

Factors Contributing to Resiliency in September 11th Disaster Relief Workers: A Proposal for Future Analysis

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While the study of post-trauma resiliency or those characteristics which protect those at risk from the negative mental and physical sequelae of trauma has attracted so much attention recently, the literature is limited with respect to Disaster Relief Workers (DRWs). This article represents a literature review conducted by the authors to better understand the concept of resiliency in the context of trauma research and survey the field's current empirical findings associated with DRWs. Due to the paucity of

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research, future analysis would shed much needed light on the precise factors that contribute to resiliency in high-risk populations (e.g., DRWs) and the ways in which these factors interact with one another.

Resiliency as a Concept

Exposure to a traumatic event may lead to the development of long-term mental and physical difficulties including the development of PTSD and associated mental health issues such as depression and anxiety. However, while the bulk of trauma research has focused on factors that lead to negative post-traumatic outcomes there is an emerging field of research focusing on those characteristics which protect people from the mental and physical sequelae of trauma. This shift in paradigm, from a problem-oriented model to a strength model, has been referred to as resiliency research (Richardson, 2002). Over the past two decades resiliency research continues to gain attention examining those qualities identified with successful adaptation to trauma, describing the underpinnings associated with successful coping, and developing applications for therapeutic intervention (Richardson, 2002).

Trauma researchers have identified factors, which may protect adults from post-traumatic maladjustment. In a sample of Vietnam Veterans with or without PTSD, resiliency was associated with low levels of Neuroticism and Psychoticism, high levels of internal locus of control, and high levels of coherent narratives (Casella & Motta, 1990). Egendorf, Remez and Farley (1981) indicated that problem solving skills, perceiving trauma as a challenge, self-discipline, and sense of responsibility were linked with successful adaptation to trauma. Others have indicated that resiliency to trauma is linked with dispositional optimism (Carver & Scheier, 1995), self-efficacy (Bandura, 1982), hardiness (Kobasa, 1979), sense of coherence (Antonovsky, 1987) and wis-

dom (Baltes & Staudinger, 2000; Linley, 2003).

Among the list of resiliency factors, there exists a constellation of personality dispositions termed hardiness. Hardiness as conceptualized by Kobasa (1979) has three components: a sense of commitment to personal life roles, a sense of control over some aspect of life's problems, and the assumption of a challenge orientation when confronted with problems. These components have been directly linked to PTSD and overall mental and physical health (Orr & Westman, 1990; Kobasa, 1979; Kuo & Tsai, 1986; Nowack, 1986).

There is a growing body of empirical evidence which suggests that personal and social transformation can result from a traumatic experience (Tedeschi, Park, & Calhoun, 1998). It has been found that 30 to 90 percent of people who experience a traumatic event report some positive change following a trauma, depending on the nature of the trauma and a host of other factors (Calhoun & Tedeschi, 1999). A growing body of research termed post-traumatic growth (PTG) suggests that people can grow in number of different ways in response to trauma including: a change in their life philosophy (e.g. learning to live life to its fullest), an ability to act altruistically in the service of others, a newly developed sense of resiliency and strength, more energy devoted to social renewal or political activism and the development of stronger relationships with family and friends (Linley & Joseph, 2003).

Resiliency and Disaster Relief Workers

There is limited research to date on the impact of trauma on the individuals whose job it is to respond to traumatic events, the DRWs. However, there is some evidence that suggests that, in general, DRWs show remarkable resilience to trauma (Norris et al., 2002). It appears that disaster relief workers develop a matu-

rity based on their extensive experience with trauma which may help to buffer the stress of the disaster (McCarroll, Fullerton, Ursano, & Hermsen, 1996; Norris & Murrell, 1988). In addition, the ability of DRWs to engage in the active process of producing meaning from the event may help the workers to effectively cope with the disaster experience (Ursano, McCaughe, & Fullerton, 1994). Norris et al. (2002) note that workers' ability to support one another and develop meaningful narratives of their experiences may serve as an example for the mental health community in understanding the factors which underlie resiliency in the wake of trauma.

The literature also provides evidence of post-traumatic growth in DRWs. When the skywalks at the Kansas City Hyatt Hotel collapsed, killing over one hundred people and injuring close to two hundred people, the majority of DRWs reported a change in their perspective on life. Some workers became more compassionate and altruistic as a result of their rescue experience (Miles, Demi, & Mostyn-Aker, 1984).

Resiliency and September 11th

The research on the impact of September 11th is beginning to emerge with some emphasis on resiliency factors. Waters (2002) proposes a "Stress/Crisis/Trauma Response Model" in response to September 11th where she describes the predisposing factors which contribute to an individual's level of resiliency. Waters suggests that the following "hardiness" factors helped to buffer individuals in the wake of September 11th: physical health, educational and financial resources, coping and problem solving skills, communication skills, a history of coping with challenges, and family and community support.

Fredrickson, Tugade, Waugh, & Larkin, (2003) examined the role of positive emotions following September 11th. In their exami-

nation of college students, the researchers found that in the wake of September 11th individuals reported feeling grateful for their own safety and the safety of their family, feeling a newfound love for their family and friends, and the urge to express their positive feelings. The authors suggested that many students viewed September 11th as a "wake up call" to remember to express their feelings of love to others frequently and directly.

Conclusion

Disaster relief workers are at an increased risk for the development of PTSD given their direct exposure to the aftermath of traumatic events. However, it is apparent from the literature that DRWs show remarkable resiliency to trauma.

There is no literature to date on the resiliency or growth factors in DRWs who responded to September 11th. Based on the literature reviewed about resiliency and DRWs and the research on growth factors resulting from September 11th, it is likely that there is much to learn about resiliency through studying a population of DRWs from September 11th. A study of resiliency among these workers may contribute to an understanding of the factors which provide a buffer against the development of clinical symptoms and components which stimulate growth following trauma.

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