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Experiential Training to Address Secondary Traumatic Stress in Aid Personnel

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Experiential Training to Address Secondary Traumatic Stress in Aid Personnel

A DISSERTATION

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I hereby certify that I have read this dissertation prepared under my direction and recommend that it be accepted as fulfilling the dissertation requirement.

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> You gain strength, courage, and confidence by every experience in which you really stop to look fear in the face. You are able to say to yourself, "I have lived through this horror. I can take the next thing that comes along." You must do the thing you think you cannot do.
> Eleanor Roosevelt, *You Learn by Living: Eleven Keys for a More Fulfilling Life*

I have carried the pain of transgenerational traumas since the time of my earliest memory. There were many moments in my life when I was afraid, when I felt that I just could not do what was required. Despite it all, I managed to "look fear in the face" and, in spite of what I felt, to move on and do things I fear. There were—and still are—many such things.

First, I would like to thank my mother Gila Gertel, who believed in my abilities and in me long before I was able to do so. Her unconditional trust and love carried me through many obstacles I thought that I could not get through. To her, I say, "Thank you for allowing me to grow 'out of the box' and for paving the path for me to be a strong woman, mother, therapist, and now, scholar."

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ABSTRACT

Existing studies indicate the widespread existence of secondary traumatic stress (STS) in aid personnel and suggest the need for preventive and response strategies. This study examined the effectiveness of an integrated approach to reducing STS among aid personnel through a model that used psychoeducation, psychodrama, and cognitive behavioral resolution techniques. Data were collected pre- and post-intervention with the Professional Quality of Life Scale (ProQOL) (Stamm, 2009) and at a two-month follow-up (TMFU) for the intervention and control groups. An analysis of variance test was used to evaluate whether the intervention group showed more change on ProQOL scores than did the control groups. The results were not significant, indicating a small decrease in STS and burnout symptoms and a slight increase in compassion satisfaction. However, results from the TMFU open questionnaire suggested that retention of learning was higher with the intervention group than with the active control group.

This finding challenges the widely held assumption that training is an effective modality of support for aid personnel exposed to trauma and traumatized populations, and underscores the urgent need to conduct evidence-based study of the efficacy of training for STS mitigation. The pilot research the author conducted (Gertel Kraybill, 2013) as antecedent to this dissertation, using the expressive trauma integration (ETI) model in a format of six individual sessions incorporating expressive therapy and psychoeducation, offers a promising alternative to existing STS training.

The reality of increasing natural disasters and conflicts means that the number of aid personnel exposed to traumatized populations is certain to grow, and aid agencies must, as a matter of priority, expand their understanding of what is effective in supporting trauma-exposed staff.

Keywords: secondary traumatic stress, burnout, compassion satisfaction, human service practitioners, aid personnel, expressive therapies, trauma therapies and training, psychoeducation, neurobiology, self-care and stress management.

CHAPTER 1

Introduction

Practitioners in a number of professions are exposed on a prolonged basis to trauma survivors, traumatized communities, or both. Such exposure places human services practitioners (HSPs) at risk for *secondary traumatic stress* (STS) (Shah, Garland, & Katz, 2007). At-risk HSPs include relief and humanitarian personnel, emergency service personnel, therapists, and social workers. These practitioners are vulnerable to a constellation of symptoms affiliated with STS, including *compassion fatigue*, *vicarious trauma,* and *burnout* conditions that predominantly arise in those who work with traumatized populations (Newell & MacNeil, 2010).

As the global community is increasingly called upon to assist after natural disasters and conflicts, international aid organizations face growing responsibility to ensure that their personnel are prepared for the challenges they face: caring for themselves while they are caring for others and readjusting to life after trauma exposure (Walsh, 2009).

A significant task of learning and discovery now awaits, for the investigation of STS and related indirect traumatic effects on international relief personnel has been relatively recent (Eriksson et al., 2009). A small number of empirical research studies (reviewed later in this paper) examining responses to secondary trauma exposure among relief and aid personnel have been published (Eriksson, Bjorck, & Abernethy, 2003).

These include studies of the effects of STS on HSPs in large agencies as well as governmental and nongovernmental organizations. For example, Eriksson, Vande Kemp, Gorsuch, Hoke, and Foy (2001) found it striking that relief and aid agencies recruit personnel without providing proper training to deal with traumatic exposure. The authors concluded that programs agencies developed to mitigate STS have been understudied (Eriksson et al., 2003; Eriksson, Vande Kemp, Gorsuch, Hoke, & Foy, 2001).

Practitioners and researchers use a variety of related terms to describe the phenomenon of stress that results when service providers or caregivers interact with populations exposed to trauma.

Complications start with the fact that stress itself comes in several varieties. Hans Selye first recognized the possibility of a set of symptoms known today as *stress* in the 1920s, when he was a medical student and noticed that several patients with differing diseases exhibited identical symptoms. They just "looked sick," he later told a long-standing colleague (Rosch, n.d.).

For purposes of this study, *stress* will be understood broadly, as defined by Zingman, Hodgson, Alekseev, and Terzic (2003): "A threat, real or implied, to the narrow range of physiological parameters necessary for survival" (p. 253). *Acute stress*, as commonly understood, is short-lived stress induced by a sense of immediate threat that may be small or large. Most of the stresses of day-to-day living belong in this category. Sincero (2012), like some other authors, observed that acute stress can manifest not only as a negative sense, but also as a sense of anticipation or thrill, such as might be

experienced in a roller coaster ride. For Sincero, up to a certain level, this aspect of stress contributes to a sense of excitement and joy in life.

An accumulation of acute stress or continuous disorganization, chaos, or crisis causes emotional distress, which is referred to as *episodic stress* or *accumulative stress.* Ongoing exposure to stress can lead to a sense of despair and is referred to as *chronic stress* (American Psychological Association [APA], 2004; Sincero, 2012).

Many authors have written about trauma and researched the concept of trauma. No single definition of the term has come to be fully accepted by all. In this paper, emotional *trauma* will be understood as a response involving complex debilitation of adaptive abilities—emotional, cognitive, physical, or spiritual—following an event or series of events that were experienced, or perceived, as life threatening.

Interacting with traumatized populations on an extended basis is now widely recognized as having challenging consequences for caregivers. These are referred to, varyingly, as STS, compassion fatigue, vicarious trauma, and burnout. These terms describe different conditions with similar symptoms and may occur simultaneously or independently of each other (Newell & MacNeil, 2010).

Compassion fatigue and *STS* refer to a condition that arises in response to indirect exposure to a traumatic event, typically through hearing a traumatic story experienced by a loved one or a client (Bourassa & Clements, 2010; Shah et al., 2007). The symptoms associated with these terms are similar to those associated with post-traumatic stress disorder (PTSD) by primary victims of trauma, and typically include intrusive thoughts,

traumatic memories, nightmares, and insomnia (Newell & MacNeil, 2010). Tehrani (2010) suggested that STS and compassion fatigue are a natural outcome of helping or wanting to help people in distress.

A term that has gained wide usage is *PTSD*. In its fifth edition of the *Diagnostic and Statistical Manual of Mental Disorders*, the American Psychiatric Association (2013) included wording in its description of PTSD that acknowledges indirect exposure to trauma as itself traumatizing: "Repeated, indirect traumatic exposure (usually as part of one's professional responsibilities) to the gruesome and horrific consequences of a traumatic event (e.g., police personnel, body handlers), is considered traumatic" (cited in Friedman, n.d.).

According to Byrne, Lerias, and Sullivan (2006), *vicarious trauma* is an individual's response to secondary exposure to traumatic experience that comes through hearing a recount of the experience of a primary victim. Vicarious trauma can take place even through exposure to indirect illustrations of a traumatic event via media coverage. Similarly, some researchers defined vicarious trauma as an accumulated response to a set of exposures to clients' or loved ones' traumatic stories (Bourassa & Clements, 2010). Other researchers used the same definition for vicarious trauma as for compassion fatigue (Newell & MacNeil, 2010).

In contrast to STS symptoms, which, like PTSD symptoms, are primarily behavioral, vicarious trauma symptoms are mostly cognitive. Typically, they involve a

change of worldviews on such issues as safety, trust, and control (Newell & MacNeil, 2010, p. 60).

Burnout is a term widely used in reference to chronic physical, emotional, psychological, and spiritual fatigue resulting from the stress of working with difficult clients or being exposed to the suffering of others for an extended time (Bourassa & Clements, 2010; Newell & MacNeil, 2010; Trippany, Kress, & Wilcoxon, 2004). Edelwich and Brodsky (1980) proposed stages of a "cycle of burnout" that might predict impact of burnout on practitioners: (1) enthusiasm, (2) stagnation, (3) frustration, and then (4) apathy.

Given the similarity of symptoms described by these terms, in this study, the terms burnout, vicarious trauma, and compassion fatigue will be collectively referred to as STS.

Finally, this study will use a term that emerged in recent years in the writings of certain authors—*compassion satisfaction*. This term refers to the capacity of HSPs to experience a sustained sense of gratification and a positive outlook by serving others (Bride, Radey, & Figley, 2007; Chang & Taormina, 2011; Stamm, 2002).

Existing studies indicate that aid personnel are especially at risk for STS (Bride, 2007; Ehrenreich & Elliott, 2004; Eriksson et al., 2003; Eriksson et al., 2009; Eriksson et al., 2001; Jordan, 2010; Knight, 2010; McFarlane, 2004; Moulden & Firestone, 2007; Musa & Hamid, 2008; Perry, 2003; Shah et al., 2007; Steed & Downing, 1998; Tehrani, 2007, 2010; Trippany et al., 2004). Furthermore, existing studies are almost unanimous

in recommending further empirical research on programs for education and prevention of secondary traumatic stress, with particular focus on self-care and psychosocial skills training (Cardozo et al., 2012).

The urgency of gaining detailed understanding of the impact of STS and the training to prevent it has been highlighted in recent years by an increase in the number of natural disasters and conflicts around the world. Suitable preparation and support for aid personnel before, during, and after deployment now becomes an urgent priority (Walsh, 2009).

Yet, few empirical studies have assessed the effectiveness of training programs to prevent and respond to STS in aid personnel. This is a serious deficit in a time when the number of aid personnel exposed to STS is rapidly increasing. Cardozo et al. (2012) stressed the need for evidence-based practices that address STS among aid personnel. Thus, the current research was designed to gain an understanding of the impact of STS on aid personnel and to establish whether training programs can mitigate STS, particularly among relief and aid personnel.

Presently, the environment in institutions that employ staff at risk of STS is generally inhospitable toward the needs of the staff and toward research about staff needs (Gertel Kraybill, 2013). At the time of initiating the research, for example, the author of this study was working in an international aid organization in Lesotho, assisting aid personnel suffering from STS. As a matter of policy, virtually all international aid organizations in Lesotho evacuated staff members who required more than four to six

counseling sessions (some organizations four, and some six). This meant that any staff member who developed emotional needs, other than easily addressed short-term issues, was subject to highly disruptive, potentially career-ending responses from their organizations.

A substantial body of recent research, to be reviewed later in the paper, strongly suggested that modalities of treatment that are creative and experiential in nature are more effective than talk-based therapies for traumatized people. The researcher observed that colleagues and supervisors in organizations often responded to staff suffering from trauma or STS with inadequate training and with treatment methods unsuited to providing the necessary care. At best, this was often unhelpful to the staff—and sometimes, it was re-traumatizing.

This response was consistent with a larger environment in which organizations demonstrated little concern about, or even awareness of, the fact that their staff members were high-risk candidates for STS, let alone consider options for emotional support of their staff. Few, if any, resources were available for the kind of extended interaction required by quantitative research. The organizations' management style was generally practical, pragmatic, and results oriented—an orientation they brought to issues of staff maintenance as well.

Thus, in order to win administrators' approval, the researcher designed the expressive trauma integration (ETI) training, both in the pilot research and in the present study, to make the fewest possible demands on organizational budgets and staff time.

The best way to change the paradigm of staff care in aid organizations, the researcher reasoned, would be to demonstrate the effectiveness of a short, low-budget intervention that made few demands on staff time. Nevertheless, even after devising a model to meet these requirements, it was difficult to find any organization willing to allow their staff to participate in the research.

This research was designed to measure the effectiveness of an approach to mitigation of STS based on recently emerging insights from trauma research. A significant body of literature argued that trauma is stored in the nonverbal areas of the brain and that *experiential* therapies, including psychodrama, are particularly effective in addressing memories of this type (Alfonso & Byers, 2012; Buk, 2009; Byers, 2011; Carey, 2006; Crenshaw, 2006; Gantt & Tinnin, 2009; Harrison, 2012; James & Johnson, 1996; Johnson, 1987; Johnson, Lahad, & Gray, 2009; Lahad & Doron, 2009; Lahad, Farhi, Leykin, & Kaplansky, 2010; Landy, 2010; Langmuir, Kirsh, & Classen, 2012; MacIntosh & Whiffen, 2005; Parker, Doctor, & Selvam, 2008; Sajnani & Johnson, 2014; Spiegel, Malchiodi, Backos, & Collie, 2006; Talwar, 2007; van der Kolk, 1994, 1996, 2002, 2006; Wigren, 1994).

In addition to offering insight about the importance of using experience-based modalities of interaction in work with traumatized people, the literature showed that two methods of trauma therapy have been found to be particularly beneficial for HSPs suffering from STS, namely, cognitive behavioral therapy (CBT) and psychoeducation approaches (Butler, Chapman, Forman, & Beck, 2006; Cohen, Mannarino, Perel, &

Staron, 2007; Dorrepaal et al., 2010; Ehlers et al., 2003; Frank et al., 1988; Hobfoll et al., 2007; Johnson, 2009; Kinzel & Nanson, 2000; Krupnick & Green, 2008; McDonagh et al., 2005; Muesser et al., 2008; Phipps, Byrne, & Deane, 2007; Phoenix, 2007; Seidler & Wagner, 2006; Southwick, Friedman, & Krystal, 2008).

Drawing on these findings, the author (Gertel Kraybill, 2013) conducted a pilot study, hereafter referred to as ETI, to examine an integrated approach to reducing STS among aid personnel. The ETI (Gertel Kraybill, 2010) is a therapeutic approach developed by the author as part of her Master's thesis. Based on this model, Gertel Kraybill (2013) conducted a pilot study that integrated psychoeducation and psychodrama techniques in six individual sessions, with aid personnel from different aid organizations in Lesotho.

Although the pilot sample size was very small ($N = 6$), findings suggested that providing participants with psychoeducation information on the neurobiological aspects of trauma exposure, combined with the use of experiential therapeutic methodologies, might contribute to a reduction in STS and burnout symptoms and an increased sense of compassion satisfaction. These preliminary results supported further investigation of an integrated approach in a larger sample and in a group format, to be economically feasible for agencies that support large numbers of aid workers.

The ETI (Gertel Kraybill, 2010) approach combines psychoeducation, experiential methods, and cognitive and behavioral resolutions. These will be described in the literature review in Chapter Two. The ETI approach aims to enable participants to:

- Gain an understanding of what happens to people after trauma or cumulative stress at the neurobiological, emotional, physical, and spiritual levels;
- Gain an understanding of one's personal journey after trauma;
- Map out a personal history of trauma in a timeline that includes personal challenges and stress triggers;
- Create a personal self-care plan to face the challenges and manage the stress they face;
- Investigate the use of expressive techniques for stress management and trauma integration; and
- Provide clinical guidance for therapy referrals as needed.

The focus of the present study is to examine the effectiveness of an *integrated* training approach in a group-training setting that combines psychodrama techniques, psychoeducation, and cognitive and behavioral resolutions to address secondary trauma among aid personnel. The specific question under research was, *What is the effectiveness of the ETI approach in addressing STS and burnout symptoms and increasing compassion satisfaction among aid personnel?*

Given that the research question aims to measure effectiveness, quantitative methods were deemed most appropriate. A quasi-experiment was designed to bring empirical rigor to the examination of data gathered in real-life environments.

Data were gathered in the form of written assessments collected from three different groups, each of which had experienced a different intervention approach. One

group received training based on the ETI model, which was designed to reflect recent insights about work with traumatized clients. A second group received conventional oratorical mental health and psychosocial support training with little experiential learning and no psychodrama. The third group was a nonactive control group that did not participate in any intervention. All three groups were administered the professional quality of life scale (ProQOL) (Stamm, 2009) self-report of well-being at the baseline and again one or two months later.

The rationale of this study is that systematic preparation to address STS among aid personnel is needed due to the rising numbers of aid personnel called upon to respond to conflict and the increasing incidence of natural disasters around the world. Currently, very little empirical data are available to confirm the effectiveness of such preparation.

In this study, a model for supporting aid workers to cope more effectively with stress and trauma was designed and deployed in a real-life workshop environment with field workers in the Philippines. Based on best practices and recent advances in the understanding of trauma, the model was designed to help aid workers understand the effect of stress and trauma on them, and to establish a regime of self-care and stress management to deal with stresses endemic in their work.

CHAPTER 2

Literature Review

Several bodies of literature dealt with issues of potential relevance to a study of secondary traumatic stress among HSPs. These issues include theories and approaches to trauma as diverse as neuroscience, body-mind-spirit practices, energy therapies such as the emotional freedom technique, and acupuncture (Feinstein, 2009); different expressive therapies modalities such as bibliotherapy and music therapy; and body-oriented approaches such as yoga, somatic experiencing (Levine, 1997), and more.

However, the review that follows will consider only those bodies of literature directly relevant to the present research. One major area of interest will be papers on efforts to mitigate STS among HSPs. A second area of interest will be papers on the approaches to trauma therapy and training approaches that were incorporated in the ETI model, whose effectiveness in mitigating STS in HSPs forms the primary inquiry of the study. Specifically, the review will cover relevant studies of the three core strategies of the ETI model: psychoeducation, expressive therapies, and certain aspects of CBT.

Following the above delimitations, the first section of this chapter reviews studies regarding the prevalence of STS in HSPs, efforts to address the phenomenon among HSPs, and the concept of positive adjustment to STS that has developed among some seeking to deal with it. The second section reviews literature on dealing with trauma, in particular, therapy and training methodologies, including psychoeducation, STS, CBT,

CBT combined with experiential therapies, expressive arts and trauma therapies, psychodrama, and ETI.

Secondary Traumatic Stress among HSPs: STS in Therapy Practitioners and Students

The STS effects on HSP have been studied widely. Multiple studies have reported a relationship between STS and HSPs such as social workers, social work students, and their field instructors, counselors, and psychosocial workers (Bride, 2007; Jordan, 2010; Knight, 2010; Moulden & Firestone, 2007; Tehrani, 2007; Trippany et al., 2004).

Counselors and social workers who provide services to traumatized clients are particularly concerned about STS (Trippany et al., 2004, p. 82). Bride (2007) found STS among social workers so prevalent that he considered it an occupational hazard. Jordan (2010) examined STS in civilian and military therapists who worked with combat veterans and, in his theoretical overview, described nine factors that affect STS severity among practitioners. These factors include (p. 228):

1. The number of clients and severity of the trauma to which the practitioner was exposed,
2. The personal history of trauma,
3. Professional trauma,
4. Deployment to a combat zone,
5. Sufficient training for working with clients who suffer from STS,

6. Peer supervision,
7. Accessibility of social support,
8. Self-care, and
9. Resiliency and stress buffers.

Similarly, therapists working with survivors of sexual abuse have been found to be at risk. A phenomenological study by Steed and Downing (1998) in Australia examined the effect of exposure to traumatic material on therapists who worked with sexual abuse trauma survivors. A sample group of female therapists (N = 12) recruited from Western Australia were all found to have experienced negative effects due to working with severely traumatized clients (p. 5), and over half the therapists reported they became more suspicious and distrusting (p. 6). In addition, a majority of therapists reported experiencing flashbacks, dreams, and intrusive thoughts as a result of being exposed to traumatic imagery.

Several researchers have sought to document the long-term effects on professionals of exposure to STS. Bride (2007) concluded that therapists and social workers leave the field as a result of experiencing STS. His study surveyed social workers from the United States (N = 600) to examine the frequency of STS and PTSD symptoms in social workers due to exposure to the traumatic events of their clients. The results showed that almost all (97.8%) respondents worked with clients who were personally exposed to a traumatic event, and most (89.9%) of the clients' issues related to those traumatic events (p. 67). However, a minority (15.2%) of the social workers in this

sample met the diagnosis of PTSD. Bride (2007) suggested that social workers who directly attended traumatized clients were likely to experience at least some symptoms of STS.

Those professionals who continue in their work are subject to changes in their worldview, with which they may have difficulty coping. Tehrani (2007) surveyed therapists who provided ongoing care to traumatized clients (N = 430) and found that 60% of his subjects experienced negative changes in their worldview. About one fifth of the sampled practitioners experienced a loss of meaning in life and felt worthless, that there was something wrong with their sense of self, and that there was no hope for recovery. These discouraging results were to some extent mitigated, however, by his finding that between 79% and 92% of the participants experienced feelings of competence and self-fulfillment, and a sense that they had performed well and expanded their learning, at least part of the time (p. 337). This finding supports one element of the present research model that will be revisited later: support for experiencing positive outcomes of exposure to STS.

In a later study, Tehrani (2010) examined the impact of working with distressed clients on four types of professional caregivers (N = 276): occupational health advisers (n = 53), human resource advisors (n = 64), counselors (n = 114), and family liaison officers (n = 45). Results indicated that the counselors felt more isolated than the other three groups of professionals. Family liaison officers and counselors reported that their belief system had been affected and they felt that there was no justice in the world.

Additionally, professional reflection through peer support or supervision and maintaining a healthy lifestyle facilitated high levels of personal growth and work satisfaction.

Finally, evidence exists that STS affects not only long-term professionals, but also social work students and field instructors. Knight (2010) conducted an exploratory study ($N = 153$) observing to what extent secondary trauma exists within a sample group of baccalaureate social work students and their field instructors. The findings indicated clear manifestations of secondary trauma among the research participants (p. 43). All participants reported experiencing some negative reactions, with students showing more signs of secondary trauma than did their field instructors (p. 46).

The studies are unambiguous and united in finding that exposure to secondary trauma brings the risk of serious, long-term disturbance to the emotional well-being of caregivers. This risk is present not only for veteran professionals who accumulate years of exposure, but also—and perhaps even more so—for social work students in their early involvements as students.

STS in Relief and Aid Personnel

A relatively small number of authors have examined the existence of STS among relief and aid personnel (Ehrenreich & Elliott, 2004; Eriksson et al., 2003; Eriksson et al., 2009; Eriksson et al., 2001; McFarlane, 2004; Musa & Hamid, 2008; Perry, 2003; Shah et al., 2007). The following paragraphs summarize these studies.

In their pioneering study, Eriksson et al. (2001) set out to identify possible risks and typical reactions that aid personnel may face during and after working abroad in difficult duty stations. They surveyed returned aid personnel (N = 195) and used the collected data to create a "personal life threat index" (p. 208). Results indicated that 10.0% of the participants suffered from PTSD and 51.3% reported moderate symptoms of at least one PTSD indicator (p. 209). Additionally, results suggested that aid personnel were at high risk for severe exposure to traumatic events (p. 210). Finally, they suggested social support to act as a buffer for staff members who were highly exposed to traumatic events (p. 211).

In later research, Eriksson, Bjock, and Abernethy (2003) interviewed World Vision International personnel (N = 101) to investigate environmental effects on personnel adaptability (p. 73). A list of common stressors for international aid workers included (a) interpersonal stressors, such as separation from family and conflict with other personnel; (b) physical environment stressors, such as issues of safety and security, (c) organizational stressors, such as work pressure and lack of support; (d) local context stressors, such as cultural differences and exposure to trauma; and (e) existential stressors, such as a sense of powerlessness to make a difference. About half the participants reported moderate to extreme stress (existential, physical, and organizational); about 43% indicated prior traumatic experience (p. 81); and 45% reported that half or more of their supportive relationships were with work peers (p. 83). A majority of the participants reported maintaining a healthy life style. Additionally,

participants reported coping skills that included developing a strategy and taking action to deal with their stressors. About 86% of the participants reported exposure to traumatic events in their current post.

In an effort to deepen the understanding of job-related stress for aid personnel, Eriksson et al. (2009) conducted a study that surveyed aid personnel (N = 111) randomly selected from three groups according to the level of their exposure to risk (high, moderate, and low). The results established that 40% of the respondents scored in a range of high risk for STS. Almost one quarter of the staff described a deficit of personal accomplishment, one fifth described high levels of emotional exhaustion, and one tenth described a sense of disconnection and depersonalization. Participants' age seemed to play a significant factor in this sample group: Younger personnel reported higher burnout scores.

Shah, Garland, and Katz (2007) surveyed aid personnel (N = 76) to document the extent of STS in aid personnel in India. They found that all personnel presented signs of STS as an outcome of their work with traumatized populations, and about 8% met criteria for PTSD (p. 59).

Several authors have explored reasons aid personnel are at risk to develop STS. Perry (2003, p. 8) suggested (a) empathy, since personnel who work with trauma survivors must be empathic and may thus internalize the pain of the survivors; (b) insufficient recovery time for personnel repeatedly exposed to the same or similar trauma stories; and (c) unresolved previous trauma.

In a survey with 17 respondents from 14 organizations, Ehrenreich and Elliott (2004) investigated existing stress management services provided by international aid organizations. Respondent reports showed that 24% of organizations provided pre-deployment stress management training, 18% offered staff regular stress-management intervention while the personnel were in service (p. 58), and half provided only one exit session to personnel at the end of their service (p. 59).

Ehrenreich and Elliott (2004) also found that aid personnel were exposed to several stressors that contributed to their vulnerability to develop STS: (a) unpleasant physical working conditions, (b) exposure to danger and ongoing stress, (c) extreme workload, and (d) lack of privacy as a result of separation from their family and support systems.

Another factor to consider is the pre-existing psychological issues that aid workers bring to their work. Musa and Hamid (2008) surveyed aid personnel from 11 organizations operating in Darfur ($N = 53$) in a study examining the relationship between psychological problems and aid personnel working in Darfur. They found the personnel in Darfur experienced a high incidence of STS and psychiatric illnesses. The authors attributed this primarily to the difficulties personnel encountered working with traumatized populations, but they also offered an alternative explanation: The personnel working in Darfur were already suffering from psychological problems that had led them to become aid workers (p. 415).

In a study that highlighted several success factors in preventing STS, Chang and Taormina (2011) investigated secondary trauma exposure of Chinese soldiers who served in a rescue mission following the 2008 Sichuan Earthquake (N = 102). Their results showed that the majority of the rescuers scored low rates of distress and high rates of satisfaction and resilience (p. 555). The researchers suggested that this outcome could have been a result of three factors. First, all Chinese soldiers took part in mandatory earthquake rescue training as part of the service. Second, all participants took part in demanding military training that could have improved their physical performance. Third, the rescuers' military background could have given them a sense of social support and comradeship. However, the sample in this study was small; further research would be needed to indicate if the Chang and Taormina study reflects a general STS response of Chinese soldiers post-disaster.

In addition to the above studies focused specifically on STS, several studies examined the broad topic of stress or risks encountered by aid personnel, including trauma. For example, Cardozo and Salama (2002) surveyed humanitarian aid personnel from 22 international aid organizations in Kosovo (N = 285) to assess their mental health difficulties and investigate the occupational risk factors associated with these difficulties. The authors identified the following stressors as affecting the mental health of personnel: (a) stressors related to living conditions and environmental difficulties; (b) stressors related to exposure to traumatic events, mostly during fieldwork; and (c) organizational stressors, such as management issues and work conflict. The authors also highlighted

preparation, suggesting that humanitarian aid organizations should focus on how best to select, prepare, train, and support aid workers, aiming to maximize their efficacy while minimizing physical and mental harm (p. 253).

McFarlane (2004) also reviewed risks commonly encountered by aid personnel in a variety of settings, including:

- Threats to health, such as loss of life, physical illness or injury, and psychological illness or injury.
- Risks related to psychological distress, timing of employment, organizational preparation, violence and life-threatening situations, cultural differences, geographical distance from home, lack of organizational support, systemic role in conflicts, and interpersonal relations.
- Individual risk factors associated with psychological distress, including difficulties with psychological adjustment before deployment, aid personnel expectations that do not match the reality of daily work, taking risks during deployment, and lack of self-care practices.

Although not specifically focused on STS issues, McFarlane's paper usefully identified the complex set of dynamics that make aid personnel particularly vulnerable to STS.

In summary, several observations can be made about the literature on STS in aid personnel:

- It is recent. The first publication, by Eriksson et al., appeared only in 2001.
- The number of existing studies is strikingly small, particularly given the growing number of aid workers in the field.
- The existing studies support the case for taking STS seriously as an urgent issue. With the exception of the Chinese study, whose subjects were soldiers staffing rescue missions rather than aid workers deeply engaged with the emotional needs of survivors, the studies all pointed to significant levels of stress and secondary trauma among aid personnel.

HSP Positive Responses to Trauma and STS

Although recognizing that traumatic events can cause psychological disequilibrium, a number of researchers asserted that trauma can also catalyze change and growth—not only for trauma survivors, but also for the practitioners who work with traumatized populations (Arnold, Calhoun, Tedeschi, & Cann, 2005; Bride et al., 2007; Calhoun & Tedeschi, 2006; Cardozo & Salama, 2002; Dekel, Mandl, & Solomon, 2011; Eriksson et al., 2003; Moulden & Firestone, 2007; Paton, 2006; Paton & Burke, 2007; Scali et al., 2012; Stamm, 2002; Tedeschi & Calhoun, 2004).

A cluster of positive concepts and terms has emerged reflecting this interest of researchers in understanding how best to facilitate positive movement after trauma. One set of terms describes resources, internal and external, that individuals and HSPs who are exposed to trauma use to cope with stressful circumstances. Internal resources include emotional flexibility, resourcefulness, intellectual mastery, ability to support others, and a

vision of moral order (Cardozo & Salama, 2002, p. 249). External resources include family and social-support mechanisms, organizational support structures, and psychological support during fieldwork and debriefing at the end of missions (p. 250).

The term perhaps most commonly used to describe positive adaptation to trauma is *resilience*, which refers to the capacity to cope, adapt, and maintain psychological and physical performance following a traumatic event (Scali et al., 2012, p. 1).

Another term widely used to describe the capacity of HSPs to maintain a sense of fulfillment and a positive attitude by serving others is *compassion satisfaction* (Bride et al., 2007; Chang & Taormina, 2011; Stamm, 2002). Compassion satisfaction results when HSPs experience positive aspects of working with trauma survivors that sustain and nourish them as individuals (Bride et al., 2007, p. 156).

However, a sense of personal satisfaction in a practitioner does not necessarily prevent secondary trauma. Practitioners may experience both compassion fatigue and compassion satisfaction at the same time. As the sense of compassion fatigue grows, the practitioner's ability to experience compassion satisfaction decreases (Bride et al., 2007). Ultimately, compassion fatigue may overwhelm the practitioner's capacity to experience compassion satisfaction (p. 156).

Finally, the literature reflects a growing awareness that many who experience trauma make personal changes to improve their lives afterwards, in spite of the deep pain they had experienced. This is recognized in the term *post-traumatic growth* (PTG), which refers to positive personal changes that may take place following a traumatic

event. Tedeschi and Calhoun (2004) defined five post-trauma outcomes that indicate PTG has taken place:

1. Improved and new relationships
2. New possibilities, previously unavailable, become available
3. Greater appreciation of life
4. Better sense of personal strength
5. Spiritual development

The PTG occurs in the context of suffering and emotional struggle. For most trauma survivors, PTG will coexist with and emerge from the struggle of coping with the trauma and not from the trauma itself. The PTG does not necessarily diminish the pain, but it becomes a way to cope with the immense pain and suffering people face post-trauma (Tedeschi & Calhoun, 2004).

Arnold, Calhoun, Tedeschi, and Cann (2005) led naturalistic interviews with psychotherapists (N = 21), seeking to explore the positive effects of conducting trauma therapy on clinicians in regards to changes in the therapists' worldview of self and the world and possible psychological growth (p. 244). All sampled clinicians reported suffering from traumatic symptoms related to their trauma work, including emotional symptoms such as sadness, anger, and fear. They reported other symptoms, including intrusive thoughts, images of their clients' trauma, and other countertransference responses such as pain and fatigue (p. 255).

However, all the clinicians also described experiencing positive outcomes from their work with trauma survivors (Arnold et al., 2005). About 86% of the clinicians reported that working with trauma survivors led them to be more sensitive, compassionate, and empathic (p. 257). In addition, several of the clinicians reported that working with trauma survivors had deepened their appreciation of human resiliency and increased their sense of vulnerability and, as a result, they were inspired to live life to its fullest. Moreover, about 90% of the clinicians reported working with clients who experienced PTG, which they described as increased or improved sensitivity, compassion, personal relationships, and gratitude for what is important in life (p. 259).

Paton and Burke (2007) argued that whereas traumatic experiences challenge psychological equilibrium in police officers, these experiences could also be viewed as opportunities for growth. Training police officers to develop future adaptive capacity for trauma, for instance, could enhance their resiliency. Such training would increase the officers' abilities to develop appropriate performance expectations and realistic outcomes of their work. It would also develop their abilities to interpret and evaluate their experiences and enable them to rehearse and get familiar with their stress and sensory responses to trauma (p. 8).

By preparing police officers to expect the unexpected and building their capacity to process challenging events as meaningful experiences, Paton and Burke (2007, p. 8) proposed that training to build future adaptive capacity for trauma could reduce the risk

of morbid trauma. However, nothing on record indicated that these suggestions, however useful, were validated in follow-up research.

In their longitudinal study of trauma, Dekel, Mandl, and Solomon (2011) identified several indicators associated with PTG. Their reported findings from their studies of former Israeli prisoners of war (N = 103), followed for over 30 years, identified factors in the pre-traumatic, peri-traumatic, and post-traumatic stages they found to be predictive of PTG. The researchers found that 23% of the participants suffered from PTSD, yet about 99% of the participants reported PTG and 78% reported more-than-moderate positive changes (p. 244). The PTG had little to do with pre-traumatic or personality factors, according to the authors (p. 249). Both active coping and loss of control during the peri-traumatic stage were found to be predictors of both PTSD and PTG, a seemingly paradoxical finding. The authors speculated this finding might suggest that PTSD and PTG are, in reality, facets of one overarching construct that might be called *psychological trauma reaction* (p. 249). Finally, a sense of self-control predicted PTG, whereas pre-trauma socioeconomic variables predicted only PTSD (p. 248).

In summary, although studies ubiquitously reported that clinicians and aid personnel suffer from traumatic symptoms related to their work with individuals and communities exposed to trauma, they also commonly report that caregivers of traumatized people experience positive outcomes as a result of the same work (Arnold et al., 2006). Research highlighted the possibility that people who have

experienced trauma, either primary or secondary, can achieve positive, long-term gains. Even minimal external assistance such as social support has been found significant in promoting the mental health of clinicians and aid personnel who work in trauma settings.

What to Do about STS: An Overview of Approaches

The literature on efforts to prevent or mitigate STS, although scant in general and silent when it comes to efficacy, nevertheless was large enough to engage in theoretical consideration of causes and possible responses.

According to Bride, Radey, and Figley (2007), four elements contribute to STS among HSPs: lack of self-care, prior trauma, work stressors, and a sense of deficiency at work (Newell & MacNeil, 2010, p. 60).

A theoretical study by Forbes et al. (2011), based on the experiences and insights of the authors in psychological first aid (PFA), proposed measures to reduce trauma impact on aid personnel. Their model gave particular attention to preparedness and proactive measures that could be taken when exposure to trauma is expected, to minimize post-trauma damage (p. 227). The framework also included an early intervention model for personnel who survived traumatic events, with strategies in both pre- and post-trauma phases, to improve individual and community resiliency.

Phase One in the Forbes et al. (2011) model involved the development of institutional policies and procedures for dealing with trauma, and Phase Two provided staff training in PFA. Phase Three involved a post-trauma intervention to initiate contact and engagement with staff, post-trauma; enhance the safety and comfort of trauma-

exposed staff; stabilize and support overwhelmed staff; identify the staff's immediate needs; offer practical assistance to meet those needs; connect staff with social support; provide staff with information about common trauma responses and coping skills; and connect staff with needed services for possible assistance in the future.

Providing social support to overwhelmed staff is a component in numerous institutional efforts to deal with trauma exposure. Prati and Pietrantoni's (2010) meta-analysis study on promoting mental health among first responders reviewed 37 empirical studies on the role of social support for first responders working in the aftermath of trauma. The authors found a medium-magnitude effect size ($r = .27$), demonstrating that social support was significantly related to first responders' mental health. Specifically, interventions that increased first responders' social support were found to promote their emotional well-being. Their results also demonstrated that even some forms of support that were not necessarily directly mental health related had a positive effect. An additional finding was that the perceived social support effects size ($r = 31$, $p < .001$) was larger than the received social support ($r = .22$, $p < .001$), indicating that even the perception of support can promote a sense of well-being among first responders.

In another theoretical review of existing literature, Phipps and Byrne (2003) outlined five short-term trauma interventions for countering STS, three of which were exposure-based interventions:

1. Critical-incident stress debriefing, an exposure-based therapy in which the practitioner coaches the trauma victim to recall traumatic events reiteratively in a safe environment (p. 141).
2. Critical-incident stress management, a series of interactions including pre-trauma training, debriefing, and individual follow-up one month after the traumatic event (p. 142).
3. Stress-inoculation training, a skill-based training designed to reduce arousal during exposure to a traumatic event (p. 142).
4. Traumatic-incident reduction, a brief exposure-based therapy given in two several-hour-long sessions (p. 143).
5. The orienting approach, a one-session crisis counseling response that aims to give the trauma victim support, a sense of normalization, introduction to anxiety reduction techniques, introduction to self-help techniques, and information about possible extended care and available services (p. 144).

Van der Veer and Francis (2011) reviewed existing mental health worker training and proposed guidelines for training grassroots psychosocial workers and counselors who provided emergency services post-disasters and post-conflicts. Based on their own experience as trainers, the authors described common traits of grassroots psychosocial workers that make them particularly vulnerable to difficulties (p. 146). Specifically, the workers have insufficient training; are overloaded emotionally, with no available space for adequate self care; possess only basic skills to assist their clients; hold strong cultural-

and religious-belief systems; respond to their clients impulsively instead of systematically; lack confidence; and are burdened with their own problems.

To address these deficits, the authors proposed a field-based, participant-oriented training approach for psychosocial workers with the purposes to provide emotional support and strengthen their existing skills, provide basic planning and reflection skills, teach self-reflection skills, and use participants' field case studies as experiential learning tools for expanding their clinical skills.

Training for psychosocial workers and counselors, according to van der Veer and Francis (2011, p. 151), should be conducted in a particular way. That is, trainers should

- Prioritize a group sense of safety,
- Introduce new materials only when the group is able to sustain it,
- Go over a few themes thoroughly rather than many themes superficially, when pressured in time,
- Pay attention to emotion-triggering themes,
- Introduce a few themes at a time, and
- Pay attention to their own emotional triggers as a tool to understand the group dynamics.

Mitigation Strategies for HSPs

In a variety of fields, HSPs work with traumatized people, albeit not with the primary intention of providing therapy or emotional support. Such professionals have another primary mission; yet, because they work with traumatized clients, they are

themselves vulnerable to secondary trauma, as evidenced by the recurrence of this theme in the literature of various professions.

Brooks, Bradt, Eyre, Hunt, and Dileo (2010) conducted a mixed-methods study that investigated the effects of music and guided imagery on nursing personnel ($N = 52$) who had experienced STS. On one hand, the qualitative results confirmed that the participants found the guided imagery sessions highly effective. On the other hand, the quantitative results of the study did not yield a statistically significant difference relating to emotional exhaustion ($t(50) = .55$, $p = .59$), depersonalization ($t(50) = 1.05$, $p = .30$), or personal accomplishment ($t(50) = .51$, $p = .61$). Thus, further research would be needed to determine whether the intervention is effective with nurses who experienced STS.

Hilliard (2006) led a study to evaluate the effects of music-therapy methods (didactic versus ecological) on hospice personnel ($N = 17$) in regards to team building and STS (p. 397). The didactic therapy sessions were structured and planned by the group facilitator, whereas the ecological therapy sessions were based on the participants' spontaneous musical and verbal expressions. The results demonstrated that the group that had didactic-structured sessions presented greater improvement in the participants' sense of team building than did the ecological therapy group (p. 400). Secondary traumatic stress scores were not significantly different between the groups (p. 400).

Although not directly linked to STS, a growing body of literature in the field of nursing dealt with ethical or moral distress that nurses encounter in their line of duties. A primary response of Canadian nurses has been the development of a Canadian Nurses

Association Code of Ethics to provide guidance in responding to situations that are outside of their control (Canadian Nurses Association, 2003, p. 2).

Emergency-services personnel are highly exposed to traumatic events on an ongoing basis (Violanti, 2001). Growing awareness that the experiences affect those engaged in emergency services has inspired efforts to develop and deploy trauma-intervention strategies. These interventions aimed to give personnel space to talk about traumatic events and provide them with resources on stress reactions, coping strategies, and counseling (p. 2).

Walsh (2009) reviewed 12 studies (three quantitative, eight qualitative, and one mixed) about relief workers' responses after disasters, and tabulated results for a comprehensive overview of research findings. The combined sample comprised 1,523 personnel in studies conducted from 1984 to 2007. Walsh found three intervention strategies had a positive effect on the respondents in the study: debriefing, team building, and pre-disaster training. Pre-disaster training was found to be the most effective instrument for minimizing post-disaster psychological difficulties (p. 239). Such training included disaster preparedness, teamwork, and preparation for a humanitarian crisis. Regardless of the phase, Walsh emphasized maintaining a sense of control and open communication as keys to the success of efforts to provide emotional support to relief workers (p. 238).

In a study to establish whether levels of post-traumatic stress in newly recruited firefighters varied from those of experienced firefighters, Regehr, Hill, Knott, and Sault (2003) surveyed new recruits (n = 65) and experienced firefighters (n = 58) before and after a 10-week training. A t-test was conducted to compare the results of new recruits and experienced firefighters. Experienced firefighters were shown to have significantly higher scores on the Impact of Events scale (Zilberg, Weiss, & Horowitz, 1982) ($t = 2.55, p < .01$) and on the Beck Depression Inventory (Beck & Beamesderfer, 1974) ($t = -4.62, p < .001$) (Regehr, Hill, Knott, & Sault, 2003, p. 191). Experienced firefighters reported significantly lower overall social support and lower levels of perceived support from family and their employer (Regehr et al., 2003, p. 192). As a result, Regehr et al. (2003) proposed that post-trauma interventions, stress management, and self-care education should take place early in the personnel-recruitment process and continue throughout the recruits' career (p. 193).

Another study of efforts to support emergency personnel with minimal training who were exposed to traumatized populations came from the sector of telephone counselors. Phipps, Byrne, and Deane (2007) surveyed volunteer telephone counselors from the Lifeline Center in New South Wales, Australia who participated in a one-day Orienting Approach for trauma counseling training (N = 73). The Orienting Approach is a single-session crisis-counseling intervention that provides personal support, assistance in achieving a sense of normalization, and self-help strategies to trauma survivors (Phipps & Byrne, 2003). Comparison of pre- and post-assessment scores revealed that total-skills

scores of participants improved following the Orienting Approach training. Results also suggested that the Orienting Approach had a short-term stress-reduction impact. However, as there was no control group, the findings of this study are of limited value.

Other efforts to support emergency responders have adopted a strategy of strengthening peer support. For instance, Cardozo et al. (2005) investigated the mental health of international (n = 410) and national aid personnel (n = 325) in Kosovo. The researchers found that aid workers were exposed to many stressors and frequent traumatic events without sufficient support mechanisms. Cardozo et al. (2005) proposed that establishing peer-support networks and enabling family members to join personnel on assignment could benefit the mental health of personnel, as long as it was to an accompanied (family) duty station.

Kaspersen, Matthiesen, and Götestam (2003) examined two samples of aid personnel who served in Kosovo: relief workers (n = 302) and United Nations (UN) soldiers (n = 97). They aimed to assess the relationships among social networks, trauma exposure, and trauma responses, and used regression analysis and interaction plots to map connections among these three variables.

Their results suggested four main findings (p. 422):

1. Levels of trauma exposure and social network (relationships with family, friends, and colleagues) differed for UN soldiers and relief workers.
2. Support of friends and colleagues was found to be more important than family support to UN soldiers.

3. UN soldiers were significantly more exposed to trauma than were relief workers.
4. Social networks moderated the relationship between trauma exposure and trauma responses among the personnel.

Scully (2011) described a theoretical care model for emergency-services personnel based on an employee-assistance program that emphasized group support. This model proposed two possible approaches for interventions after a traumatic event: either individual or group post-trauma interventions based on critical incident stress debriefing methods. The latter methods were designed to create group support and, in that setting, foster a sense of normalization of the traumatic experience. Additionally, traumatized service personnel are provided essential information about the traumatic event and possible support services (p. 36). Both individual and group interventions give special attention to preventing later psychological suffering by intervening before the trauma victim adopts maladaptive cognitive and behavioral coping mechanisms (p. 36.)

Scully (2011) described a personnel-support program that was established by the Queensland (Australia) Ambulance Service in 1992. It included face-to-face counseling, 24-hour phone counseling, a peer-support program, psychological debriefing, chaplain services, indigenous support service, gay and lesbian support service, and mental health resilience building (p. 38).

Incoming peer support officers underwent a strict preparation process that included education and training, resiliency building, and self-care strategies. Recruits

were introduced to essential concepts about human stressors, including fight-or-flight; workplace and stress management; coping with stress; physical, emotional, and cognitive distress pointers; loss and grief; and communication during conflict (Scully, 2011, p. 39). In addition, recruits took skills-development training in effective communication skills, essential counseling skills, processing personal experience with trauma, concepts of disaster management and stress, approaches to physical and mental health, suicide behavior indicators, and ethics and confidentiality. As part of this program, recruits were encouraged to identify personal challenges that might arise from trauma exposure. Since the efficacy of this personnel support program was not measured, future research would be needed to validate the arguments Scully presented.

In summary, the literature on efforts to address STS in caregivers confirmed that a wide variety of fields recognize STS as an important challenge that needs to be addressed. That said, when it comes to guidance regarding which approaches are effective, the literature was limited. Only five studies provided empirical data about the effectiveness of interventions with HSPs. Of these, both Brooks et al. (2010) and Hilliard (2006) studied medical personnel; Phipps and Byrne (2003) studied volunteer telephone counselors; and Regehr et al. (2003) studied firefighters. Only Walsh (2009) studied people working in the same area as those in this present study—disaster first responders and aid personnel. However, for purposes of identifying options and creating response models, the literature provided access to a rather wide range of theoretical approaches that have not been empirically tested.

Trauma Therapy and Training Methods

This study focuses on the efficacy of training as a strategy for reducing STS among caregivers. Data on efficacy *per se* are virtually nonexistent—a surprising gap, given the salience of STS as a professional issue, the number of personnel affected by it, and the amount of institutional resources being invested in training as a solution.

However, a significant body of literature has emerged regarding both primary and secondary trauma in varying populations, which provides a useful reference point in considering responses to trauma. A subset of this literature addressed STS in caregivers, making the case for training as a response and outlining training responses.

This section of the literature review will review essays on trauma therapy and the training methods that form the core of the ETI training model—namely, psychoeducation, CBT, and expressive therapies (in particular, psychodrama).

Psychoeducation

A range of studies and reports have, for some time, asserted that the best practice to deal with STS is awareness and education about the phenomena, risk factors, and symptoms (Bride, 2007; Budosan, 2011; Cunningham, 2004; Ehrenreich, 2001; Erikson et al., 2001; Knight, 2010; Newell & MacNeil, 2010; Phipps & Byrne, 2003; Phipps et al., 2007; Scully, 2011; Shah et al., 2007; van der Veer & Francis, 2011; Walsh, 2009; Whealin, Ruzek, & Southwick, 2008).

A number of authors shared Herman's (1992) view that knowledge is power. Psychoeducation provides personnel exposed to trauma with information about psychological, physical, and emotional responses to trauma (Phoenix, 2007). Psychoeducation arms those who experienced trauma, or were exposed to secondary trauma, with information that will enable them to recognize warnings signs and seek help when needed (Dorrepaal et al., 2010; Hobfoll et al., 2007; Kinzel & Nanson, 2000; Krupnick & Green, 2008; Phipps et al., 2007; Phoenix, 2007; Southwick et al., 2008).

That psychoeducation is effective in addressing trauma is supported by Hobfoll et al.'s (2007) finding that psychoeducation at the center of post-disaster responses was effective in reducing trauma symptoms. Phipps et al. (2007) suggested that psychoeducation alone—even unaccompanied by other interventions—assisted trauma survivors to better understand their trauma symptoms and, thus, contributed to a decrease in their stress symptoms.

A kind of knowledge some researchers thought particularly valuable comes from neuroscience. Jones, Bosch, and Williamson (2014) asserted that recent discoveries in neuroscience provide important insights into the way organizations should conduct preventive training for aid workers. Raider, Steele, Delillo-Storey, Jacobs, and Kuban (2008) suggested that a good understanding of brain responses to trauma is important for those who are affected by trauma and those who work with trauma survivors, and proposed that trauma survivors be educated on the psychophysiology of brain responses to trauma and how it relates to symptoms that survivors experience (p. 172).

CBT and Experiential Trauma Therapy

More than any other approach, CBTs lie at the core of mainstream approaches to trauma therapy (Butler et al., 2006; Cohen et al., 2007; Dorrepaal et al., 2010; Ehlers et al., 2003; Frank et al., 1988; Johnson, 2009; McDonagh et al., 2005; Muesser et al., 2008; Seidler & Wagner, 2006).

Even when other methods are used, CBTs are often part of a package of approaches. Rademaker, Vermetten, and Kleber (2009), for example, combined experiential therapies, including psychodrama, with CBT methods to treat peacekeeping veterans suffering from PTSD.

Another research effort combined group psychodrama with CBT to work with college students and patients diagnosed with mood, substance abuse, anxiety, and personality disorders. Specifically, Treadwell, Kumar, and Wright (2002) concluded that CBT could be used effectively within the context of psychodrama. However, there are many limitations in this study: (a) there was no control group; (b) it did not report what methods were used to collect data; and (c) no mention was made of sample size. Therefore, additional research would be needed to establish if combining psychodrama and CBT in a group approach for college students and patients diagnosed with mood, substance abuse, anxiety, and personality disorders, is indeed empirically effective.

Karataş and Gökçakan (2009) conducted a study that investigated the effects of CBT and psychodrama group practices on adolescent aggression in Turkey. The study utilized a pre- and post-test survey, consisting of a version of the Aggression Scale (Buss

& Warren, 2000; Can, 2002) adapted into Turkish. A group of high school students (N = 36) were divided into two experiment groups, one using psychodrama (14 sessions) and one using CBT (10 sessions), plus a third control group. The researchers found that CBT was effective in decreasing aggression (except for verbal aggression, wherein psychodrama was effective in decreasing aggression), except for verbal-physical aggression. This study did not compare the effectiveness of psychodrama with that of CBT.

Experiential and Expressive Arts Trauma Therapies

Expressive-arts trauma therapies use imagination and creative expression as a core part of the healing process (Lahad, 1999). These therapies have been found to be promising in treating populations exposed to trauma. To illustrate, Johnson (1987) found that survivors experience a state of "psychic numbing…or alexithymia" (p. 7) that affects their ability to verbally express their feelings. As survivors are often unable to translate their feeling into words, therapists suggest that initial trauma treatment should focus on symbolic—not verbal—processing as a meant to access traumatic memories. In this respect, researchers have found expressive arts promising.

Since the late 1980s, a growing number of authors argued that trauma creates nonverbal mental activity that dominates verbal thinking (Carrion & Wong, 2012; Gantt & Tinnin, 2009; James & Johnson, 1996; Johnson, 1987, 2009; Johnson et al., 2009; Lahad & Doron, 2009; Lahad et al., 2010; Langmuir et al., 2012; Lanius et al., 2004; MacIntosh & Whiffen, 2005; Ogdan, Minton, & Pain, 2006; Parker et al., 2008; Spring,

2004; Talwar, 2007; Tyler, 2012; van der Kolk, 1994, 1996, 2002; van der Kolk, Burbridge, & Suzuki, 1997; van der Kolk, van der Hart, & Marmar 1996).

These authors and many others suggested that expressive art therapies might be more appropriate forms of trauma therapies than verbally dominant ones (Alfonso & Byers, 2012; Buk, 2009; Byers, 2011; Carey, 2006; Crenshaw, 2006; Gantt & Tinnin, 2009; Harrison, 2012; James & Johnson, 1996; Johnson, 1987; Johnson et al., 2009; Lahad & Doron, 2009; Lahad et al., 2010; Landy, 2010; Langmuir et al., 2012; MacIntosh & Whiffen, 2005; Parker et al., 2008; Sajnani & Johnson, 2014; Spiegel et al., 2006; Talwar, 2007; van der Kolk, 1994, 1996, 2002, 2006).

In his 1997 keynote at the American Society of Group Psychotherapy and Psychodrama annual meeting, Bessel van der Kolk, an early advocate, argued that experiential therapies, including psychodrama, were the "treatments of choice" (p. 59) for trauma patients (Hudgins, Drucker, & Metcalf, 2000). Van der Kolk's enthusiasm for experiential methods was based on research conducted over years. He found that when PTSD clients were presented with images associated with their trauma, their left frontal cortex did not respond, particularly in the Broca area, which is the speech center (Wylie, 2004, p. 7). However, areas of the brain's right hemisphere, linked to automatic arousal, lit up across the amygdala, the part of the brain that responds instinctually to possible threats (p. 7). From his studies, van der Kolk drew the conclusion that trauma did not make an imprint on the verbal part of the brain, but in deeper areas of the brain, which are only slightly affected by thinking and cognition (Wylie, 2004).

In a similar vein, Koch and Weidinger-von der Recke (2009) pointed out that verbal psychotherapy addresses only the cognitive-level elements of trauma and overlooks the effects of trauma on the physical body. They observed that trauma survivors experience somatic symptoms and suggested that researchers should therefore consider nonverbal (as well as traditional, verbal) therapies when working with trauma clients.

One of the most challenging aspects of working with trauma is the barriers it creates to self-articulating the experience. It is fairly common for trauma survivors to fail to express their feelings in words (Johnson et al., 2009). The nonverbal aspects of expressive arts enable the survivors to access traumatic memories, even when verbal expression is limited (James & Johnson, 1996; Johnson et al., 2009).

Building on the consensus emerging among certain scholars, trauma presented a unique configuration of challenges for which experiential and creative approaches were the treatment of choice. Johnson et al. (2009) sought to ascertain which were the most effective. The creative-arts therapy approaches that empirically demonstrated the greatest effectiveness with trauma survivors in Johnson et al.'s study were

- Imaginal exposure, which the researchers considered to be "the most important therapeutic element in trauma treatment" (p. 480);
- Cognitive restructuring, via drama and psychodrama techniques such as role reversal and short vignette, used to play out the trauma—but with new

responses to bring a sense of empowerment to the survivor's view of the situation;

- Cognitive interventions, including repeating the story and "restorying" (p. 480) of traumatic experience, journaling, writing, and storytelling;
- Stress and anxiety management, such as progressive muscle relaxation and deep breathing (p. 481);
- Resilience-enhancement techniques that use creative arts such as humor, creativity, spontaneity, and flexibility to improve a sense of hope, self-esteem, and social interaction, and processing the dominant post-trauma feelings of shame and guilt (p. 481); and
- Testimonial methods, which assist trauma victims to artistically portray and educate the public about their experiences. The researchers found that creative performances additionally facilitated trauma survivors' sense of reintegration into society (p. 481).

Johnson et al. (2009) additionally wrote an overview of several creative-arts therapy methods designed specifically for populations exposed to trauma. These included:

- The *therapeutic spiral model* (TSM), developed by Hudgins (2002) to provide clinical guidance and for conducting psychodrama with trauma survivors
- Managing traumatic stress through exposure to *traumatic imagery* (Cohen, Barnes, & Rankin, 1995)

- *Guided imagery and music* (Bonny, 2002)
- *Six-part story* (Lahad, 2006)
- *CBT and therapeutic cards* (Lahad & Doron, 2009)
- The *center post model* of dance and movement therapy intervention (Gray, 2001)
- *Developmental transformation* using drama-therapy improvisational role playing (Johnson et al., 2009).

Although few empirical studies have been conducted on the use of expressive arts with trauma survivors, several researchers reported expressive-art therapies to be beneficial in facilitating the healing process (Crenshaw, 2006; Gantt & Tinnin, 2009; Golub, 1986; Howard, 1990; Orr, 2007; Spiegel et al., 2006; Talwar, 2007).

In her book, *Expressive and Creative Arts Methods for Trauma Survivors,* Carey (2006) presented a collection of expressive-arts therapy methods she considered effective with trauma survivors, such as play therapy, drama therapy, group art therapy, family art therapy, vocal psychotherapy for adults and children, sand play, puppetry interventions, video play, and story crafting.

Lahad et al. (2010) empirically studied CBT and therapeutic cards approaches. These researchers studied SEE FAR CBT, an integrated approach for treating PTSD that combines

- SEE: elements of somatic experiencing (Levine, 1997), focusing on positive and negative sensations reported by the survivor, in order to assist discharge

of traumatic energy and enable self-regulation of traumatic responses manifested in the body (Lahad et al., 2010);

- FAR: fantastic reality (Lahad, 2006), which assists trauma survivors to create an imaginary "fantastic" space where they can face their traumatic experiences and "change the unchangeable" (Lahad et al., 2010, p. 392); and
- CBT: cognitive behavioral therapy (Foa, Keane, Friedman, & Cohen, 2008).

In this study, the efficacy of SEE FAR CBT was compared with another acknowledged PTSD therapy approach: eye movement desensitization and reprocessing (EMDR). Following intake by two clinicians, participants ($N = 21$) were assigned to one of the therapy groups according to availability. The post-traumatic diagnostic (PTD) scale (Foa, Cashman, Jaycox, & Perry, 1997) was administered at the first, last, and one-year follow-up sessions. The PTD is a self-reported scale that measures trauma exposure and PTSD severity with three subscales: avoidance, intrusion, and arousal. Results indicated statistical significance for total and subscale scores of the participants in both the SEE FAR CBT and EMDR interventions from pre-treatment to post-treatment and from pre-treatment to follow-up. However, no statistical difference was demonstrated from post-treatment to follow-up. Additionally, no differences in PTSD symptoms were observed between the two intervention groups at any given assessment point (Lahad et al., 2010, p. 396).

Lahad et al. (2010) asserted that SEE FAR CBT was particularly effective because several components were integrated from other trauma-therapy models. First, the visual inducements of this work activated the brain's visual cortex and facilitated plasticity of the traumatic memory (p. 397). Second, the esthetic distancing (Landy, 1996) component enabled survivors to use a dramatic space to get in touch with a sense of emotional stability (Lahad et al., 2010, p. 392). Third, fantastic reality elements enabled survivors to consider desired and empowering alternative responses to the traumatic event.

Lahad et al. (2010) concluded that the SEE FAR CBT protocol could contribute much in treating PTSD. In their view, "the uniqueness of SEE FAR CBT is the introduction of possibilities into otherwise 'frozen' memory by suggesting to the client the possibility to remove unpleasant cards and retell the story or the instruction to experiment with the 'as if or if only' card of what could have helped without changing the outcome. This process empowers the client to withstand the impossible story with some inner real or imaginative resources" (p. 397).

In the area of crisis intervention, Lahad (1999) described his drama therapy work with 10 groups of Israelis following an emergency evacuation caused by rocket shelling in northern Israel in 1996. Each group received five sessions focused on themes such as trust building, dealing with fears and concerns, getting ready in case of another evacuation, and mobilization of resources (p. 30). Reflecting on the experience, Lahad highlighted the need for special training in crisis intervention for expressive therapists.

He also called for further development of expressive therapy techniques specialized for crisis intervention.

Whereas Lahad's (1999) study involved trauma survivors after war, Alfonso and Byers (2012) and Byers (2011) reported on a humanitarian art-therapy program for traumatized survivors of natural disaster. Alfonso and Byers (2012) created an initiative called Collective Healing through Art (C.H.ARTS) following the aftermath of the mudslide and typhoon Reming in the Philippines in November 2006. The first part of the intervention focused on one- or two-day training on secondary trauma and self-care for 50 HSPs who provided crisis response support to community members. The second part included a two-day intervention with 150 local trauma survivors, followed by referral to continued support by local professional networks. They concluded that special attention should be given to secondary traumatization and self-care among the aid workers. Because no empirical data was collected to measure the efficacy of this intervention, further research is needed to evaluate the efficacy of such an intervention.

Psychodrama Therapy

Jacob Levi Moreno (1889-1974) developed psychodrama in the mid-1930s (Blatner, 1997). Psychodrama is a form of group or individual experiential therapy that involves integrating imagination and action with verbal expression and self-reflection in clinical practice (Blatner, 1997; Dayton, 1994; Hudgins et al., 2000). Blatner (1997) suggested that psychodrama could be adapted for use not only for therapy in classic psychotherapy settings, but also for other purposes such as training.

Psychodrama foundations and methods. *Role play* refers to the enactment of roles, whether spontaneously or scripted (Kipper & Ritchie, 2003). Moreno (1946) concluded that working with roles as a point of reference has a methodological advantage in therapy. *The double* or *doubling* is an auxiliary voice used in a psychodrama session to reflect the inner reality of the client by articulating issues or feelings difficult to express (Dayton, 1994; Thacker, 1984). The double was found to generate empathy (Kipper & Ritchie, 2003, p. 22). *Role reversal* involves changing the initially given role with another person to demonstrate how another character in a scene behaves (Kellermann, 1992; Kipper & Ritchie, 2003). Kipper and Ritchie (2003) argued that role reversal enables letting go of inhibitions, generates warmth and trust, and facilitates attitude change (p. 22). *The empty chair* is a technique in which the client turns to an empty chair, speaks to it, and reverses roles with it as if it were the person or situation with which there is unfinished business (Artzi, 1991). *Mirroring*, as a technique, gives the client an opportunity to view the self through interacting with someone else or a mirror (Dayton, 1994). *Vignette* is a one- or two-scene psychodramatic enactment, and surplus reality uses enactment of wishful scenarios of a client's personal psyche (Dayton, 1994). In *surplus reality*, the protagonist is able to roam in borderless space, free to act in and out without the restrains of the real world (Kipper, 2001. p. 142).

Over the years, an ongoing debate has evolved regarding the efficacy of psychodrama. For that reason, Kipper and Ritchie (2003) conducted meta-analyses of the effectiveness of psychodramatic therapy techniques, reviewing 25 studies that were

published in professional refereed journals. All were controlled studies that included enough statistical information to calculate effect size. Kipper and Ritchie (2003) divided the studies into four groups, three of which included only a single psychodrama technique, namely, role-reversal, role-playing, or doubling. The fourth group contained studies that used multiple psychodrama techniques. The researchers found that the 25 studies generated 281 unique effects related to their dependent measures, with a combined sample {n = 1,325 *(M* = 53*, SD* = 40.95)}. They found that the total average adjusted d coefficient for all the studies under investigation, 0.95 (SD = 0.69), was significantly different from zero, ($t(280) = 23.20$, $p < .01$) at 99% CI [0.847, 1.061] (p. 18). Thus, they concluded that the results, in total, suggested the occurrence of a moderate- to large-size improvement effect.

Since the 1980s, a growing number of authors have suggested the possible benefits of psychodrama as an experiential therapy for trauma survivors (Bannister, 1997; Blatner, 1997; Carbonell & Parteleno-Barehmi, 1999; Dayton, 1994; Hudgins et al., 2000; Hudgins & Kiesler, 1987; Hudgins & Kipper, 1998; Kellermann, 1992; Kellermann & Hudgins, 2000; Miloševic, 2000, n.d.; Ragsdale, Cox, Finn, & Eisler, 1996).

In a recent book about trauma-informed drama therapy, Sajnani and Johnson (2014) offered a detailed historic overview of the neurobiological aspects of trauma and the connection between trauma and the body. Trauma-informed drama therapy focuses

on resilience enhancement, stress management, imaginal exposure, and cognitive restructuring (p. 16).

Sajnani and Johnson (2014) suggested that drama therapy could make particular contributions to the field of traumatology. Specifically,

- Dramatic re-enactment offers more freedom of expression and vivid experience than CBT imaginal exposure (p. 16).
- Theater techniques offer different types of expression tools that are far greater than the verbal instructions given by CBT (p. 17).
- Drama therapy methods like role reversal enable the trauma survivor to gain an in-depth look at the traumatic experiences and an array of possibilities to use the creative space to process these experiences.
- Dramatic methods provoke spontaneity and humor, and are more fun to engage with, than CBT (p. 17).

Sajnani and Johnson (2014) stated that, at the time of their writing, most drama therapists employed their typical means with trauma survivors, instead of using trauma-focused approaches such as Hudgins' (2002) TSM model, Lahad et al.'s (2010) SEE FAR CBT, and Johnson, Lahad, and Gray's (2009) developmental transformations mentioned earlier. Sajnani and Johnson's (2014) book introduced additional trauma-informed trauma therapy approaches, such as collective drama therapy, auto-ethnographic performance play, and trauma-informed drama therapy with complex

trauma and executive functioning. Lastly, the book presented several articles about the use of trauma-informed drama therapy with different types of trauma populations.

Corresponding with a growing interest in drama therapy—in particular, psychodrama trauma therapy—a few articles suggested the possible benefits of psychodrama therapy and techniques to deal with secondary traumatization and burnout amongst HSPs (Barbour & Moreno, 1980; Kähönen, Näätänen, Tolvanen, & Salmela-Aro, 2012; Oflaz, Meric, Yuksel, & Ozcan, 2011; Siegal & Driscoll, 1995; Thacker, 1984).

Barbour and Moreno (1980) defined *role fatigue* similarly to their definition of burnout: "Role fatigue is a loss of energy available for a role because of continued unproductive role performance" (p. 186). They suggested that therapy for role fatigue include the use of psychodrama techniques to redefine the way the client views the situation, use role reversal to explore different perspectives to view the situation, expand or reduce the role to recover from the role fatigue, reassess role expectations, re-evaluate role performance, consider alternative roles, and train for alternative roles (p. 189).

Thacker (1984) argued that psychodrama has potential to reduce relief burnout and role fatigue in HSPs. For five years, Thacker conducted a psychodrama-staff support group for counselors working in a county jail in the United States and found that psychodrama was particularly beneficial in preventing and reducing burnout. Furthermore, psychodrama provided the group participants with adaptive methods for dealing with occupational stress. Lastly, she proposed that psychodrama offered group

participants the necessary means to maintain their own mental health while helping others. However, the suggestions from this study are of limited value for research purposes, because there was no control group. Future research is needed to ground Thacker's arguments empirically.

According to Siegal and Driscoll (1995), since the 1950s, mental health and law enforcement have used role play as a teaching tool during briefing and debriefing training for HSPs. Siegal and Driscoll presented a training model for law enforcement critical-incident teams that incorporated a one-session psychodrama debriefing training. They concluded that psychodramatic techniques were excellent tools to teach peer-debriefing skills to law enforcement personnel. However, they offered no empirical means to demonstrate such a claim. In addition, they did not use a control group, so further research would be needed to support their conclusions.

Some studies showed encouraging results on the use of psychodrama as a tool for supporting caregivers. Oflaz, Meric, Yuksel, and Ozcan (2011) proposed psychodrama group training for improving self-awareness of nurses at a teaching hospital in Ankara, Turkey. Training was conducted during an intensive-care nursing training program with three groups ($N = 42$); each group received one session. The session included a psychodrama protocol of warm-up, enactment, and sharing. Data were collected qualitatively using written records and observations of the group leaders and feedback gathered from the trainees. The results suggested that this type of training helped the nurses and could be a useful educational tool. The authors reported that the training

helped the nurses better understand themselves and improve their communication skills. However, since there was no control group, the results did not demonstrate efficacy and have limited value for research.

Another study found psychodrama brought rapid improvement in HSPs suffering from burnout. Kähönen, Näätänen, Tolvanen, and Salmela-Aro (2012) investigated the efficacy of group psychodrama and group analysis among HSPs who suffered from severe burnout. Participants (N = 77) were randomly assigned to an intervention group that received psychodrama therapy (n = 24), a group that received group-analysis therapy (n = 25), or a control group (n = 28) that was able to consult with an occupational physician and a psychologist if needed. Changes in sense of coherence (SOC) were measured three or four times. The SOC among the three groups were statistically significant ($F(4,148) = 2.65$, p =.036). These results indicated that the psychodrama group demonstrated more rapid improvement than did the analysis group, whereas the analysis group saw longer-lasting post-intervention effects than the other two groups.

The ETI Model

Over the last 30 years, several authors have proposed conceptual models for understanding and influencing the dynamics of recovery following trauma or violence. Although based on substantial personal experience in some cases, none were evidence-based. Rather, they solely reflected the theories and practices of their creators.

Earlier models for breaking cycles of violence and trauma were the Walker (1980) cycle of violence, Kraybill (1988) cycle of reconciliation, Dayton (1994) cycle of trauma,

Botcharova (2001) breaking the cycle of violence, Strategies for Trauma Awareness and Resiliency (STAR, 2002), and Arts for Trauma Awareness and Resiliency (AFTAR) (Gertel, 2006).

In 2010, Gertel Kraybill developed the ETI therapeutic approach studied in the present research, in partial completion of a master's degree at Lesley University. The ETI model took insights from earlier models, in particular the Kraybill Reconciliation Model (1988), STAR (2002), and AFTAR (Gertel, 2006), a model developed by the author in partial completion of a master's degree at Eastern Mennonite University. However, the author made alterations and additions, reflecting additional insights from the author's theory and practice that ended up in the ETI model at 2010.

In the pilot research, Gertel Kraybill (2013) measured the effectiveness of the ETI approach with aid personal serving in Lesotho, in an individual setting. The protocol included six sessions, each two hours long. The model used in the pilot included the following six stages:

1. Traumatic event;
2. First response;
3. Withdrawal;
4. Self-awareness;
5. Act of risk; and
6. Trauma integration.

In the pilot study (Gertel Kraybill, 2013), data were collected with the Secondary Traumatic Stress Scale (STSS) (Bride et al., 2007) and the ProQOL (Stamm, 2009). Data were gathered pre- and post-intervention, and in the three-month follow-up for the intervention and control groups. The overall results were not statistically significant. However, the STSS subscale change scores for avoidance and arousal were significant. Cohen's *d* calculated for the ProQOL ($d = 0.36$) suggested a low effect-size value; and for the STSS ($d = 0.80$), suggested a moderate to high effect size.

Following the pilot study (Gertel Kraybill, 2013), the author refined the model so that each stage name was only one word, to improve retention by clients. The updated names of the six stages were: (1) Routine, (2) Event, (3) Withdrawal, (4) Awareness, (5) Action, and (6) Integration (Appendix A).

The ETI approach integrates three key insights from research and practice on trauma therapy:

Psychoeducation. This provides personnel at risk for STS with key information about post-trauma responses, in particular, the way the brain responds to trauma. The inclusion of such information is based on findings of researchers such as Jones et al. (2014), who argued that recent discoveries in neuroscience should guide how organizations do preventive training in STS for aid workers. A few years earlier, Raider et al. (2008) advocated the value of a good understanding of the brain's responses to trauma for those affected by trauma or who work with trauma survivors. They proposed

that training in psychophysiology of brain responses to trauma be part of work with trauma survivors (p. 172).

Expressive arts and experiential learning. Learning about, and reflection on, primary and secondary trauma should be done with methods proven effective for traumatized people. As mentioned earlier in this literature review, the nonverbal aspects of expressive arts enable access to traumatic memories in an indirect way, even when verbal expression is limited (James & Johnson, 1996; Johnson et al., 2009).

Using surplus reality combined with mirroring, embodied sculpture work, and drama and psychodrama techniques such as role reversal and short vignette, participants are able to identify where they are on the ETI model and move ahead in the model stages until they experience how it may feel to be in the integration stage.

Cognitive and behavioral resolutions. Cognitive behavioral methods such as stress management and self-care techniques are most widely used by practitioners due to their favorable experience in practice and encouraging data from studies. Stress management is also one of the pillars of trauma-informed practices (Sajnani & Johnson, 2014). Thus, stress management and a personal regime of self-care comprise the resilience enhancement aspect of the ETI model. Stress management and self-care techniques are essential for HSPs to prevent a sense of burnout and maintain a sense of compassion satisfaction (Regehr et al., 2003; Scully, 2011). See Appendix A for more information.

Conclusion

The relationship between STS and aid personnel has been widely observed and researched (Bride, 2007; Ehrenreich & Elliott, 2004; Eriksson et al., 2003; Eriksson et al., 2009; Eriksson et al., 2001; Jordan, 2010; Knight, 2010; McFarlane, 2004; Moulden & Firestone, 2007; Musa & Hamid, 2008; Perry, 2003; Shah et al., 2007; Steed & Downing, 1998; Tehrani, 2007, 2010; Trippany et al., 2004).

Studies have been almost unanimous in recommending further empirical research on STS preventive and educational programs.

The limited number of studies available about the efficacy of training programs to prevent and address STS in aid personnel was notable. Research is needed to advance understanding of the effects of STS and to establish whether existing mitigation programs in fact help to deal with the growing STS phenomenon among HSPs. The need exists for data regarding mitigation programs for caregivers of all types. However, it is particularly glaring in regards to relief and aid personnel, whose numbers are growing rapidly due to increased natural disasters and whose support mechanisms are minimal and largely unexamined for efficacy.

Regarding the modality most effective in addressing STS, the topic of the present research, numerous authors in several disciplines have argued that trauma is stored in the nonverbal areas of the brain and is poorly accessed by therapies that lead with verbal expression. Thus, experiential therapies, including psychodrama, should be the primary approach in treatment of trauma clients (Alfonso & Byers 2012; Buk, 2009; Byers, 2011;

Carey, 2006; Crenshaw, 2006; Gantt & Tinnin, 2009; Harrison, 2012; James & Johnson, 1996; Johnson, 1987; Johnson et al., 2009; Lahad & Doron, 2009; Lahad et al., 2010; Landy, 2010; Langmuir et al., 2012; MacIntosh & Whiffen, 2005; Parker et al., 2008; Sajnani & Johnson, 2014; Spiegel et al., 2006; Talwar, 2007; van der Kolk, 1994, 1996, 2002, 2006). These findings have implications for the modality of efforts to address STS, a question at the heart of the current study.

On one hand, the above-summarized body of recently formulated theory and research regarding creative experiential approaches argued persuasively for expressive therapies as, at a minimum, a first line of treatment of trauma. On the other hand, a formidable and older body of practice and research confirmed the effectiveness of CBT and psychoeducational approaches to trauma therapy and STS (Butler et al., 2006; Cohen et al., 2007; Dorrepaal et al., 2010; Ehlers et al., 2003; Frank et al., 1988; Hobfoll et al., 2007; Johnson, 2009; Kinzel & Nanson, 2000; Krupnick & Green, 2008; McDonagh et al., 2005; Muesser et al., 2008; Phipps et al., 2007; Phoenix, 2007; Seidler & Wagner, 2006; Southwick et al., 2008).

In light of this rich and, to some extent, contradictory set of findings, the researcher devised an approach for working with trauma that integrates several approaches. Expressive therapies and experience-based techniques—in particular, psychodrama—provide a primary modality for indirect exploration of traumatic experiences through use of the arts. Psychoeducation provides a framework for understanding personal experiences and making well-informed choices about how to

respond to stressful situations. In addition, CBT techniques—in particular cognitive and behavioral resolutions—reinforce intentions formulated in response to psychoeducation. This blended approach was named “Expressive Trauma Integration” (ETI) and formed the subject of the present research.

CHAPTER 3

Method

This quantitative, quasi-experimental study assessed a training intervention designed to help aid personnel better cope with secondary traumatic stress. Several tests were used to compare data gathered pre- and post-intervention in three groups, to determine the effectiveness of the ETI training model.

Purpose of the Study

Williams and Irving defined research as "an act of movement from opinion to knowledge" (Cruz & Berrol, 2012, p. 15). Existing training efforts to address STS belong, with few exceptions, in the category of "opinion," as little or no evidence on record showed the approaches taken were subjected to evaluation.

To address this gap, the present research was a quasi-experiment to test the effectiveness of a training program created by the researcher to mitigate STS in aid personnel, a program designed to reflect key insights from existing research identified in the literature review.

Quasi-Experimental Research

Participants in a quasi-experimental study are not assigned to conditions randomly; rather, two or more groups of participants receive one or more interventions and data is collected pre- and post-intervention (Creswell, 2008; Harris et al., 2006; Shadish, Cook, & Campbell, 2002). Thus, the present study compared pre- and post-

intervention results among three groups: one trained according to the ETI model; a second trained according to standard training approaches; and the third, which received no intervention.

It is widely accepted among researchers that the majority of behavioral studies are of necessity quasi-experimental, reflecting the reality that researchers have better access to accurate data if they work with intact groups in natural settings, rather than creating artificial groups (Creswell, 2008, p. 313; Cruz & Berrol, 2012. p. 29; Harris et al., 2006). However, the barriers to working with live subjects in the present research were significant.

In addition to the difficulty of finding organizations willing to allow the research to take place, involving staff, budget, and time constraints limited intervention options to a short-workshop format with a small number of sessions. Furthermore, the quasi-experimental nature of the research presented challenges described below.

Limitations of this Study Design

In quasi-experiments, participants are not randomly assigned. This potentially decreases the usefulness of data as alternative interpretations could be posited to explain causal relationships among the variables (Shadish et al., 2002). In addition, since the research used only quantitative measures, the information tabulated was restricted to data that could be counted. Lastly, the researcher was also the author of the model whose effectiveness was measured in this study.

Several measures were taken to address these limitations. First, a qualitative questionnaire was created to provide additional information about the results and the effectiveness of the interventions being studied to give a greater basis on which to evaluate results. Second, to preclude any possibility of results being somehow influenced by the researcher, the researcher was not involved in delivery of the training workshops for either the intervention groups or active control group. Additionally, the researcher was not involved in the data-collection process, to prevent any possibility of bias contamination at that stage. Lastly, the researcher used an external peer reviewer in addition to the principal investigator, to ensure the data were analyzed without manipulation.

Cultural Adaptation

The training was adapted to meet local needs and cultural context. Following consultation with local staff from the National Center for Mental Health (NCMH), the researcher adapted the theoretical framework of the ETI model to the Filipino context. The NCMH staff provided several scripts that related to their work as aid personnel. A new script of the case study and materials that introduced a theoretical overview about the ETI model (first and secondary trauma, personal alerts and stressors, what happens to the brain following trauma, self-care, and resiliency) was created in accordance with the scripts provided by the NCMH staff (Appendices B and C). The psychoeducation and cognitive-behavioral aspects of the ETI training remained the same, as this type of information is cross-cultural.

Participants

Participants in this study (N = 58) were aid personnel who functioned as first responders to natural disasters and trauma and worked or volunteered in aid organizations in the Philippines. About 45% of the sample were men, and 55% were women. All were high school graduates, the majority (89%) had college degrees, and a few (7%) had master's level or medical doctor diplomas (4%). Participants were not randomly assigned to groups; rather, they were taken as groups that had been already formed within their organizations. Each of the three groups comprised 30 participants; however, not all participants responded to every question (58 participants responded to all questions). Thus, "*N*" in the statistics reflects the total question respondents rather than total participants.

Table 1 shows the sample distribution of years of experience the participants had as aid personnel, and Table 2 presents descriptive statistics about the sample demographic data.

Table 1. *Sample Distribution of Years of Experience as Aid Personnel*

Groups	Years Experience as Aid Personnel			
	n[a]	Percentage[b]	Range	*M* ± *SD*
Intervention group	23	40	24	6.35 ± 4.8
Active control group	25	43	8	2.6 ± 1.9
Non-active control group	10	17	14	3.7 ± 5.3

Note. $N = 58$
[a]Participants who responded to all questions. [b]Percentage of total respondents.

Table 2. *Sample Demographic Data*

Variable	*n*[a]		Percentage[b]
Gender			
Male	26		45
Female	32		55
Level of education			
College graduate	49		89
Masters/Post-graduate	4		7
Medical doctor	2		4
Variable	*n*[a]	Range	*M* ± *SD*
Years experience in disaster	42	25	4.73 ± 4.6

Note. $N = 58$
[a]Total participants who responded to the related question (respondents). [b]Percentage of total question respondents.

Intervention group participants (n = 23) were adult (18 years or older) aid personnel working at the NCMH in Manila. Fifty-two percent of the intervention group were men, and 48% were women. Table 3 presents additional descriptive statistics about the demographic information of the intervention group, such as gender distribution, level of education, and years of experience as aid personnel. Participants in the intervention group received a two-day ETI training using psychoeducation and experiential methods, mostly psychodrama.

Table 4 presents demographic information and descriptive statistics about the active control group, such as gender distribution, level of education, and years of experience as aid personnel. Participants in the active control group (n = 25) participated in a three-day group training course on basic psychosocial support in times of crises, delivered by a NCMH trainer. This training was not based on an experiential approach; the trainer used oral-lecture techniques with only occasional use of role play and no experiential techniques using expressive arts. Further, the theoretical aspect of this training did not include psychoeducation about a survivor's brain responses to trauma.

Participants in the non-active control group (n = 10) were referred by local mental health centers with which the NCMH was affiliated in the Philippines. Descriptive statistical data and more demographic information about the non-active control group are presented in Table 5. Participants in this group did not receive any intervention; they only completed questionnaires at the baseline, at the time of the one-month follow-up, and again two months later.

Table 3. *Intervention Group Demographic Data*

Variable	*n*	Range	*M* ± *SD*
Age	23	34	40.20 ± 8.6
Years experience as aid personnel	23	24	6.35 ± 4.8
Variable	***n***		
Gender			
Male	12		
Female	11		
Variable	***n***		**Percentage**
Level of Education			
College	17		74
Masters/Post-graduate	4		17
No answer	2		9
Occupation			
Nurse (Head/Staff)	19		82
Medical officer/Psychologist	2		9
Social worker/LGU	2		9

Note. $N = 58$

Table 4. *Active Control Group Demographic Data*

Variable	*n*	Range	*M* ± *SD*
Age	25	29	41.9 ± 8.9
Years experience as aid personnel	25	8	2.6 ± 1.9
Variable	***n***		**Percentage**
Gender			
Male	11		44
Female	14		56
Level of education			
College	22		88
Masters/Post-graduate	2		8
No answer	1		4
Occupation			
Nurse (Head/Staff)	1		4
Social worker/LGU	7		28
Teacher	3		12
Government employee \ Administrative officer	13		52
No answer	1		4

Note. $N = 58$

Table 5. *Non-Active Control Group Demographic Data*

Variable	*n*	Range	*M* ± *SD*
Age	10	36	36.1 ± 12.0
Years experience as aid personnel	10	14	3.7 ± 5.3
Variable	***n***		**Percentage**
Gender			
Male	3		30
Female	7		70
Level of education			
College	9		90
Masters/Post-graduate	1		10
Occupation			
Nurse (Head/Staff)	7		70
Medical officer/Psychologist	3		30

Note. $N = 58$

Research Measures

The following questionnaires were used in this study:

- Demographic questionnaire
- Professional Quality of Life Scale (ProQOL) (Stamm, 2009)
- Traumatic Exposure Questionnaire (TEQ)
- Two-Month Follow-Up Questionnaire (TMFU)

The *demographic questionnaire* (Appendix D) was developed by the researcher to describe the sample. Participants complete this questionnaire at the beginning of the trainings (or baseline).

The *ProQOL* (Stamm, 2009) was administered to the participants before the training sessions (as a baseline for the non-active control group), and one month following the training for the intervention and active control groups. In the pilot study (Gertel Kraybill, 2013) the author administered two validated assessments, the STSS (Bride et al., 2007) and the ProQOL (Stamm, 2009). Whereas the STSS only measured STS, the ProQOL measured three different subscales: secondary traumatic stress, burnout, and compassion satisfaction. The ProQOL scale was chosen for the present study due to the greater detail provided by its three subscales.

The ProQOL is a 30-item self-report scale in which users indicate how often each item was experienced in the preceding 30 days, using a six-item Likert scale (0 = never, 1 = rarely, 2 = a few times, 3 = somewhat often, 4 = often, and 5 = very often) (Bride et al., 2007).

The ProQOL comprises three discrete subscales: (1) a subscale that measures compassion satisfaction, (2) a subscale that measures burnout, and (3) a subscale that measures compassion fatigue/STS (Bride et al., 2007). Participants in all groups completed this form (Appendix E) prior to the workshop and one month following the workshop (or baseline).

The researcher created the *TEQ* to gather data that would give further understanding of the possible effects of recent traumatic exposure on the participants results. Participants in all groups filled out this form (Appendix F) one month following the workshop (or baseline). The purpose was to inquire whether other factors might have influenced the participants' results.

The researcher created a *TMFU* questionnaire to determine the extent participants were able to remember the concepts presented in the workshop. The participants in the intervention group and the active control group completed this form (Appendix G) two months after the workshop.

Data Analysis

An existing STSS protocol was used to calculate the results of the ProQOL scale, including mean values, inferential statistics, an analysis of variance (ANOVA), and a two-tailed *t*-test to measure the results of the ProQOL total scores and subscale scores.

The TEQ results were summarized quantitatively and analyzed to see if recent trauma was experienced that might have had an effect on the participants' responses.

The TMFU forms were manually analyzed and coded qualitatively to examine the comments and feedback received from participants in both the intervention and active control groups.

Training Settings and Timelines

- The intervention (IN) group trainings took place 26-27 May and 28-29 May 2014 at the NCHM in Manila, the Philippines. A total of 30 participants were divided into two groups of 15 and took part in each of the training sessions.
- The active control (AC) group training took place 9-11 July in Surigao City, Mindanao Island, the Philippines. A total of 30 participants took part in the active control group training.
- A non-active control (NAC) group of 10 aid personnel was used. Participants were aid personnel working in the Makati clinic, an affiliated clinic of the NCHM in Manila.

Training Outlines

Intervention group. The IN group received two-day training according to the following outline:

Day 1 (8 hours):

(a) Introduction and filling out forms

(b) Review of training guidelines and concept of safe space

(c) Presentation of key concepts of trauma through experiential activities:

(1) Introduction and overview of trauma—warm-up activity that introduced what happens to the brain when we experience trauma

(2) Impact of Trauma

(3) The Trauma Integration Path. Common stages of moving through the trauma experience were laid out, using the ETI model and a scripted story. The six stages of the ETI model were placed in a circle on the floor. Small groups of participants—each assigned to present one stage of the mode—took turns presenting aspects of the scripted story that related to their stage in an artistic way.

(4) Connecting to inner resources with the "Guardian Double." Participants were introduced to the psychodrama technique of the double. Then each participant was invited to describe a part of themselves, like a double, that overcame difficulty in the past and would be used as a guardian double in times of need.

(5) Review of personal history with trauma. Participants created a personal "Trauma Timeline" with paper, clay, or other creative means, portraying their personal history with trauma and/or cumulative stress. Then, they shared it with the group.

Day 2 (8 hours):

(a) Group check-in time

(b) Review of neurobiology responses to trauma and stress. A scripted story from the previous day described what happens in the brain following trauma. The group was then divided into small groups, and each group created a dramatic enactment reflecting key psychoeducation neurobiological insights of trauma, according to the ETI model (Appendix C).

(c) Application to present experience. Participants created a list of personal stressors they faced and a second list of alerts, that is, personal behavioral responses typical for them in times of stress and trauma.

(d) Integration of the ETI model into participant's personal stories

(1) Participants chose one event from their "Trauma Timeline" and artistically created a symbol/drawing of that event.

(2) Participants sketched out their personal story in reference to the ETI model stages (like the scripted one they used the previous day). The ETI stages were laid in a circle on the floor and, working with a partner and using embodied sculpture and role reversal, participants enacted their personal stories using the stages of the model.

(c) Preparing for self-care, resiliency building, and PTG. Participants created a personal list of self-care techniques that they choose to use for the following two months.

(d) Closing and farewells. Final summaries, review of steps for gathering of follow-up data, and goodbyes.

Active control group. The active control group received a three-day basic mental health psychosocial support (MHPSS) training facilitated by a NCMH trainer. This training was a standard introductory workshop held under the umbrella of the NCMH. Participants received basic training on the following lecture modules:

- Introduction to MHPSS
- Framework of understanding MHPSS in emergencies and disasters
- Stories and life experiences amid disasters
- Well-being, resilience, coping, trauma, and recovery in extreme life situations
- Mental health and psychosocial assessment
- Mental health and psychosocial intervention
- Needs of special populations

Institutional Review Board Approval and Confidentiality

The researcher received Institutional Review Board (IRB) approval from Lesley University on 26 March 2014, and from the NCMH-Manila IRB on 8 May 2014.

Participants in this study signed a participation consent form (Appendix H), which presented an explanation of the research. It indicated that the researcher would maintain the participants' privacy, confidentiality, and anonymity and would use the data only for educational or professional presentations, as described within the informed consent form and agreed to by consenting participants. In such use, participants' privacy, confidentiality, and anonymity would be maintained.

CHAPTER 4

Results

This chapter presents the results of the study, including the age and years of experience of the participants as aid workers; ProQOL questionnaire results, including mean values, inferential statistics, ANOVA, and ProQOL two-tailed *t*-test (Stamm, 2009); TEQ results; and two-month follow-up form results.

Age and Years of Experience as Aid Workers as Variables

Examining the sample ages and years of experience variables in greater detail, Table 6 shows the results of a one-way ANOVA of age conducted to compare the three groups: IN group ($M = 40.2$, $SD = 8.6$), AC group ($M = 41.9$, $SD = 8.9$), and NAC group ($M = 36.1$, $SD = 12.0$) according to the age of the participants. The ANOVA results demonstrated no significant statistical differences among the groups related to participants' ages.

Table 6. *One-Way Analysis of Variance of Participants' Ages*

Source of Variation	*SS*	*df*	*MS*	*F*	*p*	F_{crit}
Between groups	238.633	2	119.317	1.274	.288	3.165
Within groups	5149.453	55	93.626			
Total	5388.086	57				

An ANOVA was conducted (see Table 7) to compare the years of experience working with traumatized people as reported by aid personnel participants in the three groups: IN ($M = 6.35$; $SD = 4.8$), AC ($M = 2.60$; $SD = 1.9$), and NAC ($M = 3.70$; $SD = 5.3$). The ANOVA results show a significant statistical difference related to years experience [$F = 3.559$; $df = 2, 39$; $p < .05$].

A post-hoc Tukey Honestly Significant Difference test was performed to locate the differences among the three groups. The results indicated a significant difference between the IN and AC groups ($M_d = 3.7$; $p < .05$). However, the NAC group was not significantly different from the IN group ($M_d = 3.2$; $p > .05$) or the AC group ($M_d = 0.5$; $p > .05$).

To further assess the potential influence of years of experience on the ProQOL total scores, ANCOVA was used to examine years of experience as the covariate (see Table 8). Controlling for the effect of years of trauma experience, results showed no statistical difference ($F = 0.355$).

Table 7. *One-Way Analysis of Variance of Years in Trauma Experience as Aid Workers*

Source of Variation	*SS*	*df*	*MS*	*F*	*p*	F_{crit}
Between groups	134.599	2	67.299	3.559	.038	3.238
Within groups	737.503	39	18.910			
Total	872.101	41				

Table 8. *Analysis of Covariance of Years in Trauma Experience as Aid Workers on the ProQOL Scores*

Source	Type III *SS*	*df*	*MS*	*F*	Sig
Corrected model	67.678[a]	3	22.559	.312	.816
Intercept	4.822	1	4.822	.067	.798
Years trauma response	25.656	1	25.656	.355	.555
Group	63.101	2	31.550	.437	.649
Error	2745.108	38	72.240		
Total	2812.786	41			

ProQOL Questionnaire Results

Table 9 shows the means and standard deviations for the ProQOL (Stamm, 2009) across the three groups. The baseline measures of the IN and AC groups were nearly the same, while the NAC group scores were slightly higher, and the post-intervention NAC group scores were lower than were the IN and AC groups. The ProQOL scores showed a decrease of 3.20 in the mean score of NAC participants, when comparing baseline and one-month follow-up baselines. Negligible changes were seen in the IN group (-0.09) and AC group (.44). The ProQOL scores also showed that the IN group scored higher in the compassion satisfaction subscale than did the AC group.

Table 9. *Descriptive Statistics for Sample Total Outcome Measure*

Group	*N*	Time 1 (Baseline) *M (SD)*	Time 2 (1 Month) *M (SD)*	Difference *M (SD)*
Intervention group	23	96.30 (7.95)	96.39 (8.09)	-0.09 (6.39)
Active control group	25	95.88 (15.39)	95.44 (8.81)	0.44 (13.50)
Non-active control group	10	100.80 (5.98)	97.60 (5.60)	3.20 (8.42)

A one-way ANOVA was conducted to compare the total scores (gain scores) of the three groups IN, AC, and NAC. The results showed no significant difference among the groups [$F = 0.267$; $df = 2, 55$; $p > .05$].

An additional one-way ANOVA was conducted to evaluate whether the experimental interventions significantly affected the participants' ProQOL (Stamm, 2009) subscale scores. As seen in Table 9, results for total scores were not significant

However, a comparison of the ProQOL (Stamm, 2009) subscales scores (Table 10) revealed the IN group (1.26) scored slightly higher than did the AC group (1.08). On the other hand, the NAC compassion satisfaction scores decreased (-1.10). Burnout scores slightly decreased for all three groups: IN (-0.87), AC (-0.96), and NAC (-0.60). The STS scores also decreased for all three groups: IN (-0.87), AC (-1.64), and NAC (-0.90), and here the decrease for the AC was slightly more than it was for the other two groups. There was notable variability in the difference scores for the three groups on all subscales.

Table 10. *One-Way ANOVA ProQOL Subscale Difference Scores*

	Group				
	IN	AC	NAC	*F*	η^2
CS difference	1.26	1.08	-1.10	0.83 [ns]	0.04
	(3.14)	(6.51)	(4.65)		
BO difference	-0.87	-0.96	-0.60	0.03 [ns]	0.02
	(2.72)	(4.71)	(2.84)		
STS difference	-0.87	-1.64	-0.90	0.14 [ns]	0.14
	(4.06)	(6.15)	(6.19)		

Note: CS indicates compassion satisfaction, BO indicates burnout, and STS indicates secondary trauma stress subscales; [ns]indicates $p > .05$; standard deviations appear in parentheses below the means.

TEQ Results

The results of the TEQ questionnaire were collected one month following intervention and baseline, and were quantitatively summarized and analyzed to measure if recent trauma was experienced that might have influenced the participants' responses. In the month between baseline and interventions and follow-up, about 43% of the participants in the IN group experienced or witnessed a traumatic event, as did 16% of AC group. None of the participants in the NAC group witnessed or experienced a traumatic event between the baseline and one-month follow-up. Table 11 details the frequency of the participants' recent traumatic exposure in the three groups.

Table 11. *Frequency and Percentage of Participants' Recent Exposure to Traumatic Experiences*

	IN		AC		NAC	
Experienced / witnessed trauma, last 30 days	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Yes	10	43	4	16	0	0
No	13	57	21	84	10	100
Total	23	100	25	100	10	10

TMFU Questionnaire Results

The TMFU questionnaire results were manually analyzed with qualitative methods and coded to indicate topics that participants remembered from the interventions two months later. Additionally, this form was used to collect comments and feedback from the intervention (n = 26) and active control group (n = 25) participants, administered about two months following interventions. Table 12 summarizes the response frequency and percentage.

Table 12. *Two-Month Follow-Up Responses (IN and AC Groups): Percentages*

	Percentage[a]	
Question	Yes	No
1. Do you remember the ETI (or other) model stages from the workshop?		
IN	100	0
AC	100	0
2. Have you paid attention to your stressors and alerts since the training?		
IN	92	8
AC	96	4
3. Did you manage to maintain a self-care regime?		
IN	96	4
AC	100	0
4. Did the workshop assist you in managing your stress?		
IN	100	0
AC	100	0
5. Did the workshop contribute in any way to your overall sense of satisfaction from your work?		
IN	100	0
AC	100	0
6. Do you remember Suzy's story about what happens to the brain (parts of the brain) after trauma?		
IN	100	0
7. Do you remember anything from the workshop?		
IN	100	0
8. Would you like to add any final comment?		
IN	72	28
AC	100	0

Note. [a]Percentage of total responses.

Table 12 shows that both the IN and AC groups reported highly positive outcomes of the workshops, with participants saying they remembered the contents, monitored their stress levels afterwards, maintained a regime of self-care, managed stress better, and so forth. However, variances appeared when comparing the detailed responses of individuals in the two groups.

In response to Question 1 (whether they remembered models taught in the workshop), 100% of the IN group participants reported that they remembered the ETI model, but only 50% remembered the model specifics. All AC group participants responded that they remembered their training, but only 40% specified an activity (i.e., "the body map"). The other 60% mentioned no specific activity or content.

In response to Question 3 (whether they had managed to maintain a self-care regime), 96% of the IN group responded affirmatively, of which 81% reported specific self-care techniques, mentioning art expressions, exercise, diet, meditation and spirituality, and breathing techniques. The entire AC group reported that they had managed to maintain a regime of self-care, of which 80% reported specific techniques such as diet, exercise, and "me time."

In response to Question 6 (whether they remembered Suzy's story and the regions of the brain it illustrated), 100% of the IN group participants responded affirmatively, of which 92% mentioned specific stress-related brain regions associated with the story. This question was not asked of the AC group.

Invited to make additional comments (IN Question 8 and AC Question 6), 65% of the IN group made additional comments. Nineteen percent wrote, “thank you” in various ways, 27% asked to be included in future workshops, and another 27% mentioned they had “learned a lot.” All of the AC group said they would like to make additional comments, of which 56% said “thank you” in various ways, 32% asked to be included in more workshops, and 12% mentioned they had “learned a lot.”

CHAPTER 5

Discussion

The purpose of this dissertation was to examine the effectiveness of the ETI training approach in addressing STS and burnout symptoms, and increasing compassion satisfaction among aid personnel. This research addressed a rising need for aid personnel who work with traumatized populations and a gap in the literature regarding empirically validated ways to mitigate secondary trauma in aid personnel.

This chapter discusses the findings of the present research in relation to the literature reviewed in chapter two and the results presented in chapter four, and suggests implications for the field of those working in trauma support.

Relation to Literature Review

The literature reviewed in Chapter 2 leaves no doubt regarding the challenges faced by professionals working with traumatized clients. Eriksson et al. (2001) confirmed a link for international relief and aid personnel between personal and secondary exposure to traumatic events on one hand, and STS symptomology on the other. Recognizing this, they suggested that future research should focus on improving the efficacy of training and support programs for aid workers.

In the course of the present research, numerous such programs for reducing incidence and effects of STS in groups of HSPs, such as therapists and emergency service personnel, were located and studied (Arnold et al., 2005; Brooks, Bradt, Eyre, Hunt, &

Dileo, 2010; Cardozo et al., 2005; Cardozo & Salama, 2002; Dekel et al., 2011; Forbes et al., 2011; Hilliard, 2006; Kaspersen, Matthiesen, & Götestam, 2003; Paton & Burke, 2007; Phipps & Byrne, 2003; Phipps et al., 2007; Regehr et al., 2003; Scully, 2011; van der veer & Francis, 2011; Violanti, 2001; Walsh, 2009).

The existence of these programs indicates widespread awareness of key issues for professionals working with trauma survivors and consensus that they need to be addressed. However, most share a critical gap: they lack empirical study and evidence regarding their efficacy.

This gap has been recognized for some time. Several authors have underscored the importance of future studies to improve the effectiveness of training for STS prevention and management (Eriksson et al., 2009; Knight, 2010; Musa & Hamid, 2008; Shah et al., 2007; Steed & Downing, 1998). However, only one study reported in the literature considered empirical documentation of the effectiveness of training in addressing secondary trauma among aid personnel (Walsh, 2009).

Thus, the present study sought to develop a training model that integrated several approaches considered effective in addressing stress and secondary trauma and to empirically test whether the resulting model, in fact, effectively mitigated STS among aid personnel.

An initial step was to further review the literature and investigate what approaches were in use to deal with STS among trauma survivors and HSPs who work with

populations exposed to trauma—in particular, aid personnel. Three particular themes emerged as important.

First, recent insights from neuroscience were particularly relevant to this study. For example, Raider et al. (2008) documented that trauma has a marked effect on brain functioning. These findings have important implications for those who work with trauma survivors and offer insight regarding how to conduct preventive training for aid workers (Jones, Bosch, & Williamson, 2014). Drawing on these findings, the ETI model was designed to provide participants psychoeducational information on the neurobiological, emotional, physical, and spiritual aspects of trauma exposure, stress, and cumulative stress.

Second, further investigation revealed a growing body of literature that stressed the advantages of experiential therapies with populations exposed to trauma. The use of psychodrama techniques (experiential in their essence) to deal with trauma, including populations who were exposed to secondary trauma, similarly attracted study by numerous authors (Barbour & Moreno, 1980; Gantt & Tinnin, 2009; Kähönen et al., 2012; Langmuir et al., 2012; Oflaz et al., 2011; Parker et al., 2008; Siegal & Driscoll, 1995; Thacker, 1984; van der Kolk, 1994, 1996).

Third, numerous authors made a case for the importance of cognitive behavioral resolutions in the form of self-care and stress management for aid personnel who work with trauma populations (Bride et al., 2007; Jordan, 2010; McFarlane, 2004; Phipps & Byrne, 2003; Phipps et al., 2007; van der Veer & Francis, 2011).

The ETI approach, then, was designed to integrate these recent findings from neuroscience and experiential training methodology into a workshop experience whose content was created in light of the evidence-based work of leading practitioners. The approach began as a theoretical framework (Gertel Kraybill, 2010), underwent initial investigation in a pilot study (Gertel Kraybill, 2013), and was then reframed and adapted for the present study.

Summary of Findings

This study was designed to test the efficacy of the ETI training model in a group setting for aid personnel dealing with STS. In regards to the primary research question, the study did not yield statistically significant results. The ProQOL (Stamm, 2009) results indicated only a small decrease in the burnout and STS subscales for participants in the intervention group.

However, the compassion satisfaction reported by participants in both the intervention group (1.26) and the active control group (1.08) increased, while that reported by the non-active control group decreased (-1.10). These data suggest the possibility of a relationship between STS and compassion satisfaction. The group that reported more encounters with trauma in the one-month period between pre- and post-tests reported the most compassion satisfaction. The group that reported almost no trauma experienced a decrease in compassion satisfaction, and the group in the middle, which reported a moderate amount of trauma, experienced some increase in compassion satisfaction.

Such a relationship coheres with the work of several authors (Arnold et al., 2005; Bride et al., 2007; Dekel et al., 2011) who had observed that STS and compassion satisfaction often co-exist in individuals. In fact, it would go beyond the existing literature to suggest a linear relationship—that is, increased trauma exposure is associated with an increase in positive outcomes such as compassion satisfaction and, possibly, PTG.

Failure to demonstrate the higher level of efficacy expected in the IN group than in the AC or NAC might have been due to a demographic anomaly. Considered only at the level of the numbers, the results of the study showed no statistically significant improvement achieved by the ETI model. However, two anomalies in the sample groups make this difficult to interpret:

1. The results of the ANOVA, which compared the years of experience of participants, showed significant statistical difference in years of experience among the three groups [$F = 3.559$, $df = 2, 39$; $p < .05$]. The NAC group participants had the least experience ($M = 3.70$; $Mdn = 0.75$) as aid personnel, IN group participants had the most experience as aid personnel ($M = 6.35$; $Mdn = 5.00$), and AC group participants were more experienced than the NAC but less experienced than the IN group ($M = 2.60$; $Mdn = 2.00$).
2. In the TEQ, the group that underwent the ETI model—coincidentally, by all appearances—reported higher levels of personal trauma experiences and exposure in the month between the baseline and the follow-up post-test than did the other

two groups. Forty-three percent of IN group participants reported themselves as being exposed to or witnessing trauma in the month following the intervention/baseline, whereas only 16% in the AC reported such exposure and, the NAC group reported no exposure at all.

On both counts, this is arguably a salient anomaly that is supported by some previous scholarship. Perry (2003) observed that personnel exposed frequently to trauma rarely received sufficient recovery time to deal with the accompanying symptoms, and he concluded the consequences were cumulative. Regehr et al. (2003) went further, observing that longer experience in trauma-associated work makes people more vulnerable to trauma symptomology. In their study, Regehr et al. (2003) found that experienced firefighters were significantly more affected by traumatic exposure than were new firefighters.

In light of the assertions of these authors, the IN group participants could be understood as having entered the workshop more traumatized than their counterparts in the other two groups. Then, in a chronic state of heightened vulnerability due to their previously accumulated trauma, they endured a month of trauma exposure significantly higher than that of their counterparts, just prior to post-intervention testing. Together, these two factors could have had a decisive effect on their post-intervention scores.

Lastly, since the IN participants had, on average, many years of experience and high levels of trauma exposure and experience, it may have been unrealistic to expect to see any change a month after a training event of two days. The impact of a short, one-off

training event must perhaps be considered minimal compared to years of stress and trauma and their cumulative effect on the body and spirit .

An unexpected finding was that the total NAC group scored slightly better in the ProQOL (Stamm, 2009) than did the two groups that underwent training. This might relate to the fact that the NAC group (n = 10) was smaller—less than half of the IN (n = 23) and AC groups (n = 25), and the NAC group members had less experience as aid workers.

However, these results may call into question the premise, widely apparent in the literature and in the growing investment of agencies in such training, that training is effective as a modality for equipping aid workers to cope with stress.

The ETI training was conducted in an unorthodox manner, designed to ground all learning in artistic or participatory experiences, in keeping with recent advances in understanding trauma and how to work with it. Participants in the group that received ETI training—who reported a higher incidence of recent trauma than did the other groups—achieved ProQOL scores only slightly less than those in the control group. This could indicate that training conducted in modalities designed specifically for trauma work is indeed efficacious.

The TMFU results showed that learning retention was higher with the ETI model (IN group) than with either control group. Participants in both the IN and AC groups reported a highly positive experience in the workshops. For example, the results revealed that both the IN and AC groups reported reduced levels of personal stress in the two

months after the workshop. This, in itself, is noteworthy, particularly for the IN group, in which 43% reported they had experienced trauma during that period (compared with 16% in the AC group).

However, a marked difference appeared upon examination of the detailed responses by participants of the two groups. In response to the question inquiring *what* participants remembered from the workshop, 19 (83%) in the IN group mentioned specific aspects of the ETI model that they remembered. Responding to a question inquiring if they remembered Suzy's story and what happens to the brain after trauma, 24 participants remembered specifics of Suzy's story and the regions of the brain it illustrated. In comparison, in response to a similar question, not a single participant in the AC group mentioned specific content that they remembered from the training they received.

The finding that those participants who were taught in an experiential workshop displayed better retention than those who were not echoes leading trauma specialists' argument that experiential methods are preferable when working with people who were exposed to trauma (Carey, 2006; Crenshaw, 2006; Harrison, 2012; Johnson, 1987; Lahad & Doron, 2009; Lahad et al., 2010; Langmuir et al., 2012; MacIntosh & Whiffen, 2005; Sajnani & Johnson, 2014; van der Kolk, 1994).

The present study would seem to extend the argument to pedagogy, suggesting that psychoeducation regarding trauma would be improved for traumatized people if delivered via experiential methods.

Limitations of the Study

The sample size of this study presented limitations that must be acknowledged. The relatively small number of participants limited the statistical weight of the results and reduced the possibility to generalize from them. A larger sample size would strengthen generalization from the study.

The format of quantitative data collection potentially increased the possibility of procedural bias if participants rushed to fill in the forms, and measurement bias if participants failed to respond to all questions honestly for fear of being judged.

Further, participants might have given, intentionally or unconsciously, the same responses on the ProQOL in the second taking, disregarding their actual situation. In addition, it is possible that in the one-month period between the intervention and the second measurements, unknown external factors (in addition to those mentioned above) affected participants' scores in varying ways. Indeed, it is possible that using a different measurement would have yielded different results.

Lastly, this study contained a methodological limitation in that participants were not randomly assigned to take part in the intervention or control groups. Future studies should ensure that participants are randomly assigned.

Recommendations and Implications for Future Research

Although numerous studies indicated the need to address STS in aid personnel, there exists a striking lack of empirical studies on this area. Additional research is needed to advance understanding of the effects of STS and to establish whether such

programs can, in fact, help deal with STS among relief and aid personnel. It must be acknowledged that the results of this study demonstrate only a small influence of the ETI model on participants one month following intervention. Nevertheless, this might be attributed to anomalies in the participants' life context, as already discussed.

Despite its limitations, an important outcome of this study for the field is its implications for the widely held assumption that training is an effective modality of support for aid personnel exposed to trauma and traumatized populations. Two different interventions (ETI and MHPSS) were found to have no statistically measurable effect on addressing STS in aid personnel. In fact, the NAC group, which received no intervention training at all, showed better results on the measured indices than did the other two groups one month after the interventions (baseline).

Such a finding must be considered surprising in a field in which numerous aid agencies and authors advocated for the need to conduct training programs. At a minimum, and given that virtually no research evidence existed to support the efficacy of training as a modality of intervention, this finding suggests it is now urgent to conduct evidence-based study of training and assess its efficacy as a method for supporting aid personnel working with traumatized people.

The findings also suggest the importance of investigating other models of response for dealing with STS among aid personnel. In this regard, the pilot research that the author conducted (Gertel Kraybill, 2013) suggested a promising possible alternative

intervention using the ETI model in a format of six individual sessions that incorporate expressive therapy and psychoeducation.

The findings of this pilot demonstrated that the experience contributed to reducing participants' STS and burnout symptoms and increasing their sense of compassion satisfaction. As measured on the STSS (Bride et al., 2007), the results ($d = 0.80$) suggest a moderate to high effect size for this intervention; however, it is possible that these results were inflated due to the small sample size.

The promising results notwithstanding, the labor-intensive approach of six individual sessions with each client was abandoned when designing the primary research. The premise for this approach was that the key requirement for assisting aid workers was the psychoeducational and expressive therapy and the stress management and self-care aspects of the model, and that these two aspects could be replicated in group workshops.

This premise was predicated on several empirical studies on the use of expressive arts with trauma survivors, which concluded that expressive arts were beneficial to facilitating trauma integration (Crenshaw, 2006; Gantt & Tinnin, 2009; Golub, 1986; Howard, 1990; Orr, 2007; Spiegel et al., 2006; Talwar, 2007). Psychodrama, specifically, was suggested as beneficial in addressing STS among HSPs, including aid personnel (Barbour & Moreno, 1980; Kähönen et al., 2012; Oflaz et al., 2011; Siegal & Driscoll, 1995; Thacker, 1984). Although these studies reported on practitioner experience, none were designed to specifically test efficacy.

On one hand, one-on-one clinical work appears to yield promising results but is costly and may prove too expensive to be adopted on the scale required to support aid workers in a world with growing crises. On the other hand, the findings of this research underscore the need for further study of the efficacy of group-training methods before investing deeply in them as a primary response.

Taken together, perhaps future research should seek an ideal combination of training modalities that expands on the success of the use of experiential approaches described in this study, as well as more in-depth clinical work. This combination would ideally keep costs manageable while nevertheless providing enough intense clinical attention for professionals to deeply incorporate their learnings.

Finally, this study has implications for a variety of actors involved in work with and allocation of resources for trauma survivors, communities affected by trauma, and those who care for them. These actors include:

- Humanitarian and relief organizations, for which the findings underscore the importance of establishing methods of evaluating the effectiveness of their interventions and suggest incorporating experiential and expressive methods into trainings in order to increase content retention.
- Trauma therapists, and expressive therapists in particular, for whom the findings provide clear encouragement for the use of experiential and expressive methods in trauma therapy training and emphasize the need for more attention to evaluation of methodologies used.

- University programs that prepare students to work in settings where they will encounter trauma might consider the findings a mandate to give increased attention to preparing students to manage stress and possible effects of STS as a standard part of their curricula. The less-than-convincing performance of oratorical training methods in this study suggests giving priority to experiential based types of learning and experiential based practicum.
- Human service practitioners, especially aid workers, might recognize in these findings a call for more attention to their own on-going education about trauma, accumulative stress, and possible signs of burnout and STS; and to develop an appropriate self-care and stress-management plan before, during, and after deployment to fieldwork.
- Funders, understandably preoccupied with the needs of target populations, might recognize in these findings the case for urgency regarding care for caregivers. The findings call for greater attention to the question of what actually works in mitigating STS among HSP, as well as exploration of new models of care.

APPENDIX A

THE ETI MODEL

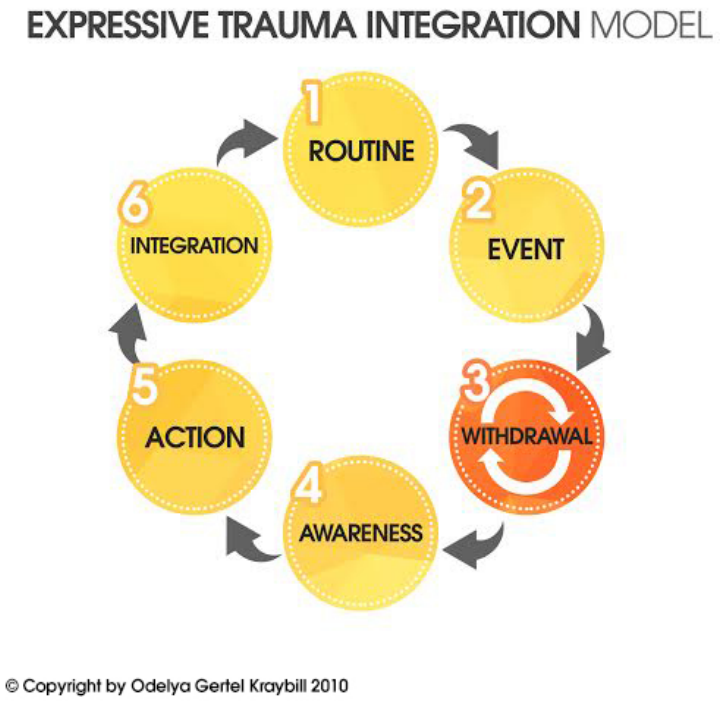

Figure A1. ETI Model (Gertel Kraybill, 2010)

Using Psychoeducation to Teach about Post-Trauma Brain Responses

This component of the ETI approach provides information on what happens to the brain following a trauma event, using experiential warm-ups and a case study presentation of "Suzy's Story" (Appendix B).

Theoretical Background of the Psychoeducation Component

Trauma affects the brain and its chemistry, and degrades flexibility of responses to future stress and trauma. A victim's instinctive responses to trauma are fight, flight, or freeze (Dayton, 1994; Levine, 1997). Four parts of the brain interact in managing these responses in an individual (van der Kolk, 1994, 2014; Yoder, 2005):

1. The instinctual brain, or brain stem. In this part of the brain, everything is experienced as now. This past is responsible for first alert and self-preservation.
2. The emotional brain. The limbic system is responsible for emotion and memory storage. This part contains the first-alert system called the *amygdala*.
3. The rational brain. The cerebral cortex is responsible for cognitive functions and thinking. This part of the brain has a sense of linear time (yesterday, today, tomorrow) now, now, now.
4. The frontal cortex. This part of the brain is responsible for registering sensations, communicating, regulating emotions, and exercising moral judgment.

In normal function—the Routine Stage in the ETI model—outside information is first directed through the cerebral cortex to the lower brain. However, when a major threat occurs, the information bypasses the thinking brain and goes directly to the first-alert system of the brain—the brain stem—in an instinctual response taking place in a matter of a millisecond. The resulting fear activates the fight/flight/freeze mechanism in a response known as *hyperarousal* (Gaskill & Perry, 2014; Levine, 1997; van der Kolk, 1994, 2014; Yoder, 2005).

According to Levine (1997), ongoing trauma is inflicted when an individual experiences major threat and hyperarousal, but cannot fight or flee. In this case, the body turns to its last option, the freezing response. Freezing during hyperarousal holds the trauma energy in the nervous system (Levine, 1997; Yoder, 2005).

This energy lives on in the individual, even after the threat is gone. Dayton (1994) used Moreno's terms "open tension" and "act hunger," an early hunger that cries out for action or completion, to describe the enduring legacy of the experience of hyperarousal when neither fight nor flight can be employed. Dayton suggested that the primordial tension created by trauma can be released only when the survivor "develops a new mental schema for understanding what has happened" (p. 237).

The hypothesis of the researcher was that participants who were introduced to this information in an experiential way would be better able to remember the material than participants who were introduced to it with verbal-oratory methods.

Expressive Arts Components of the ETI Approach

This model has six stages, in which Stage 3, "Withdrawal," is a cyclic stage of its own. A key goal of the ETI approach is to present these stages to participants with learning methods that are primarily experiential rather than cognitive. This was accomplished by introducing participants to the model stages through "Suzy's Story," a short, first-person account by an individual trauma survivor named Suzy that was adapted to the cultural and local context of the participants' setting.

The stages of the model are:

1. **Routine**. All systems of the body functions without hyperarousal.
2. **Event**. The model assumes that a trauma/injury of some sort took place and a survivor mode of responses is activated in the brain and the body (Buk, 2009; Gaskill & Perry, 2014; van der Kolk, 1994, 2014).
3. **Withdrawal**. This is a cyclic stage, since a survivor may remain in it for an indefinite time, ranging from several hours to days, months, years, or even a lifetime, unable to break the cyclic effect of the withdrawal.

Withdrawal is a normal response to trauma (Dayton, 1994; Johnson, 1987; Kellermann & Hudgins, 2000). Initial withdrawal responses manifest as a sense of shock, numbness, and possibly dissociation (Johnson, 1987; Kellermann & Hudgins, 2000). Later stages of withdrawal can manifest as denial, avoidance, anger, and aggression towards self and others (Kellermann & Hudgins, 2000; Kraybill, 1988; Poa, Doron, & Yadin, 2006). A sense of guilt and shame is common, including persistent self-doubt accompanied by questions such as, “What if?” and “Why me?”

Kraybill (1998) asserted that withdrawal is essential for protection of the survivor, as it enables removal from the source of the hurt. In his perspective, withdrawal is a healthy response mechanism to trauma that allows the survivor to pull back and assess the situation. This stage is crucial for the survivor and enables him or her to prepare for the next stage.

Several responses are common among survivors of trauma during withdrawal. One of them is a sense of hopelessness. According to Dayton (1994), a sense of disempowerment, even only for the moments following the traumatic event, can lead a survivor to a period of long withdrawal and a loss of sense of self.

4. **Awareness**. The name of this stage points to what needs to happen for a trauma survivor to be able to move on from withdrawal. When a survivor is in a cyclic stage of withdrawal, he or she is not able to see outside of his or her self. However, gradually, trauma survivors gain the ability to see themselves in a context that includes much more than the pain of unresolved trauma. The survivor is able to differentiate between the pain of the trauma and other aspects of life, and thus to see that the trauma is not all-encompassing. This stage is assisted by expanding the survivor's ability to name and precisely describe the impact of the trauma, thereby creating a sense of verbal mastery of a phenomenon that previously seemed to impossible to manage. Thus, providing survivors psychoeducational information about what happened to them on different levels facilitates a sense of normalization and promotes the survivors' ability to see themselves "outside of themselves." Having attained the ability to see outside of themselves brings the survivors a dawning awareness that they also have powers of choice, which earlier may have seemed beyond reach. They can exercise this power in a choice to move beyond withdrawal.

Kraybill (1988) posited *self-awareness* as an essential stage to move beyond the withdrawal stage. He suggested that many people carry old injuries that pre-date the recent one, and that the weight of these earlier wounds compounds as the survivor moves into the present. A survivor may be conscious only of the recent injury when, in fact, the recent injury triggered old injuries and the survivor is dealing with them all. Thus, Kraybill suggested reflection on previous hurt as one possible strategy for awareness that may bring release from present trauma.

The author shares the belief that previous hurt is often part of what blocks people from moving on from withdrawal. In the ETI model, the author sought to provide a path out of the withdrawal stage that did not require revisiting old pain.

During withdrawal, many survivors seem to feel trapped in the pain of their traumatic experience and unable to see beyond it. The author opted to use psychoeducation to give survivors a larger perspective on what they had experienced. Providing survivors with information about common responses to trauma, and the instinctual neurobiological aspects of it, could perhaps help survivors see the experience in a larger perspective, free of guilt or self-incrimination.

5. **Action**. Awareness is an important and crucial stage in the path toward trauma integration. However, it is not enough. At a neurological level, traumatic memories are not stored via the same mechanisms as non-traumatic memories. Thus, methods of verbal engagement that seem effective in processing non-

traumatizing issues do not necessarily provide access to the traumatic memories (MacIntosh & Whiffen, 2005).

Additionally, if, as some researchers believe, traumatic experiences were stagnated in the body (Levine, 1997; Ogdan et al., 2006), it stands to reason that the body must be involved to release them. This would suggest that an expressive act with the body needs to take place to enable movement from frozen traumatic experiences.

Kraybill's (1988) model of reconciliation introduced a useful concept to the literature that was picked up in the later models of Botcharova (2001), STAR (2002), AFTAR (Gertel, 2006), ETI models, and an *act of risk* (termed an "action stage" in the current model). Kraybill (1988) observed that all relationships involve risk, particularly in times of transition and growth. The deepening of relationships, he observed, is premised on the taking of ever-bigger risks and the corresponding growth of trust. This reality cannot be avoided, even after trauma. This is, of course, a big obstacle for survivors whose tolerance for risk has been greatly reduced. Kraybill suggested that survivors can move more rapidly in their healing if they recognize this and make a conscious choice to enter into a state of risk when they are ready. He stressed that the risk should be small, even symbolic; the point being to move risk taking into the realm of conscious choice.

Although not normally presented in terms of risk management, surplus reality in fact offers a form of "safe" engagement with the traumatic event. The material is, of course, volatile and potentially explosive for the protagonist, but the protagonist controls

the pace and manner of interaction. In psychodrama, the survivor has an opportunity to experience the traumatic event in a new way, gaining awareness and perspectives.

Other psychodramatic tools such as role reversal or a psychodramatic vignette using surplus reality allow the survivor to identify the frozen, locked response—or, at least, to acknowledge that the survivor is unable to let go of old trauma. From a neurological perspective, such experiential activity in reference to traumatic experience facilitates changes in the brain cell assembly and allows a new cell assembly to be reintegrated in the brain in reference to that experience (Dayton, 1994).

Thus, the ETI training was designed to incorporate these techniques. In this stage of the training, participants worked in pairs and created body-sculptured images that enacted their personal traumatic story. If participants reported that they did not yet feel able to move beyond a certain stage, they were asked to create a "time tunnel sculpture," a body sculpture of a wished-for state regarding how they would like to look. In pairs, participants reversed roles and mirrored each other's sculptures, so that each person had an opportunity to shape, in the body of another person, a sculpture of their own experience. They could touch and manipulate a sculpture that had first been conveyed with their own body, then reflect on and transform it, until it felt right to leave the sculpture as it was.

6. Integration. For trauma survivors whose trauma is unprocessed, this stage is likely to be the hardest, since the work here involves accepting symbolically that life has moved on.

It is true, of course, that when participants were able to symbolically engage with the previous action stage of the ETI model, many were also able to momentarily reach integration. However, early experiences of this stage are inevitably accompanied by recurring experiences that feel like relapse. Moments of "normality," in which survivors have a positive sense in the here-and-now, raise hopes that life has returned to "normal," but the truth, of course, is that the old "normal" is gone forever. Feelings of "normality" in the beginning, then, are a setup for letdown when the reality of loss again reasserts itself. The challenge for the survivor is to build a meaningful life around the new normal, and to re-orient in it the self, aspirations, and new memories. This is a journey of months and years.

It is important to recognize that the journey after trauma is not a linear one, nor is ETI a linear model. Participants may move from one stage to another, skipping stages and moving back and forth. Any number of triggers, stressful times, even exciting times, can lead a survivor to any of the model stages, both "forward" and "backward." This model aims to provide survivors with information and action methods that will enable them to make informed decisions to identify where they are in their healing journey, where they are headed, and what challenges and strengths they face in the process of achieving integration of their traumatic experiences.

APPENDIX B

SUZY'S STORY—ETI TRAINING, MAY 2014

Routine

One morning, another team member and I were organizing things in a support tent that we had just finished building. The tent was in a location half an hour's walk from where we were staying.

If was the first day in a long time that I felt more relaxed. My team member needed to use the bathroom. For security reasons, we were not allowed to move around or stay alone at any give moment when outside our living quarters, but it was a long walk. So, I convinced my team member to go with another team member, and I would stay alone.

I was sitting on a chair, closing my eyes for a few minutes, so I could relax.

Event/Trigger: Fight, Flight, Freeze

Out of nowhere, I suddenly felt a heavy punch on the back of my head and fell on the floor. Then, I realized someone was trying to tear my clothes from me. I was finally able to see that it was a middle-aged man with madness in his eyes. I froze! I couldn't talk, scream, move, or breathe.

It felt like an "out of body" experience. It seemed like I was watching from outside of myself. I wasn't able to move.

He started breathing fast and took off my clothes. I was still unable to move. I don't know how long it was, I just remember that something must have scared him that made him stop and run away.

I was lying on the floor for what felt like a long time. After that, I got dressed and went out of the tent, toward our living quarters.

Withdrawal

Thankfully, I was able to arrange to fly back to escort some other team members who needed evacuation back home.

I came to realize that, even after I went home, there were moments where something would trigger me—a smell, a sight, a noise—I would freeze and feel like I was right back there, on the ground in that tent.

I was so ashamed about what happened to me, but I couldn't bring myself to say anything to anyone. I felt like I should have done something—fight back, scream, resist in any way. I also did not want anyone else to know. I knew the policy, knew I should not have stayed alone in that tent, but did so anyway.

I took a long leave of absence from my work and, for a long time, it felt like nothing really mattered anymore. I just wanted to sleep.

My parents thought that I had PTSD. They knew something must have happened in the last assignment. But, I wasn't ready to talk to them.

I ended up leaving my work. I moved close to my parents and joined our family business. For a very long time, I felt like I was buried alive.

Awareness

About a year ago, while watching TV, I saw another aid worker about my age telling a story that reminded me a lot of my terrible experience. The report was about aid

personnel who suffered from traumatic experiences while helping others. I decided to call the help number they published on that TV show.

I was so overwhelmed to hear such a gentle voice on the other side of the phone that I burst into tears for the first time in years. I was referred to a local mental health center that was close to my house for further assistance.

I was not sure I was ready, or what would that do to me. I thought about it for a few weeks, but then decided to give it a try.

It was both hard and good to talk with a therapist. It was the first time that I told my story. It was the first time that someone else told me that what had happened was really terrible and that I had no responsibility whatsoever for what happened, even if I hadn't follow security regulations and stayed alone.

Action

The therapist gave me homework: to work on my thoughts and behaviors and to maintain a self-care routine. I saw her for almost a year, twice a week to begin with, than once a week, and now once every two weeks.

Integration

I am able to enjoy small moments again, after this long time of being numb. I have come to appreciate my strength. Sometimes, I feel a big sense of gratitude just for the fact that I survived and am alive. There are many things I look forward to. I understand now that this story is just a part of me and who I am. It doesn't define all of who I am and what I am all about.

I still have moments when the memory haunts me. But usually now, when those moments come, I am able to put it aside. It will always be a part of me, but I know now that I can live with it. I am so grateful to feel alive and have life ahead of me.

APPENDIX C

SUZY'S BRAIN: A FIRST RESPONSE TO TRAUMA

Characters

1. Narrator
2. Suzy
3. Lizard, *the instinctual brain*
4. Puppy, *the emotional brain*
5. Computer, *the rational brain*
6. Godmother glue, *the moral brain*

NARRATOR: One day, Suzy, a first responder in a disaster and recovery team, was sitting in a support tent that she and her colleagues had built. She decided to stay by herself while two team members went to use the bathroom.

SUZY: Don't worry about me. I'll be fine here by myself. *Sighs and sits on chair, closes her eyes, and takes a deep, soothing breath.*

NARRATOR: The lizard, puppy, computer, and Godmother Glue brains were standing close by Suzy.

LIZARD: *(Stands next to Suzy with eyes closed.)*

PUPPY: *(Excitedly.)* Yup, yup, this feels good, I am relaxed.

COMPUTER: Not much work for me at the moment.

GODMOTHER GLUE: *(Standing calmly.)* Everything is going very well. I'm doing great.

NARRATOR: Everything was calm for Suzy, when all of a sudden she felt a heavy punch on the back of her head. She fell to the ground.

SUZY: *(Falls down in a state of shock.)*

COMPUTER: This is not right!

PUPPY: *(Nudges the lizard.)* This doesn't feel good to me.

LIZARD: *(Opens his eyes, looks around franticly, and makes a siren noise.)*

GODMOTHER GLUE: *(Spreads her arms, trying to keep things under control.)* I'm not able to make sense of this.

NARRATOR: Suzy was frozen and stayed on the ground.

COMPUTER: Something is wrong. My systems are crashing! *(Falls down to ground.)*

PUPPY: *(To Lizard.)* Wake up! I need your help! *(Falls down to ground.)*

LIZARD: I'm up! I'm doing the best I can. Can't you see I'm trying to save her? *(Stays on alert.)*

GODMOTHER GLUE: *(Backs away and falls to the ground.)* I am losing control here.

NARRATOR: Suzy was stunned and remained on the ground.

LIZARD: *(Looks at Puppy and gets closer to him.)* No past, no future, just now, now, now! I'm trying to save Suzy!

SUZY: *(Remains frozen.)*

NARRATOR: Suzy remained frozen, when something startled the attacker. In a flash, Suzy's attacker disappeared. Suzy moved on the ground very slowly. Carefully, she opened her eyes.

She is visibly shaken. Her parts of the brain start moving around her very slowly. Suzy stands up and slowly gets dressed.

COMPUTER: *(Slowly stands up.)* Systems are restoring.

PUPPY: (*Slowly stands up*.) This doesn't feel good. Computer, what just happened?

LIZARD: (*Slowly stands up*.) Alarms relaxed, but stay aware!

GODMOTHER GLUE: *(Slowly stands up and spreads arms around Lizard, Puppy, and Computer.)* I'm here now.

NARRATOR: Slowly, Suzy went out of the tent toward her living quarters.

APPENDIX D

DEMOGRAPHIC QUESTIONNAIRE

The information requested is completely confidential, and will be kept separate from the rest of the questionnaires in the packet.

1. Gender: Male/ Female (please circle your response)

2. Age ____

3. Ethnicity_____

4. Level of education_____

5. Occupation/job title_____

6. Years of experience in disaster and trauma response_____

7. Have you ever experienced a traumatic event(s)? ____ (life-threatening accident, disease; victim of violent crime, abuse physical / sexual / psychological; knowledge of family member, partner, or very close friend subject to the above-mentioned abuses; traumatic bereavement; combat exposure, etc.)

8. If answered yes to any previous questions, have you ever received assistance from a clinical professional to deal with these experiences?

APPENDIX E

COMPASSION SATISFACTION AND COMPASSION FATIGUE

(PROQOL) VERSION 5

When you *[help]* people you have direct contact with their lives. As you may have found, your compassion for those you *[help]* can affect you in positive and negative ways. Below are some questions about your experiences, both positive and negative, as a *[helper]*. Consider each of the following questions about you and your current work situation. Select the number that honestly reflects how frequently you experienced these things in the *last 30 days.*

1. I am happy.
2. I am preoccupied with more than one person I *[help]*.
3. I get satisfaction from being able to *[help]* people.
4. I feel connected to others.
5. I jump or am startled by unexpected sounds.
6. I feel invigorated after working with those I *[help]*.
7. I find it difficult to separate my personal life from my life as a *[helper]*.
8. I am not as productive at work because I am losing sleep over traumatic experiences of a person I *[help]*.
9. I think that I might have been affected by the traumatic stress of those I *[help]*.
10. I feel trapped by my job as a *[helper]*.
11. Because of my *[helping],* I have felt "on edge" about various things.
12. I like my work as a *[helper]*.
13. I feel depressed because of the traumatic experiences of the people I *[help]*.
14. I feel as though I am experiencing the trauma of someone I have *[helped]*.
15. I have beliefs that sustain me.
16. I am pleased with how I am able to keep up with *[helping]* techniques and protocols.

17. I am the person I always wanted to be.
18. My work makes me feel satisfied.
19. I feel worn out because of my work as a *[helper]*.
20. I have happy thoughts and feelings about those I *[help]* and how I could help them.
21. I feel overwhelmed because my case [work] load seems endless.
22. I believe I can make a difference through my work.
23. I avoid certain activities or situations because they remind me of frightening experiences of the people I *[help]*.
24. I am proud of what I can do to *[help]*.
25. As a result of my *[helping],* I have intrusive, frightening thoughts.
26. I feel "bogged down" by the system.
27. I have thoughts that I am a "success" as a *[helper]*.
28. I can't recall important parts of my work with trauma victims.
29. I am a very caring person.
30. I am happy that I chose to do this work.

APPENDIX F

RECENT TEQ

In the past month, you may have experienced or witnessed traumatic events. If you have experienced or witnessed one of the events, please mark "Yes." If you have not experienced or witnessed such event, mark "No" and continue to the following question.

1. In the past month, have you been in or witnesses a car / industrial accident?
No ___ Yes ___

2. In the past month, have you experienced a natural disaster such as typhoon, flood, or earthquake?
No ___ Yes ___

3. In the past month, have you been a victim or a witness of a violence crime?
No ___ Yes ___

4. In the past month, have you been in serious danger of losing your life or being injured?
No ___ Yes ___

5. In the past month, have you experienced a traumatic event that was not listed above?
No ___ Yes ___
If you feel comfortable, please mention the event:

_____

6. In the past month, have you experienced or witnessed a traumatic event that you feel you cannot share in this questionnaire?

No ___ Yes ___

APPENDIX G

ETI TRAINING, TMFU FORM

Date (DD/MM/YY)_____

Name _____

1. Do you remember the Expressive Trauma Integration (ETI) model stages?
   No ___ Yes ___ If yes, what do you remember?

2. Did you pay attention to your stressors and alerts since the ETI training?
   No ___ Yes ___ If yes, elaborate below:

3. Did you mange to maintain a self-care regime?
   No ___ Yes ___ If yes, what do you remember?

4. Did the workshop assist you in managing your stress?
   No ___ Yes ___ If yes, what do you remember?

5. Did the workshop contribute in any way to your overall sense of satisfaction from your work?
   No ___ Yes ___ If yes, what do you remember?

6. Do you remember Suzy's story and what happens to the brain after trauma (parts of the brain)?
   No ___ Yes ___ If yes, what do you remember?

7. Do you remember anything from the workshop?
   No ___ Yes ___ If yes, what do you remember

8. Any final comments you would like to add?
   No ___ Yes ___ If yes, write below?

APPENDIX H

PARTICIPANT CONSENT FORM

Purpose:

This study aims to conduct an assessment of the efficacy of experiential preventive/responsive training in dealing with accumulative stress, compassion fatigue (hereafter, CF), and secondary traumatic stress (hereafter, STS).

Procedures:

You are asked to participate in a training workshop that incorporates experiential techniques to facilitate possible reduction of compassion fatigue (CF) and secondary traumatic stress (STS).

You will be asked to complete pre-review questionnaires and assessments that will allow the researcher to learn about your background and possible prior exposure to stress and trauma. A few weeks after the training workshop, you will be asked to complete post-review questionnaires and assessments.

Participation Benefits/Risks:

Participation in the this study and engaging in this training has the potential to assist you to acquire stress-management skills, be better prepared for the possibilities of compassion fatigue and secondary traumatic stress, and develop self-awareness, coping skills, and build resiliency.

Risks include any discomfort you may feel in response to filling out the questionnaires and assessments, and responses the may arise during the training. If this is the case, you may contact the principal investigator for a referral to appropriate services.

Voluntary Nature of the Study/Confidentiality:

Your participation in this study is entirely voluntary and you may refuse to complete the study at any point during the experiment, or refuse to answer any questions with which you are uncomfortable. You may also stop at any time and ask the trainer any question you may have. Your identity will remain anonymous. Information that would make it possible to identify you or any other participant will remain confidential.

Contacts and Questions:

At this time, you may ask any questions you may have regarding this study. If you have questions later, you may contact the principal investigator: ogertel@lesley.edu

Lead Researcher: Odelya Gertel Kraybill. Telephone: (202) 580-8656.

Email: ogertel@lesley.edu

Principle Investigator and Faculty supervisor: Robyn Flaum Cruz, PhD, BC-DMT

rcruz@lesley.edu

Lesley University IRB Co-Chair: Terry Keeney tkeeney@lesley.edu

Statement of Consent:

I have read the above information. I have asked any questions I had regarding the experimental procedure, and they have been answered to my satisfaction. I consent to participate in this study.

Name of Participant_____

Date: _____

Signature of Participant _____

Age_____

(Note: You must be 18 years of age or older to participate in this study. Let the facilitator know if you are under 18 years old.)

Thanks for your participation!

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