatry, 65*, 207-239.
- Norris, F.H., & Uhl, G. (1993). Chronic stress as a mediator of acute stress: The case of Hurricane Hugo. *Journal of Applied Social Psychology, 23*, 1263-1284.
- Pennebaker, J. W., & Harber, K. (1993). A social stage model of collective coping: The Loma Prieta Earthquake and the Persian Gulf War. *Journal of Social Issues, 49*, 125-145.
- Proctor, L.J., Fauchier, A., Oliver, P.H., Ramos, M.C., Rios, M.A., & Margolin, G. (2007). Family context and young children's responses to earthquake. *Journal of Child Psychology and Psychiatry, 48*, 941-949.
- Roussos, A., Goenjian, A.K., Steinberg, A.M., Sotiropoulou, C., Kakaki, M., Kabakos, C., et al. (2005). Post-traumatic stress and depressive reactions among children and adolescents after the 1999 earthquake in Ano Liosia, Greece. *American Journal of Psychiatry, 162*, 530-537.
- Scaramella, L., Sohr-Preston, S., Callahan, K., & Mirabile, S. (2008). A test of the family stress model on toddler-aged children's adjustment among Hurricane Katrina impacted and nonimpacted low-income families. *Journal of Clinical Child & Adolescent Psychology, 37*, 530-541.
- Schechter, D.S., Coates, S., Kaminer, T., Coots, T., Zeanah, C., Davies, M., et al. (2008). Distorted maternal representations and atypical behavior in a clinical sample of violence-exposed mothers and their toddlers. *Journal of Trauma and Dissociation, 9*, 123-147.
- Schechter, D.S., Willheim, E., Honojosa, C., Scholfield-Kleinman, K., Turner, J., McCaw, J., et al. (2010). Subjective and objective measures of parent-child relationship dysfunction, child separation distress, and joint attention. *Psychiatry, 73*, 130-144.
- Scheeringa, M.S., & Zeanah, C.H. (2001). A relational perspective on PTSD in early childhood. *Journal of Traumatic Stress, 14*, 799-815.
- Scheeringa, M.S., & Zeanah, C.H. (2008). Reconsideration of harm's way: Onsets and comorbidity patterns of disorders in preschool children and their caregivers following Hurricane Katrina. *Journal of Clinical Child and Adolescent Psychology, 37*, 508-518.
- Smith, P., Perrin, S., Yule, W., & Rabe-Hesketh, S. (2001). War exposure and maternal reactions in the psychological adjustment of children from Bosnia-Herzegovina. *Journal of Child Psychology & Psychiatry, 42*, 395-404.
- Solomon, S.D., Bravo, M., Rubio-Stepic, M., & Canino, G. (1993). Effect of family role on response to disaster. *Journal of Traumatic Stress, 6*, 255-269.
- Spell, A.W., Kelley, M., Wang, J., Self-Brown, S., Davidson, K., Pellegrin, A., et al. (2008). The moderating effects of maternal psychopathology on children's adjustment post-hurricane Katrina. *Journal of Clinical Child and Adolescent Psychology, 37*, 553-563.
- Swenson, C.C., Saylor, C.F., Powell, M.P., Stokes, S.J., Foster, K.Y., & Belter, R.W. (1996). Impact of a natural disaster on preschool children: Adjustment 14 months after a hurricane. *American Journal of Orthopsychiatry, 66*, 122-130.
- Tuicomepee, A., & Romano, J.L. (2008). Thai adolescent survivors 1 year after the 2004 tsunami: A mixed methods study. *Journal of Counseling Psychology, 55*, 308-320.

- Valentino, K., Berkowitz, S., & Stover, S. (2010). Parenting behaviors and posttraumatic symptoms in relation to children's symptomatology following a traumatic event. *Journal of Traumatic Stress, 23*, 403-407.
- Vigil, J., & Geary, D. (2008). A preliminary investigation of family coping styles and psychological well-being among adolescent survivors of Hurricane Katrina. *Journal of Family Psychology, 22*, 176-180.
- Vigil, J., & Geary, D. (2009). An exploratory analysis of family coping styles and psychobiological distress among adolescents affected by a large-scale disaster. *Journal of Child & Adolescent Trauma, 22*, 81-89.
- Wasserstein, S., & La Greca, A.M. (1998). Can peer support buffer against behavioral consequences of parental discord? *Journal of Clinical Child Psychology, 25*, 177-182.
- Wickrama, K.A.S., & Kaspar, V. (2007). Family context of mental health risk in tsunami-exposed adolescents: Findings from a pilot study in Sri Lanka. *Social Science and Medicine, 64*, 713-723.

The book focuses on stress in the context of education and health. The first part is concerned with stress in educational settings including stress, anxiety, and coping of preschoolers, primary school children, college students adolescents and teachers. The second part deals with stress and its effects on health, e.g. while coping with a disaster, with chronic pain or myocardial infarction.

Logos Verlag Berlin

ISBN 978-3-8325-2886-7

Stress and Anxiety

Edited by Petra Buchwald, Kathleen A. Moore and Tobias Ringeisen