An Exploratory Study of the Traumatic Stress Experienced by Professional Caregivers Exposed to Children Injured by Violence

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CHAPTER I

INTRODUCTION

"A number of authors have explored, explained, and warned about the common dangers of the personal and professional stresses inherent in the care of the ill, the dying, and the bereaved. The general consensus of such writers, is that work in these areas is inherently intimate, powerful in eliciting the caregivers' own feelings, thoughts, memories, and fantasies about loss; and commanding in its life and death nature" (Rando, 1993, p. 651). Professional caregivers face a number of difficult professional and personal issues when treating the victims and survivors of a traumatic event. McCann and Pearlman (1990) point out that the potential effects of working with trauma victims and survivors are distinct from those working with other difficult populations because the helper is exposed to the emotionally shocking images of horror and suffering that are characteristic of serious trauma. In addition, the helper must provide the necessary emotional and physical support to the victims. As a result, the professional caregivers' own traumatic experiences and emotional responses become secondary to the demands of their work and needs of the victims, and the caregiver becomes vulnerable to stress, and what McCann and Pearlman (1990) refer to as "vicarious traumatization".

Within the area of victimization, an important relation between cognitive schemas and individual adaptation to stressful life events has been hypothesized (McCann, Sakheim, & Abrahamson, 1988). Research examining the relationship between experiencing a traumatic event (such as responding to a disaster and its victims) and psychological adaptation has important implications for understanding the content and processes of one's conceptual system as it relates to traumatic experiences and coping.
McCann et al. (1988) presented a theoretical model designed to assess and conceptualize unique patterns of response among victims. The underlying premise of the model is that cognitive schemas that are affected by traumatic life experiences, influence the unique way that traumatic events are responded to and interpreted. Similarly, other authors have considered the role that cognitive schemas play in the psychological adaptation and coping strategies of individuals who experience traumatic events. Janoff-Bulman (1989) considered the coping tasks of individuals who have experienced extreme negative events by examining the role of people's basic assumptions about the world and the impact of a stressful event on these assumptions. McCammon, Durham, Allison, and Williamson (1988) studied emergency workers' appraisal of emergency events and found that the most frequently endorsed coping strategies involved attempts to reach cognitive mastery over the event and to ascertain meaning. Dyregrov and Mitchell's (1992) study also points to the cognitive processes and strategies which enable professional helpers to perform more effectively, make sense of the situation, and manage the demands and overwhelming emotions which accompany their work.

Many clinicians and researchers in the field of traumatization and victimization have highlighted the role of social support in dealing with traumatic events. There is an emerging understanding of the association between support and general beneficial health and behavior outcomes, some common agreement on the types of interchanges that are helpful, and where such interchanges occur (Flannery, 1990). However, relatively little attention has been given to the meaning of these findings for professional caregivers who treat traumatized persons. Hartsough (1985) identified three characteristics of emergency workers' roles which help in trauma resolution which include worker cohesiveness, commitment to the profession, and the desire for improving one's self and the organization. Rando (1993) discussed the need for professional caregivers who treat traumatized persons to process both alone and with others the reactions elicited by repeated exposure to trauma. Additionally, Rando noted the importance for professional
caregivers to be aware of the potential sources of support within their professional network to avoid professional isolation.

Emergency personnel and other professional caregivers are exposed to a range of potentially traumatic events and experiences which can and often will engender psychological, emotional, and/or physiological stress reactions in those involved. Within the past decade, a growing body of literature has focused on the psychological impact of emergency crisis work on professional caregivers. Past studies have shown that traumatic events involving extensive human suffering have lingering psychological effects on many emergency workers (Berah, Jones, & Valent, 1984; Janoff-Bulman, 1989; McCammon, Durham, Allison, & Williamson, 1988; McCann & Pearlman, 1990; Mitchell, 1983; Raphael; 1981; Talbot, Manton, & Dunn, 1992).

Only a limited number of studies have focused on the effects of crisis work on mental health professionals. McCann and Pearlman (1990) discussed therapists' reactions to clients' traumatic material and developed a theoretical framework for understanding therapists' reactions to traumatized clients. Therapists' stress reactions have also been discussed in the literature pertaining to client suicide (Chemtob, Hamada, Bauer, Kinney, & Torigue, 1988). Talbot, Manton, and Dunn (1992) examined the stresses inherent in crisis work and its' effects on psychologists. The authors identified several distinctive stressors that confront psychologists in crisis intervention work which include: urgency and ambiguity of the crisis situation, the role of the psychologist, countertransference issues, and the organizational context in which the crisis takes place. The stresses associated with crisis intervention work can have a range of effects, which mirror those of primary victims (Hodgkinson & Shepherd, 1994).

While the literature suggests that emergency workers who respond to crises may experience substantial distress and symptomology as a result of their work, much of the empirical evidence is based on the aftermath and response to disasters and major crises which are frequently large-scale and highly public. Genest, Levine, Ramsden, & Swanson
(1990) suggested that traumas of smaller magnitude, such as resuscitation attempts made by emergency personnel would lead to similar distress and symptomology. For instance, results from their study indicated that an unsuccessful attempt at CPR seemed to lead to persistent psychological aftermath.

While much of the research on the psychological aftermath of a traumatic event focuses on post traumatic symptoms, there is a limited understanding of the experiences and reactions during and immediately following a traumatic event. Koopman, Classen, Cardena, and Spiegel (1995) identified the pattern of dissociative and anxiety symptoms and other reactions which constitute Acute Stress Disorder. The authors pointed out that while these distancing methods may allow a person to limit the painful thoughts and feelings associated with the event to enable them to function, a continuation of these symptoms, may disrupt the person's social and interpersonal functioning. Empirical research has not yet identified a link between Acute Stress Disorder and Post Traumatic Stress Disorder. However, it is important to be able to identify immediate reactions and symptoms characteristic of Acute Stress Disorder, so that appropriate intervention can be provided to those individuals who are displaying persisting symptoms.

Violent crimes and victimization rates for children and youth are reaching alarming levels in the United States. Almost daily, the news media reports incidents involving children injured or killed as a result of domestic or societal violence. The deaths of these children deeply affects the lives of countless individuals. Health care professionals who are involved in the care of traumatized children are confronted with the sad reality that despite tremendous advances in technology, children will die within their health care settings (Neidig & Dalgas-Pelish, 1991). Caring for a child who is mortally wounded raises many feelings related to one's personal and professional life. Dyregrov and Mitchell (1992) hypothesized that work with seriously ill or injured children is characterized by extreme levels of personal involvement, identification with the victim which may cause an individual's natural defenses to break down.
Overall, the literature suggests that exposure to traumatic events and the traumatic experiences of victims has serious psychological consequences for the professional caregivers involved. "In essence, law enforcement officers, emergency medical personnel, crisis workers, and health care professionals have been called upon to deal with a form of human tragedy and violence which exceeds that for which they are normally trained and prepared" (Sewell, 1993, p. 104). The effects of disasters, accidents, or other traumatic events are not confined solely to those directly involved in such atrocities, but rather extend outward to the lives of countless others impacting upon the mental health and social structure of entire communities and even society-at-large. "When emergency personnel (i.e., police, fire-fighters, paramedics, and emergency nurses) and those involved in more long term care such as hospital staff members are asked about the worst events they experience in their work, there is a unanimous response, that being death or serious trauma to children" (Dyregrov & Mitchell, 1992, p. 6). Hence, there is a need to examine the traumatic experiences, psychological effects, and coping strategies of professional caregivers who work with traumatized persons. Additionally, future research in the areas of traumatization and victimization are warranted in settings and situations other than large disasters or other major trauma incidents.

It appears that dealing with traumatized children intensifies stress on the professional caregiver and may lead to significant distress even in the most experienced helpers. Such incidents can engender psychological, emotional, and/or physiological stress reactions in those involved. However, the issues confronting the professional caregivers and other crisis workers exposed to this type of trauma, are nearly invisible in the existing literature. Consequently, this lack of attention has seriously impeded our understanding of the professional and personal dilemmas faced by help providers who come into contact with children traumatized by violence. It is hoped that this study will increase our understanding of the unique challenges faced by professional caregivers who treat children traumatized by violence. Research questions to be addressed include the following:
1). Are there significant differences among occupational groups?

2). From where do most professional caregivers receive their support?

3). Are there significant differences across levels of intrusion, avoidance, subjective distress, acute or long-term emotional impact in regards to the extent to which professional caregivers are exposed to children traumatized by violence?

4). What types of symptoms are most frequently reported by professional caregivers who are exposed to or treat traumatized children?

5). What is the relation between perceived social support and long-term emotional impact?

6). What is the relation between length of time in one's occupation and long-term effects of treating traumatized children?
CHAPTER II
REVIEW OF THE RELATED LITERATURE

The following chapter is a literature review highlighting some of the theoretical and empirical findings of the traumatic experiences, psychological effects, and coping strategies of professional caregivers who work with traumatized persons.

Theoretical Models of Trauma and Victimization

Over the past two decades, the topics of traumatic stress and victimization have become focal issues in research. At no other time in history have we been as concerned about the incidence and prevalence of violence and the aftermath of traumatic events that affects individuals, families, and communities. A monumental article written by McCann, Sakheim, and Abrahamson (1988) provided a comprehensive overview of the literature on traumatic stress and victimization and presented a theoretical model describing the complex relation among traumatic experiences, cognitive schemas, and psychological adaptations.

While the study of traumatic stress and victimization is increasing, these topics have been of interest since the turn of the century. During World War I for instance, professionals observed veterans suffering from "battle fatigue" or "shell shock" (McCann, Sakheim, & Abrahamson, 1988). Interest resurfaced during World War II as researchers attempted to conceptualize and classify war stress reactions in the first "Diagnostic and Statistical Manual of Mental Disorders" (DSM I, American Psychiatric Association, 1952). However, after World War II, a diagnosis specifically focused on war stress was no longer warranted presumably because of the relative calm of peace time. Post-traumatic stress disorder (PTSD) was reintroduced as a diagnostic category as professionals became aware of severe and often delayed post-traumatic symptoms among...
returning Vietnam veterans (McCann et al., 1988). While the concept of PTSD originated with the onset of post-traumatic responses resulting from World War I, it is no longer tied exclusively to war traumas. PTSD has increasingly been viewed as a diagnosis capable of encompassing a variety of victimizing events (McCann et al., 1988).

McCann, et al., (1988) presented major findings on the psychological consequences of victimization across seven different victim groups including: rape, childhood sexual and physical abuse, domestic violence, crime, environmental factors, and the Vietnam War. Five major categories of response which included emotional, cognitive, biological, behavioral, and interpersonal were proposed to represent the major assessment areas relevant to victimized populations. Commonalties in response patterns were identified across victim groups. McCann et al., (1988) then integrated into a theoretical model designed to assess and conceptualize unique response patterns among victims.

The McCann et al., (1988) model, which was based upon cognitive-constructive theoretical perspectives, proposed that cognitive schemas influence the way in which traumatic events are interpreted and responded to. Thus, the model provides an organizing framework for assessing both the impact of life experiences on schemas and the impact of schemas on persons' interpretations of traumatic events and psychological adaptation (McCann, et al., 1988). An analysis of both the clinical and empirical literature of psychological responses to victimization revealed five major areas of psychological and interpersonal functioning which may be impacted such as, safety, trust, power, esteem, and intimacy.

Janoff-Bulman (1989) attempted to further extend our understanding of the psychological reactions and coping processes of individuals who have experienced extreme negative events by examining the role of basic assumptions about the world. The conceptual system which develops and maintains our basic assumptions about the world and the self enables us to recognize the congruence and incongruence or irrelevance of information providing expectations about ourselves and the world so that we might
function effectively. Stressful life events may dramatically challenge these assumptions. The individual is left with the difficult task of assimilating the traumatic experience and/or changing their basic schemas about themselves and the world. Thus, a major coping task facing victims is largely reconciling a cognitive dilemma. Janoff-Bulman (1989) identified several cognitive responses and coping strategies which victims often engage in following traumatic events. Such coping strategies include self-blame, denial, and intrusive and recurrent thoughts. Janoff-Bulman noted that these psychological processes facilitate the course of cognitive integration and create possibilities for assimilation and adaptation.

Janoff-Bulman (1989) proposed a model of basic assumptions composed of assumptions presumed to be core elements of our basic conceptual system. There are three primary categories: (1) perceived benevolence of the world, (2) meaningfulness of the world, and (3) worthiness of the self. Each primary category is comprised of several assumptions. This model of basic assumptions served as the basis for the development of the World Assumptions Scale (Janoff-Bulman, 1989) which is designed to investigate people's basic assumptions. In an attempt to investigate the assumptive worlds of victims, Janoff-Bulman conducted an exploratory study using the World Assumptions Scale to determine the extent to which the impact of past traumatic events would be apparent in the basic assumptions of victims when compared with those of non-victims. Results indicated that even years after the negative event, the victims were significantly more depressed than the non-victims. Responses to the World Assumptions Scale continued to reflect different assumptions about the world. Victims tended to perceive themselves more negatively and perceived the impersonal world as more harsh. According to this study, people's assumptive worlds are affected by traumatic events and the impact on basic assumptions is still apparent for years after the negative event (Janoff-Bulman, 1989). Janoff-Bulman's model of basic assumptions has important implications for examining both the content and process of our basic conceptual system as it relates to traumatic stress and coping.
In "The Treatment of Complicated Mourning", Therese Rando provided a comprehensive and historical overview of the philosophies, theories, and models used to explain the complicated processes of grief and mourning. Rando integrated theory, research, and practice in her examination of how individuals respond, cope, and adapt to many different types of loss. For the purposes of this literature review, only the chapter which focused on the stresses inherent in the work of professional caregivers will be discussed. For a more detailed discussion of complicated grief, assessment and treatment strategies, the reader is referred to Rando (1993).

It has been eluded to by some researchers that those individuals who are attracted to emergency work have a certain "hardiness" to their personality, suggesting that emergency workers may be less likely than the ordinary citizen to crack while under intense pressure (McCammon et al., 1988; Moran & Britton, 1994). However, emergency workers and other professional caregivers are not immune to the painful images, thoughts, and feelings associated with traumatic events. Rando (1993) points out that work with traumatized persons demands a deep emotional response from the caregiver. "Both giving and withholding this type of emotional response can severely tax the caregiver" (Rando, 1993, p. 651). Therefore, it is important for the professional helper to be aware of the continuing impact that exposure to illness, injury and death have on ones' self.

Rando (1993) identified several death-related stressors which are involved in caring for the ill, the dying, and the bereaved. Specifically, these stressors are associated with the mode of death, the degree to which the death was anticipated, the number of deaths involved, and the extent of trauma, and whether the loss was of a child or related to AIDS. In a personal encounter with death, the individual experiences helplessness, anxiety, heightened arousal, fear, terror, a sense of abandonment, increased vulnerability, and the yearning for relief and rescue (Rando, 1993). In treating the victims and survivors of traumatic events, the caregivers' own traumatic experiences and overwhelming
emotional reactions are secondary to the demands of their work and needs of the victims. Consequently, the caregivers become vulnerable to post-traumatic stress.

The caregiver can be expected to experience additional problems when they are exposed to high-risk characteristics, such as, the death of a child. "High-risk deaths often generate in the caregiver as well as the survivors, increased vulnerability, heightened anxiety, insecurity and threat, intensified feelings of helplessness, and a strong sense of loss of control" (Rando, 1993, p. 659). Professional caregivers are faced with an existential challenge to find meaning in the victimization of innocent people.

**Psychological Effects and Coping Strategies of Emergency Personnel**

Within the past decade, researchers have begun to explore the psychological impact that emergency and crisis work has on professional caregivers. For some crisis workers, the stress inherent in their jobs may produce long-term psychological difficulties.

McCann and Pearlman (1990) proposed a theoretical model based on constructivist self-development theory (McCann et al., 1988), which sought to explain the psychological effects of working with victims. The authors indicated that mental health professionals can experience profound and lasting psychological effects as a result of repeated exposure to the traumatic experiences of victim clients. McCann and Pearlman (1990) referred to this process as "vicarious traumatization". They viewed such traumatization as being related to the graphic and painful material presented by traumatized individuals and to the caregivers' unique cognitive schemas, beliefs, expectations, and assumptions about self and others (McCann & Pearlman, 1990). While the literature on burnout and countertransference provide a broad understanding of the psychological effects of therapists working with difficult clients, McCann and Pearlman (1990) asserted that the potential effects of working with trauma survivors are distinct from those working with other difficult populations because the therapist is exposed to the
emotionally shocking images of horror and suffering that are characteristic of serious trauma.

The basic premise underlying McCann and Pearlman's (1990) conceptual framework for understanding caregivers' responses and adaptation to working with victims is that the unique way in which trauma is experienced depends in part upon which schemas are central or salient to the individual. Therefore, vicarious traumatization implies that much of the therapists' cognitive world will be altered by hearing traumatic client material. This disruption in the clinicians' existing schemas (i.e., basic assumptions) may precipitate internal conflicts and fears in varying areas of one's life such as dependency/trust, safety, power, independence, esteem, intimacy, and frame of reference. McCann and Pearlman (1990) further suggested that therapists who listen to accounts of victimization may also experience disruptions in imagery or memory system; which may lead to such post-traumatic stress symptoms as flashbacks, dreams, or intrusive thoughts. Therapists who internalize the vivid and powerful memories of their clients, may temporarily or even permanently alter their own memory system. The authors explained that this process is likely to occur when the material is particularly salient to the therapist's needs and life experience and when the therapist does not have the opportunity to talk about his or her experiences of the traumatic material (McCann & Pearlman, 1990).

Talbot, Manton, and Dunn (1992) examined the stresses inherent in crisis work in general, and the effects on psychologists in particular. These authors argued that psychologists, as distinct from other emergency responders, require psychological understanding and integration to be able to function and intervene effectively (Talbot et al., 1992). Talbot et al. identified the distinctive features of crisis intervention which can provoke stress for psychologists. These features include: the urgency and ambiguity of the crisis situation, the role of the psychologist, countertransference issues, and the organizational context in which the crisis takes place. The authors cited several other studies which described and explained the stresses and effects of crisis intervention work.
on mental health professionals. Raphael (1981) explained that in dealing with violence, death, and human suffering, both the victim as well as the helper must integrate the shock, denial, distress, helplessness, and images of death. Mitchell (1983) explained that rescuers are vulnerable human beings who have all the normal physical and psychological responses to the horror of human suffering. Mitchell also explained that emotional aftershocks can appear can appear at the scene, days, weeks or even months later and can seriously affect the person's work performance and interpersonal relationships. Talbot et al., (1992) further cited the work of Berah, Jones, and Valent (1984) who studied the effects of working with disaster on mental health professionals and found evidence that both their emotional and physical health were affected. The authors' work with victims of armed hold-ups are consistent with these findings. The authors described several behavioral effects which included: exhaustion, an increase in alcohol consumption, numerous somatic complaints, sleep disturbances and nightmares, an increased sensitivity to violence in general and demanding emotional support from family and friends. The circumstances in which helpers work, and the subsequent post-traumatic stress reactions experienced by crisis workers require techniques to help them deal with such experiences.

In an effort to provide a specialized debriefing strategy for psychologists, social workers, psychiatric nurses, and psychiatrists, Talbot et al. proposed a crisis debriefing model based upon Mitchell's (1988) critical incident stress debriefing procedure, and Raphael's (1986) psychological debriefings. This model has important implications for psychologists working in crisis and trauma situations, because it assists the psychologist in gaining a psychological understanding of the whole crisis and provides an integrative approach to understanding both the reactions of the victims and of themselves. In an attempt to expand upon the existing literature which focuses on the psychological impact on helpers providing psychological support to victims of a disaster, Hodgkinson and Shepherd (1994) examined the impact of disaster support work on 67 social workers providing psychological support following two major disasters. The participants
completed measures which assessed psychological symptomology and well-being, personality variables, social support, life events, and various aspects of disaster support work. Two major sources of disaster support work related stresses emerged from the data: "identification" with clients or impact of client contact and role-related difficulties. Ninety nine percent of the social workers surveyed imagined how they would have coped had they been one of the victims and 63% described how the disaster support work reminded them of earlier unhappy memories. Eighty seven percent of social workers indicated that they were confused about their role. Results indicated that high role problem levels were associated with high symptom scores and low psychological well-being scores; thus suggesting that there is a strong need for clear roles and well-defined tasks. A majority of the social workers (60%) experienced significant levels of symptoms during their first year of disaster support work, and follow-up data suggested that levels were maintained twelve months after the initial survey. Symptoms most frequently reported included: cognitive difficulties, symptoms of depression, and interpersonal sensitivity. "Hardiness" and prior life events emerged as the most important moderating factors in predicting helper stress. These findings support previous research indicating the importance of cognitive appraisal, which appears to play a crucial role in determining helpers' response.

In an attempt to examine the adjustment of emergency workers, McCammon, Durham, Allison, and Williamson (1988) studied emergency workers' appraisal (or interpretation of an event) and their reported coping mechanisms. Emergency workers responding to two different disasters (an apartment building explosion and a tornado one year later) completed the Disaster Experience Questionnaire (based on Wilkinson, 1983), the Coping Inventory (Horowitz & Wilner, 1981) and rated the extent of their support networks. In response to both disasters the most frequently endorsed symptoms were repeated recollections of the event and sadness. Coping strategies most frequently used following both events involved attempts to achieve cognitive mastery over the event and
to ascertain meaning. The magnitude of the disaster appeared to be a crucial variable affecting adjustment. For example, the tornado workers utilized more coping mechanisms, found it more difficult to put the event behind them, and experienced a greater desire for emotional support, than did the apartment explosion workers. Factor analysis of the responses to the Coping Inventory revealed four coping themes among the workers including: search for meaning, regaining mastery through individual action, regaining mastery through interpersonal action, and philosophical self-contemplation. Findings from this study illustrate the critical processes of cognitive appraisal and coping, which allowed the emergency worker to manage the demands and emotions generated by stressful, traumatic events.

Sewell (1993) addressed the unique and difficult stress facing law enforcement personnel who investigate multiple murders. He suggests that such incidents can produce psychological, emotional, or physiological stress reactions in the involved officers. Consistent with this view are the findings of McCafferty, Domingo, & McCafferty, 1989). These researchers found that 50% of the approximately 200 personnel present at the San Ysidro Massacre, in which 21 persons were killed and 19 others wounded in a McDonald's restaurant, experienced some degree of Post-Traumatic Stress Disorder. Only 26% of a control group, comprised of 60 officers not involved in the incident, suffered from PTSD.

The literature on coping strategies in the event of an emergency, crisis, or trauma has consistently identified the need and use of distancing methods to regulate the emotional intensity of a traumatic event or crisis situation. It is also common for individuals to elicit dissociative reactions in the acute phases of a traumatic event, which are characterized by periods of intense reliving of trauma alternating with little awareness, psychological numbing, depersonalization, and even amnesia. (Koopman, Classen, Cardena, & Spiegel, 1995). Dissociative reactions, anxiety, and other reactions such as those mentioned above, are characteristic of Acute Stress Disorder. The word "Acute" in
the Acute Stress Disorder diagnosis denotes that the symptoms occur within four weeks of a traumatic event. The American Psychiatric Association (1994) identifies several criteria in the diagnosis of Acute Stress Disorder (ASD). The person must have experienced an event "that involved actual or threatened death or serious injury, or a threat to the physical integrity of self or others," and the person reacted with intense fear, horror, or helplessness. While dissociative reactions play a major role in the diagnosis of Acute Stress Disorder, other symptoms must also be present such as: anxiety symptoms or increased arousal, re-experiencing the traumatic event, and avoiding reminders of the traumatic event. The symptoms must also produce significant distress or impairment in social or occupational functioning. In addition, the symptoms must last for at least two days and occur within four weeks of the traumatic event in order to warrant diagnosis of Acute Stress Disorder.

While limiting the painful thoughts and feelings associated with a traumatic event may allow a person to function at least minimally, continuation of these symptoms, may impair the persons' quality of life and disrupt daily functioning. In an attempt to consider the prevalence of Acute Stress Disorder in response to traumatic events, Koopman, Classen, Cardena, and Spiegel (1995) reviewed 15 studies which examined the psychological reactions of survivors within the first month of a traumatic event. The traumatic experiences of survivors, their families, and rescue workers were investigated across a variety of traumatic events. Although the exact prevalence of Acute Stress Disorder in these studies was unable to be determined, five dissociative symptoms described in the Acute Stress Disorder diagnosis (subjective sense of numbing, detachment, or absence of emotional responsiveness; a reduction in awareness of one's surroundings; derealization; depersonalization; dissociative amnesia) were reported among many of the survivors of the traumatic events. Anxiety symptoms were reported in fourteen of the fifteen studies. It was also indicated in several studies that later events similar to the traumatic event triggered intense emotional reactions. Intrusive thinking and
ruminating about the traumatic event also appeared to be common reactions of traumatic events as well. Different coping strategies identified throughout the studies included: talking about the event, counseling, self-medicating with alcohol or other substances, and actively avoiding thinking about the event. Several survivors across a variety of traumatic events reported experiencing difficulty in functioning including illnesses, accidents, changes in eating, sleeping, smoking, and/or drinking alcohol. Difficulties in interpersonal relationships were also observed. Koopman, Classen, Cardena, and Spiegel (1995) pointed out that a continuation of these symptoms may lead to Post Traumatic Stress Disorder (PTSD). It is important to be able to identify the symptoms of Acute Stress Disorder, so that appropriate intervention (i.e., psychological and social services) can be provided. The cumulative findings from this study signifies the value and need for future research to help improve our understanding of Acute Stress Disorder and the issues surrounding assessment, intervention, treatment.

Sewell (1993) identified two categories of trauma stressors which can be identified in law enforcement personnel involved in multiple murder investigations. Organizational stressors and event stressors. Among organizational stressors, are the administrative pressures to solve the crime, administrative pressures to "carry on with business", the work environment itself, and conflicts within both role and responsibility. Event stressors include: traumatic stimuli, personal loss or injury, and the impact of mission failure, including an inability to bring closure to the crime, or human error. According to Sewell, as a police officer, one is expected to project strength, even in the most severe and trying events, to handle any crisis without display of emotions, and to place the needs and demands of the organization above one's own personal feelings (Sewell, 1993). A cumulative effect of many of these stressors takes its toll on the officer's body, mind, and emotional well-being. In discussing these issues, Sewell (1993) identified key components to effectively confront the traumatic stress associated with violent crisis situations. These
include organizational commitment, training, critical incident stress debriefing, organizational support services, and community support.

While the literature suggests that emergency workers who respond to a crisis may experience substantial distress and symptomology as a result of their work, much of the empirical evidence is based on the aftermath and response to disasters and major crises such as airplane crashes and earthquakes. Genest, Levine, Ramsden, and Swanson (1990) proposed that traumas of smaller magnitude, such as resuscitation attempts made by emergency personnel would lead to similar problems. Genest et al. (1993) surveyed fourteen volunteer ambulance personnel who had been involved in unsuccessful resuscitation attempts. Subjects completed the Reactions Questionnaire (Tait & Silver, 1984) the Revised Ways of Coping Checklist (WCCL) (Lazarus & Folkman, 1989) and responded to six Likert-type items concerning their perceptions of control and responsibility. Results indicated that for these ambulance personnel, an unsuccessful attempt at CPR seemed to lead to a persistent psychological aftermath. Some of these individuals experienced vivid, involuntary and uncontrollable thoughts, feelings, and/or mental images concerning their attempt. Ten of the 14 reported that they thought about the unsuccessful attempt "sometimes" or "frequently". Responses to items measuring perceived control and responsibility indicated that a majority of the subjects were not "completely able" to avoid being overwhelmed by their reactions. An obvious limitation of this study, as pointed out by the authors is the small sample size, yet the findings have relevance for future research in this area and the need to further examine the aftermath of crises and other stressful events of smaller magnitude.

Due to the nature of their work, emergency personnel are exposed to a range of potentially traumatic experiences including accidents, emergencies, and large scale disasters (Moran & Britton, 1994). While it has been suggested that past experience with crisis situations may help prevent negative reactions to subsequent events, an alternative viewpoint suggests that increased exposure to traumatic incidents may contribute to a
breakdown in coping. In an attempt to gain a more comprehensive understanding of emergency workers' reactions to traumatic events, Moran and Britton (1994) investigated the association between volunteer emergency work experience, personality, and reactions to a past traumatic event. Individual's past exposure to traumatic events were examined on three different dimensions: intensity or severity of reactions to the worst incident experienced, length of that reaction, and the frequency of similar types of incidents experienced. Participants were asked to describe the "worst incident" in an open-ended format. This enabled the researchers to examine the subjective experiences of their participants and compare effects across different incidents.

Results suggested that personality variables did not appear to be directly related to effects of exposure to traumatic incidents. Variables associated with emergency service work, length of service, and frequency of callouts were generally the most efficient predictors of reactions to traumatic incidents (Moran & Britton, 1994). The relevant findings of this study suggest a need to further examine the relationship between occupational factors and background characteristics of emergency workers and the potential effects which may result from repeated exposure to traumatic incidents.

Effects of Working with Traumatized Children

"When emergency personnel (police, fire-fighters, paramedics, and emergency nurses) and those involved in more long-term care such as hospital staff members are asked about the worst events they experience in their work, there is a unanimous response: death or serious trauma to children" (Dyregrov & Mitchell, 1992, p. 6). Dyregrov and Mitchell (1992) hypothesized that work with seriously ill or injured children are characterized by extreme levels of personal involvement, identification of victim which may cause an individual's natural defenses to break down. These authors proposed that while helper's personalities are characterized by concern, compassion, and the desire to be helpful to others, these traits are intensified when working with traumatized children. In an attempt to illustrate the dynamics involved in working with traumatized children,
Dyregrov and Mitchell (1992) presented the psychological effects and coping strategies used by emergency personnel responding to a bus disaster in Norway involving in which 12 children and 3 adults were killed. Results indicated that the most frequently used coping strategy among the participants (94%) was concentrating on their job in order to avoid thinking about the intensity and severity of the event. Ninety percent of the sample reported that contact with others or social support served as a buffer against the overwhelming stress facing the workers. A majority of the emergency workers reported that they consciously suppressed their emotions and actively avoided thinking about the event. There appeared to be a strong need for the emergency workers to emotionally detach themselves from their work. Feelings of unreality, shock, and the use of distancing and dehumanizing strategies allowed some emergency workers to focus more exclusively on the tasks at hand which helped them to cope better. Other coping mechanisms used by the emergency workers included: mental preparation, regulating the amount of exposure, developing a sense of purpose, diverting their attention to other thoughts, and self-assuring comments.

Although some helpers experienced reactions at the scene, most reactions developed following the disaster (Dyregrov & Mitchell, 1992). More than half of the sample (67%) reported feelings of helplessness of not being able to do more at the scene of the crash. Fear and anxiety were also common responses. Dyregrov and Mitchell cited the work of several authors who have explained that exposure to an extremely stressful event challenges a person's sense of invulnerability. When this natural defense breaks down, the individual identifies with the victim or the victim's family, causing an increase of intense feelings of vulnerability and fear that something similar will happen to either oneself or one's loved ones. Dyregrov and Mitchell (1992) further explained that identification with the victim is exceptionally strong when the helping relationship involves children because caring for traumatized children can trigger one's own memories of childhood anxieties and fears, and the feelings of helplessness, separation, and loss which
accompany those fears. Other post-exposure responses included: rage, sorrow, grief, intrusive images, self-reproach, guilt, shame, and change in values.

McCammon et al. (1988) have shown that the search for meaning is a common coping strategy employed by disaster workers. However, the death of a child poses a difficult challenge for the helping professional who is trying to make sense of the event and incorporate it into one's life experience. The difficulties facing helping professionals working with traumatized children are vast and complex. Situations in which children are involved have a greater capacity to trigger on-scene emotional reactions, and can threaten the helper's ability to function effectively in disaster or crisis situations. The on-scene and post-exposure reactions, as well as the coping strategies described in Dyregrov and Mitchell's study (1992), clearly points to the use of cognitive processes and strategies, which enable the helpers to perform effectively, make sense of the situation, and manage the demands and overwhelming emotions which accompany their work. These findings support previous research which emphasizes helpers' use of cognitive appraisal and coping in stressful and traumatic situations.
CHAPTER III
METHODOLOGY

Participants and Setting

The target population for this study was professional caregivers including: registered nurses, physicians, social workers, and emergency medical technicians or paramedics who work in the Emergency Room and/or Pediatrics Intensive Care Unit at a Metropolitan Level I Trauma Hospital. In order to participate in the study, participants had to meet two criteria: (1) occupation is that of a professional caregiver (emergency service personnel, healthcare or mental health care professional such as a physician, nurse, social worker, or other emergency room personnel), and (2) have been exposed to or treated children physically injured or killed by violence. The expected sample size for this exploratory study was between 30 and 40 professional caregivers.

Procedure

A written proposal outlining purpose, literature review, and methodology was submitted to the Director of the Emergency Department. After receiving approval to conduct the study, a volunteer internship was established for the researcher in order to provide an opportunity to interact with the professional caregivers and to gain an understanding of their experiences in treating traumatized children. The internship involved assisting the licensed clinical social worker one night a week in the emergency room for approximately three months.

Survey packets were placed in the mailboxes of all emergency room staff members. The survey packet consisted of a cover letter with consent form, questionnaire, and plain white business size envelope. The cover letter explained the study, criteria for
participation, potential uses of the data, as well as the anonymous, voluntary and confidential nature of the survey. It was presumed that the survey would take approximately 20 minutes to complete. Completion of the survey implied that one gave informed consent to participate in the study. A large envelope was placed near the staff mailboxes for the respondent to deposit their survey. Surveys were also distributed and collected by a contact person in the Pediatrics Intensive Care Unit and the Social Work Department and then returned to the researcher. Participants were instructed by the cover letter not to write their names on the survey or envelope and were asked to insert the questionnaire into the white envelope and seal it before depositing it into the "drop box" or giving it to the contact person in their respective department. With respect to the expected sample size, a total of 34 professional caregivers participated.

**Instruments**

The survey covers seven general areas: (a) demographic information, (b) role in treating traumatized children and frequency of exposure, (c) professional caregivers' acute emotional impact, (d) professional caregivers' long-term emotional impact, (e) coping and utilization of support systems, (f) professional caregivers' perceived social support, (g) professional caregivers' reported symptomology. The completed survey packet is included in Appendix C.

The demographic section was aimed at assessing characteristics of the helping professionals such as sex, age, racial or ethnic background, marital status, number of children, occupation, and number of years in the occupation. Two qualitative questions were also included. These two questions inquired about the role of the professional caregiver in treating traumatized children, and how often they are exposed to such trauma.

**Impact of Event Scale**

Participants were asked to complete the Impact of Event Scale and indicate which of the statements were true for them during the last six months in which they were exposed to or treated children physically injured or killed by violence. The standard
instructions, as well as the wording of the statements on the IES were reworded to reflect
the targeted event(s) and/or experiences. The original directions for the Impact of Event
Scale instruct the participant to indicate how frequently each item was true for them
during the past seven days in response to a specific event. The original version of the
Impact of Event Scale can be found in Appendix D.

The Impact of Event Scale (IES), developed by Horowitz, Wilner, and Alvarez
(1979) was designed to measure the subjective distress and impact experienced as a result
of a specific event. The instrument was included in the survey in order to measure the
professional caregivers' current level of subjective distress related to the repeated exposure
of treating traumatized children. This 15 item scale consists of statements pertaining to
two categories of commonly reported stress responses: intrusion and avoidance. These
two subscales reflect the extent to which subjects thought about the event when they did
not want to and the extent to which they avoided reminders of the event. Each intrusion
and avoidance item is rated according to the frequency of occurrence: (a) "not at all",
(b) "rarely", (c) "sometimes", (d) "often", and are assigned score weights of 0, 1, 3, & 5
respectively. A sum of the ratings yield an intrusive score, an avoidance score, and a
combined or total score. The items on the IES are worded in such a way that they do not
represent a specific occurrence, but rather so they might be applied to the conscious
experiences of any specific life-event.

The instrument was initially piloted on 25 physical therapy students who had
recently begun dissection of a cadaver. Results indicated a test-retest reliability of .87 for
the total stress scores, .89 for the intrusion sub-scale, and .79 for the avoidance sub-scale
(Horowitz, et at., 1979). It was also found that the IES is a sensitive measure which is
able to reflect change over time.

Zilberg, Weiss, and Horowitz (1982) conducted a cross-validation study of the
Impact of Event Scale. In comparison to the original sub-sample used to determine the
IES content and scale properties, Zilberg et al., (1982) administered the IES to two
distinct groups of people who had experienced the death of a parent; one group consisted of 35 outpatients who sought treatment after the death of their parent, and the second group was composed of 37 field subject volunteers. Both groups were evaluated over time and were assessed at three points in time: (a) at entry into the study, (b) 4 months after termination of the study, and (c) 13 months after the event. Internal consistency of the two subscales (intrusion and avoidance) were examined across six separate subsets, defined by the dimensions of time of the assessment (a, b, or c) and the subject type (patient or field subject). Coefficients of internal consistency as designated by Chronbach's Alpha, were uniformly high across all six conditions, ranging from .79 to .92. Thus, the IES subscales possess the requisite psychometric properties in the realm of internal consistency reliability (Zilberg et al., 1982).

Acute-Emotional Impact Scale

and the Long-Term Emotional Impact Scale

The Acute Emotional Impact Scale and Long-Term Emotional Impact Scale were created by the researcher. This was done by taking two sections which were adapted from a semi-structured telephone survey developed by Kleespies, Smith, and Becker (1993). Kleespies, Smith, and Becker (1993) conducted a study in which fifty-four predoctoral interns in clinical psychology were asked a series of questions designed to identify the experience of a patient suicide or serious attempt during their training years.

The Acute Emotional Impact Scale was based on section of Kleespies et al. phone interview which asked participants to rate 14 reactions or feelings according to their impact during the two weeks after a patient's suicide attempt/ideation. The Acute-Emotional Impact Scale was used to assess the impact of specific reactions or feelings of the respondents in relation to their exposure to children injured by violence; and their subjective impact during the last six months. Participants were asked to rate several statements relating to their feelings and reactions experienced in the last six months. The feelings and reactions rated by the respondents included: shock, guilt, shame, disbelief,
feelings of incompetence, feelings of failure, anger, depression, self-blame, sadness, relief, fear, discouragement, and helplessness. The rating scale ranged from "0=no impact" to "6=extremely strong impact".

The Long-Term Emotional Impact Scale was developed by the researcher and based on a section from Kleespies et al. phone interview which asked participants to rate 10 items according to the long-term impact of their patient's suicide attempt/ideation on themselves and their clinical practice. Items were either re-worded or omitted from the original section in order to reflect the specific experiences of the targeted population. The Long-Term Emotional Impact Scale was created to measure the long-term impact of treating traumatized children. The scale included 8 items which represent both negative, positive, or neutral long-term effects of treating traumatized children. Participants were asked to rate a number of different reactions or feelings in relation to their exposure to traumatized children during the past six months on a 6-point scale ranging from "0=no impact" to "6=extremely strong impact". Such aspects included: perceived competence and personal effectiveness, increased feelings of anxiety, helplessness, and guilt, acceptance that children die as a result of violence, and increased sensitivity to children affected by violence.

Coping and Utilization of Support Systems

The section identified as Coping and Utilization of Support Systems was used to assess the respondents' use of their support systems. Participants were asked to rate the extent in which they received or sought support from several different groups of people such as: co-workers, supervisors, friends, family members, significant others, counseling, and crisis de-briefing teams. The rating scale ranged from "0=not at all" to "6=extremely frequent".

Social Support Behaviors Survey Form R-3

The Social Support Behaviors Survey Form R-3 (SSBS R-3) was developed by Hardy, Rosenfeld, Richman, and Manzo (1993, unpublished). Initially, the survey
originated from the practice model of the social support process advanced by Richman, Rosenfeld, and Hardy (1993). Richman et al. (1993) identified three broad types of social support which is communicated by support providers when they enact behaviors perceived by recipients as enhancing the recipients well-being: (a) tangible or material; (b) informational; and (c) emotional. Each of the 8 subscales or types of supportive behaviors within the instrument are representative of a broader category of social support. The instrument consists of 32 statements which reflect the content of eight subscales measure listening support, emotional support, emotional challenge, task appreciation, task challenge, reality confirmation, tangible assistance, and personal assistance. Participants were asked to rate the degree of satisfaction they feel with the help or support they receive using a 7-point scale ranging from "1=very unsatisfied" to "7=very satisfied". A score for each social support behavior is derived such that high scores indicate a higher degree of satisfaction with the people who provide the eight types of support.

The instrument was initially piloted on 150 male and female university students. Inter-factor correlations among the subscales ranged from a low of .07 to a high of .67. Cronbach coefficient alphas ranged from a high of .85 for reality confirmation to a low of .64 for tangible assistance.

Symptom Checklist 90-Revised

The SCL-90-Revised (SCL-90-R), developed by Derogatis (1977) measures a range of psychophysiological and psychological reactions which, depending on intensity, might be regarded as symptomatic of a particular condition such as somatic, anxiety, or phobic disorder (Moran & Britton, 1994). The instrument consists of 90 self-report items rated on a 5-point scale ranging from "0=not at all" to "4=extremely". Participants were asked to indicate how distressed they had been by each of the 90 symptoms during the last six months.

The original SCL-90-R quantifies psychopathology along nine symptom constructs or subscales: Somatization (SOM), Obsessive-Compulsive (O-C), Interpersonal Sensitivity
(I-S), Depression (DEP), Anxiety (ANX), Hostility (HOS), Phobic Anxiety (PHOB), Paranoid Ideation (PAR) and Psychoticism (PSY). In addition, there are three global indices which reflect overall severity of symptomology and psychological distress. The three global measures include the Global Severity Index (GSI), which averages the overall degree of severity for all symptoms; the Positive Symptoms Total (PST) score, which is the total number of positively endorsed symptoms; and the Positive Symptom Distress Index (PSDI), which measures the severity only of the positively endorsed items (Waysman, Mikulincer, Solomon, & Weisenberg, 1993).

The SCL-90-R is a widely used instrument which has proven to be both a reliable and valid measure. The SCL-90-R has established adequate concurrent validity and internal consistency for each of the nine subscales (Derogatis, Rickels, & Rock, 1976, Schwarzwald, Weisenberg, & Solomon, 1991; as cited in Waysman et al., 1993).

The SCL-90-R was used to describe what types of symptoms are experienced by professional caregivers who are exposed to traumatized children, the SCL-90-R was used as a means to identify the frequency with which symptoms were reported by the professional caregivers in this study. It was not used or scored in the standard way in which it was designed.
CHAPTER IV
RESULTS

The findings reported in this study are divided into two sections: descriptive profile of the participants and data analysis.

Descriptive Profile of the Participants

Table 1 provides a demographic profile of the participants. The sample consisted of 34 professional caregivers who worked in the emergency department or pediatric intensive care unit of a metropolitan hospital. Fifty percent of the sample was male and 50% was female with a mean age of 31 years from a range of 20-56 years (SD=10 years). With regard to race/ethnicity, 90.6% of the sample was Caucasian, 6.3% Hispanic, and 3.1% African-American. Fifty percent of the participants reported that they were married, 38.2% single, and 11.8% divorced. Over 52% of the professional caregivers reported having no children (Mean of 1.19, SD of 1.4 with a range of zero to four children). The sample represented five occupational groups consisting of 20.6% registered nurses who worked in the emergency department, 20.6% registered nurses who work in the Pediatrics Intensive Care Unit, 5.9% physicians, 17.6% social workers, and 35.3% emergency medical technicians. The average number of years in one’s occupation was 9.8 with a range of 1-33 years (SD=8.97). Participants also indicated to what extent they are exposed to or treat children physically injured or killed by violence. Of the 34 participants, 32.4% reported that they frequently (daily or weekly) are exposed to such trauma, 41.2% fell into the moderate range (1 to 4 times per month), and 20.6% rarely confronted children traumatized by violence. Two hundred surveys were distributed and only 34 fully completed surveys were used in the study, providing a 17% response rate.
Table 1
Descriptive Profile for Total Sample

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>50.0%</td>
</tr>
<tr>
<td>Female</td>
<td>50.0%</td>
</tr>
<tr>
<td>Racial/Ethnic Background</td>
<td></td>
</tr>
<tr>
<td>Caucasian</td>
<td>90.6%</td>
</tr>
<tr>
<td>African-American</td>
<td>3.1%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>6.3%</td>
</tr>
<tr>
<td>Marital Status</td>
<td></td>
</tr>
<tr>
<td>Single</td>
<td>38.2%</td>
</tr>
<tr>
<td>Married</td>
<td>50.0%</td>
</tr>
<tr>
<td>Divorced</td>
<td>11.8%</td>
</tr>
<tr>
<td>Number of Children</td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>52.9%</td>
</tr>
<tr>
<td>1</td>
<td>11.8%</td>
</tr>
<tr>
<td>2</td>
<td>14.7%</td>
</tr>
<tr>
<td>3</td>
<td>11.8%</td>
</tr>
<tr>
<td>4</td>
<td>8.8%</td>
</tr>
<tr>
<td>Occupation</td>
<td></td>
</tr>
<tr>
<td>RN-Emergency Department</td>
<td>20.6%</td>
</tr>
<tr>
<td>RN-Pediatrics Intensive Care Unit</td>
<td>20.6%</td>
</tr>
<tr>
<td>Physician</td>
<td>5.9%</td>
</tr>
<tr>
<td>Social Worker</td>
<td>17.6%</td>
</tr>
<tr>
<td>Emergency Medical Technician</td>
<td>35.3%</td>
</tr>
<tr>
<td>Extent of Exposure to Children Traumatized by Violence</td>
<td></td>
</tr>
<tr>
<td>Frequently (daily or weekly)</td>
<td>32.4%</td>
</tr>
<tr>
<td>Moderately (1 to 4 times per week)</td>
<td>41.2%</td>
</tr>
<tr>
<td>Rarely (those indicating rarely or hardly at all)</td>
<td>20.6%</td>
</tr>
</tbody>
</table>
A reliability analysis was conducted for each of the instruments used with this sample. The overall alpha coefficients are reported in Table 2. Reliability coefficients generated for each of the instruments yielded high alphas and indicate good internal consistency. Table 3 depicts the means, standard deviations, and range of responses for all measures utilized in the inferential statistical analysis of the data.

Table 2
Reliability Analysis

<table>
<thead>
<tr>
<th>Test</th>
<th>Total Item</th>
<th>Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Impact of Event Scale</td>
<td>15</td>
<td>.85</td>
</tr>
<tr>
<td>Intrusion Subscale</td>
<td>7</td>
<td>.88</td>
</tr>
<tr>
<td>Avoidance Subscale</td>
<td>8</td>
<td>.55</td>
</tr>
<tr>
<td>Acute Emotional Impact Scale</td>
<td>14</td>
<td>.91</td>
</tr>
<tr>
<td>Long-Term Emotional Impact Scale</td>
<td>8</td>
<td>.86</td>
</tr>
<tr>
<td>Social Support Behaviors Survey</td>
<td>33</td>
<td>.96</td>
</tr>
<tr>
<td>Form R-3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 3
Mean Scores, Standard Deviations, and Scale Ranges for Dependent Measures

<table>
<thead>
<tr>
<th>Measure</th>
<th>M</th>
<th>SD</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Impact of Event Scale (total score)</td>
<td>1.28</td>
<td>.79</td>
<td>1 to 4</td>
</tr>
<tr>
<td>Intrusion Subscale</td>
<td>1.35</td>
<td>1.04</td>
<td>1 to 4</td>
</tr>
<tr>
<td>Avoidance Subscale</td>
<td>1.25</td>
<td>.71</td>
<td>1 to 4</td>
</tr>
<tr>
<td>Acute Emotional Impact Scale (total score)</td>
<td>1.82</td>
<td>1.18</td>
<td>0 to 6</td>
</tr>
<tr>
<td>Long-Term Emotional Impact Scale (total score)</td>
<td>1.90</td>
<td>1.31</td>
<td>0 to 6</td>
</tr>
<tr>
<td>Social Support Behaviors Survey (total score)</td>
<td>5.21</td>
<td>.97</td>
<td>1 to 7</td>
</tr>
</tbody>
</table>
Data Analysis

Research Question 1

Are There Significant Differences Among Occupational Groups?

Several interesting findings emerged from the data analysis in regards to differences among the five occupational groups represented in the sample. A one-way analysis of variance (ANOVA) procedure was conducted comparing differences between occupational groups (Registered Nurses-Emergency Department (RN-ED), Registered Nurses-Pediatrics Intensive Care Unit (RN-PEDS), Physicians (MD), Social Workers (SW), Emergency Medical Technicians (EMT) across scores on all scales. Each of the dependent variables can be defined as follows: current degree of subjective distress (TOTIES=total score on the Impact of Event Scale); extent to which subjects thought about an event when they did not want to (Intrusion); extent to which they avoided reminders of the event (Avoidance); acute emotional impact (AEI); long-term emotional impact (LTEI); perceived satisfaction of social support (SSBS). Table 4 depicts F ratios and probability values for the ANOVA conducted on experimental variables. There were no significant differences found between occupational groups in regards to avoidance, acute emotional impact, long-term emotional impact, or perceived satisfaction with social support. Both occupational groups of registered nurses (RN-ED Mean=1.69 and RN-PEDS Mean=2.29) were found to be significantly different from the emergency medical technicians (EMT) (F=5.61; p<.05) on scores obtained from the intrusion subscale. On the total scores received from the Impact of Event Scale, registered nurses from the pediatrics intensive care unit (Mean=1.92) significantly differed from the emergency medical technicians (Mean=.71) (F=3.89, p<.05). The significant differences found between both RN groups and EMT's on scores obtained from the intrusion subscale, and between RN-PEDS and EMT's on IES total scores indicate that registered nurses experience a greater degree of intrusive thoughts and feelings and overall subjective
distress in response to treating traumatized children than do emergency medical technicians.

Table 4

One-Way Analysis of Variance (ANOVA): Occupational Group Differences

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intrusion</td>
<td>5.61</td>
<td>&lt;.05</td>
</tr>
<tr>
<td>TOTIES</td>
<td>3.89</td>
<td>&lt;.05</td>
</tr>
</tbody>
</table>

Research Question 2

From Where do Most Professional Caregivers Receive Their Support?

In reviewing the frequency with which these professional caregivers utilize their sources of support, four categories of potential support emerged from the data: support from co-workers, friends, significant others, and family. The percentage of participants reporting frequent use of support ('somewhat frequent' to 'extremely frequent') were as follows: support from co-workers (70.5%), friends (70.5%), significant others (67.6%), and family (55.9%). Table 5 identifies the means and standard deviations of seven sources of support which subjects rated according to the frequency with which they utilize a specific source of support (Range=0 to 6). Fifty nine percent of the sample indicated that they do not seek or receive support from their supervisors. Ninety four percent indicated that they do not utilize counseling, while 97% reported that they do not receive support via crisis de-briefing team. These results suggest that while participants receive support from those closest to them, this sample did not report utilizing support within their professional network.
Table 5

Sources and Utilization of Support

<table>
<thead>
<tr>
<th>Source of Support</th>
<th>**Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Co-workers</td>
<td>3.0</td>
<td>2.2</td>
</tr>
<tr>
<td>Supervisors</td>
<td>1.2</td>
<td>1.8</td>
</tr>
<tr>
<td>Friends</td>
<td>2.6</td>
<td>1.8</td>
</tr>
<tr>
<td>Family members</td>
<td>2.6</td>
<td>2.3</td>
</tr>
<tr>
<td>Significant others</td>
<td>2.9</td>
<td>2.2</td>
</tr>
<tr>
<td>Counseling</td>
<td>.21</td>
<td>.85</td>
</tr>
<tr>
<td>Crisis De-briefing</td>
<td>.03</td>
<td>.17</td>
</tr>
</tbody>
</table>

**Range=0 to 6

Research Question 3

Are There Significant Differences Across Levels of Intrusion, Avoidance, Subjective Distress, Acute or Long-Term Emotional Impact in Regards to the Extent to Which Professional Caregivers are Exposed to Children Traumatized by Violence?

A one-way analysis of variance procedure was performed to examine whether differences existed among those participants who are either frequently, moderately, or rarely exposed to children traumatized by violence (EXTENT) in regards to intrusion, avoidance, subjective distress (TOTIES), acute emotional impact (AEI), and long-term emotional impact (LTEI). Table 6 depicts the F ratios and probability values for the ANOVA conducted on experimental variables. There were no significant differences found between the three groups (frequently, moderately, rarely) in regards to acute or long-term emotional impact. However, significant effects were found for those participants who indicated frequent exposure (daily or weekly) (Mean=2.25) to children traumatized by violence in regards to intrusion (F=10.62; p<.05), avoidance (F=5.04; p<.05), and subjective distress (TOTIES) (F=10.73; p<.05). These results suggest that
the greater the frequency of exposure to traumatized children, the more likely one will experience greater subjective distress with episodes of intrusive thoughts and feelings and periods of avoidance.

Research Question 4

What Types of Symptoms are Most Frequently Reported by Professional Caregivers who are Exposed to or Treat Children Traumatized by Violence?

An examination of the frequency with which participants rated their subjective distress in relation to 90 items depicting physical and/or psychological symptoms revealed three symptoms which were experienced by more than 50% of the sample. Table 7 lists the three most frequently reported symptoms, means, standard deviations, and percentage of participants reporting symptoms 'a little bit' to 'extremely'. Fifty percent of the sample reported feeling low in energy or slowed down. Feeling critical of others was reported by 61.8% of the participants, while 55.8% reported feeling easily annoyed or irritated.

Table 6

One-Way Analysis of Variance (ANOVA): Frequency of Exposure Group Differences

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intrusion</td>
<td>10.62</td>
<td>&lt;.05</td>
</tr>
<tr>
<td>Avoidance</td>
<td>5.03</td>
<td>&lt;.05</td>
</tr>
<tr>
<td>TOTIES</td>
<td>10.72</td>
<td>&lt;.05</td>
</tr>
</tbody>
</table>
Table 7
Symptoms Most Frequently Reported

<table>
<thead>
<tr>
<th>Symptom</th>
<th>**Mean</th>
<th>Standard Deviation</th>
<th>*Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feeling critical of others.</td>
<td>1.29</td>
<td>1.16</td>
<td>61.8%</td>
</tr>
<tr>
<td>Feeling easily annoyed or irritated.</td>
<td>1.58</td>
<td>1.24</td>
<td>55.8%</td>
</tr>
<tr>
<td>Feeling low in energy or slowed down.</td>
<td>1.46</td>
<td>1.45</td>
<td>50.0%</td>
</tr>
</tbody>
</table>

*Percentage of subjects reporting symptoms 'a little bit' to 'extremely'.
**Range=0 to 4

Research Question 5
What is the Relation between Perceived Social Support and Long-Term Emotional Impact?

Correlational analyses were conducted across all measures (Intrusion, Avoidance, total scores on the Impact of Event Scale (TOTIES), total scores on the Acute Emotional Impact Scale (TOTAIEI), total scores on the Long-Term Emotional Impact Scale (TOTLTEI), and total scores on the Social Support Behaviors Survey Form R-3 (TOTSSBS) utilized in the study. Pearson product moment correlations are reported in Table 8. Of interest was the relation between perceived social support (total scores on the SSBS) and long-term emotional impact (total scores on the LTEI). It was hypothesized that those participants reporting greater overall satisfaction with one's perceived social support would be less likely to exhibit longer term emotional effects. However there was no evidence to support a relationship between these two variables ($r=0.01; p<0.05$)

Research Question 6
What is the Relation between Length of Time in One's Occupation and Long-Term Effects of Treating Children Traumatized by Violence?
Correlational analyses were conducted with all measures (Intrusion, Avoidance, TOTIES, TOTAEI, TOTLTEI, SSBS) in relation to years in one's occupation number of years in one's occupation (YRSOCC) (see Table 8). It was hypothesized that greater time in one's occupation would lead to a greater likelihood of experiencing long-term effects associated with working with children traumatized by violence. Total scores on the Long-Term Emotional Impact Scale were not found to be significantly correlated in the suggested direction ($r=.05; p<.05$).

Other Relevant Data Related to Reported Stress of Participants

Several interesting findings emerged in reviewing the frequency with which these professional caregivers reported experiencing an emotional impact both in the acute and long-term phases of working with children traumatized by violence. Participants responded to a range of emotional reactions reflective of the acute emotional impact of their work. Participants reported experiencing feelings of sadness, anger, disbelief, shock, discouragement, and helplessness in their work with children traumatized by violence, as indicated by results obtained by the frequency analysis conducted for the Acute Emotional Impact Scale. Table 9 depicts the emotional reactions, means, standard deviation and percentage of subjects reporting a significantly strong acute emotional response. In regards to long-term emotional impact, a majority of the subjects reported minimal long-term effects in their work with child victims of violence. However, 82.3% of the participants reported an increased sensitivity to children affected by violence.

Several other interesting findings were revealed in the correlational analysis represented in Table 8. Those measures found to be significantly correlated with one another at the .05 alpha level include: Intrusion and TOTAEI ($r=.43; p<.05$) and Avoidance and TOTAEI ($r=.47; p<.05$). Those found to be significantly correlated with one another at the .01 alpha level include: Intrusion and TOTLTEI ($r=.58; p<.01$), Avoidance and TOTLTEI ($r=.45; p<.01$), TOTIES and TOTAEI ($r=.50; p<.01$), TOTIES and TOTLTEI ($r=.59; p<.01$), TOTAEI and TOTLTEI ($r=.55; p<.01$). These results are
consistent with what was predicted, as they indicate positive correlations between subjective distress and perceived emotional impact.
### Table 8

**Significant Pearson Product Moment Correlation**

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Intrusion</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Avoidance</td>
<td>.61**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. TOTIES</td>
<td>.93**</td>
<td>.84**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. TOTAEI</td>
<td>.43*</td>
<td>.47*</td>
<td>.50**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. TOTLTEI</td>
<td>.58**</td>
<td>.45**</td>
<td>.59**</td>
<td>.55**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. TOTSSBS</td>
<td>-.02</td>
<td>-.25</td>
<td>-.13</td>
<td>-.12</td>
<td>-.01</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. YRSOCC</td>
<td>.10</td>
<td>.15</td>
<td>.12</td>
<td>-.00</td>
<td>.05</td>
<td>.25</td>
<td></td>
</tr>
</tbody>
</table>

*p < .05, **p < .01

TOTIES = Total score for Impact of Event Scale
TOTAEI = Total score for Acute Emotional Impact Scale
TOTLTEI = Total score for Long-Term Emotional Impact Scale
TOTSSBS = Total score for Social Support Behaviors Survey Form R-3
YRSOCC = Years in occupation
Table 9

**Acute Emotional Impact**

<table>
<thead>
<tr>
<th>Reaction</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>*Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sadness</td>
<td>3.56</td>
<td>1.96</td>
<td>73.5%</td>
</tr>
<tr>
<td>Anger</td>
<td>3.88</td>
<td>2.14</td>
<td>73.5%</td>
</tr>
<tr>
<td>Disbelief</td>
<td>3.12</td>
<td>2.01</td>
<td>61.7%</td>
</tr>
<tr>
<td>Shock</td>
<td>2.59</td>
<td>1.87</td>
<td>55.9%</td>
</tr>
<tr>
<td>Discouragement</td>
<td>2.68</td>
<td>2.13</td>
<td>52.9%</td>
</tr>
<tr>
<td>Helplessness</td>
<td>2.06</td>
<td>2.09</td>
<td>49.9%</td>
</tr>
<tr>
<td>Fear</td>
<td>1.32</td>
<td>1.55</td>
<td>23.5%</td>
</tr>
<tr>
<td>Depression</td>
<td>1.62</td>
<td>1.78</td>
<td>20.6%</td>
</tr>
<tr>
<td>Feelings of Incompetence</td>
<td>1.24</td>
<td>1.92</td>
<td>20.6%</td>
</tr>
<tr>
<td>Guilt</td>
<td>.62</td>
<td>1.16</td>
<td>11.8%</td>
</tr>
<tr>
<td>Feelings of Failure</td>
<td>.91</td>
<td>1.49</td>
<td>11.7%</td>
</tr>
<tr>
<td>Shame</td>
<td>.52</td>
<td>1.09</td>
<td>8.8%</td>
</tr>
<tr>
<td>Relief</td>
<td>.44</td>
<td>.96</td>
<td>5.8%</td>
</tr>
<tr>
<td>Self-blame</td>
<td>.35</td>
<td>.73</td>
<td>2.9%</td>
</tr>
</tbody>
</table>

*Percentage of subjects reporting reactions 'moderately' to 'extremely strong'."
CHAPTER V
DISCUSSION

This study attempted to explore the impact on professional caregivers in treating children traumatized by violence. More specifically, this study examined the differences among occupational groups and the extent of exposure to child victims of violence in regards to subjective distress, acute and long-term emotional effects, perceived social support, and symptomology of professional caregivers who worked in the Emergency Department or Pediatrics Intensive Care Unit of a metropolitan hospital.

Relationship of the Data to the Research Questions

Question 1 sought to examine whether occupational groups (Registered Nurses-Emergency Department, Registered Nurses-Pediatrics Intensive Care Unit, Physicians, Social Workers, and Emergency Medical Technicians) differed in regards to reported overall distress including extent of intrusion and avoidance of thoughts and feelings, acute and long-term emotional impact, and perceived social support. Results from the analysis of variance (ANOVA) indicated that both groups of registered nurses (RN-ED and RN-PED) scored significantly higher than emergency medical technicians on the intrusion subscale of the Impact of Event Scale. Additionally, registered nurses from the pediatric intensive care unit obtained higher total scores on the Impact of Event Scale than did emergency medical technicians. These results suggest that registered nurses experience a greater degree of intrusive thoughts and feelings and overall subjective distress in response to treating children traumatized by violence than do emergency medical technicians.

Several possible explanations may account for the differences between these occupational groups. In examining these differences, it is important to consider the nature of their respective occupational roles as well as the characteristics of the sample of participants.
within the occupational groups. The EMT's participating in the study were enrolled in an introductory class for emergency medical technicians. The average number of years as an EMT was 2 years, while the average years as an RN in the emergency department was 13 years and 9 years for the registered nurses in the pediatrics intensive care unit. A majority of the EMT's reported that they were "rarely" exposed to children traumatized by violence, whereas, registered nurses on average, reported frequent to moderate exposure to child victims of violence. In addition to the fact that this sample of EMT's were relatively new to their field, EMT's do not generally perform advanced medical procedures and are therefore, less likely to deal with situations which require extensive medical intervention. The interaction that an EMT has with a patient is also very time limited in comparison to the more longer-term care that a patient receives in the hospital. This is not to say, however, that emergency medical technicians do not cope with severe trauma and experience emotional distress as a result of their work. In speaking with EMT's on this matter anecdotally, some reported that the time is not so much a factor, as is the extent of their own personal involvement with a patient. As one EMT noted, if one is involved in trying to save a child's life, there is a greater likelihood to experience an emotional response and personal interest in the outcome. Also in my interactions with EMT's, I found that for EMT's there is more "down-time" or gaps in-between emergency calls, thus allowing time for them to deal with their feelings and process their traumatic experiences with others. The findings of this study indicate that these EMT's may, as a result of their level of experience and occupational role, have had less exposure to children traumatized by violence. These reasons may also serve to explain why EMT's scored lowest on measures of intrusion, avoidance, total subjective distress, acute emotional impact and long-term emotional impact.

The higher levels of intrusion reported for both groups of registered nurses, and greater levels of subjective distress experienced by the RN's pediatrics intensive care unit may also be accounted for by their occupational role. The duration with which registered
nurses spend treating a child may contribute to the extent to which they experience intrusive thoughts about the child or the violent nature and/or circumstances of the trauma. For pediatric nurses in the intensive care unit, more longer-term care is involved, and thus there is a greater likelihood for a relationship to develop between nurse and the child patient and even the child's family. Consequently, the intense level of personal involvement which often accompanies work with traumatized children may result in experiencing greater distress, especially in the case that a child dies. In the emergency room, registered nurses are moving from trauma to trauma, and as a result may experience greater intrusive thoughts and feelings from the cummulation of traumatic experiences coupled with the intense nature of treating a traumatized child. Those occupational groups which were not found to be significantly different from the other occupational groups included physicians and social workers. In considering the possibilities as to why there were not significant differences found for physicians and social workers in regards to reported subjective distress, intrusion and avoidance of thoughts and feelings, and acute and long-term emotional impact, one might speculate that these participants have developed effective coping mechanisms which serve to mitigate their subjective distress and emotional impact. Social Workers may be more cognizant of the importance to process traumatic experiences with victim clients. The physicians participating in the study reported their role in treating traumatized children as one in which they supervised the medical staff. As a result, these physicians may be less focused on the traumatized child and more focused on the medical interventions of the staff, therefore minimizing their potential to experience distress and/or an emotional impact in relation to treating a traumatized child. "Although professional relationships with traumatized children may vary considerably from the rescue personnel's rather short interactions with the children to the more extended contact hospital staff experience, the potential for intense emotional reactions as a consequence of the professional relationship with injured children is considerable" (Dyregrov & Mitchell, 1992, p. 6).
The results from this analysis further suggest that participants experience cognitive
difficulties in the form of intrusive thoughts and feelings and use deliberate cognitive
efforts to keep from thinking about an event or experience. The cognitive processes and
coping strategies identified in this study are consistent with other research findings
(McCammon, Durham, Allison, & Williamson, 1988; Janoff-Bulman, 1989; Genest,
Levine, Ramsden, & Swanson, 1990; Dyregrov & Mitchell, 1992; Koopman, Classen,
Cardena, & Spiegel, 1995).

Koopman, Classen, Cardena, & Spiegel (1995) point out that while intrusive
thoughts and feelings and avoidance strategies may serve a useful function in helping
people temporarily cope with overwhelming feelings, these strategies may prove to be
maladaptive. While this notion is supported in the literature on stress and coping to
traumatic events, findings from this study show that the majority of participants reported
minimal long-term effects in their work with child victims of violence. The only significant
long-term effect reported by 82% of sample was an increased sensitivity to children
affected by violence. The failure to find long-term effects with this particular sample may
suggest that the use of avoidance strategies in addition to utilizing support from others
may serve as a buffer against the deleterious effects of working with traumatized persons,
and may in fact enhance psychological adaptation in the long run.

The acute-emotional reactions reported by the subjects in this study are consistent
and nearly identical with the findings of Dyregrov and Mitchell (1992) who identified the
reactions of rescue and health care professionals responding to a bus disaster which killed
12 children. The participants in this study reported experiencing acute emotional distress
in the form of sadness, anger, disbelief, shock, discouragement, and helplessness in their
work with traumatized children. Children represent the beginning of life, vitality, and
innocence, and is not uncommon for professional caregivers to experience feelings such as
sadness, anger, and helplessness in their fight to save a traumatized child.
Question 2 assessed the frequency with which professional caregivers sought and receive support from co-workers, supervisors, friends, significant others, family members, counseling, and crisis de-briefing. Participants most frequently reported seeking and receiving support from co-workers. Support from significant others, friends, and family members were also perceived positively. Although the participants reported 'moderately frequent' utilization of non-professional support, professional coping strategies such as support from supervisors, counseling, or crisis de-briefing were not reported to be significant sources of support. These findings may suggest that for these professional caregivers, non-professional/organizational sources of support (such as support from significant others, friends, family members) and support received from co-workers may offer them sufficient support which is consistent with their needs. The findings do not indicate whether or not formal methods of organizational support are provided or utilized by the professional staff.

Question 3 pertained to the influence of exposure to traumatized children among professional caregivers' reported levels of subjective distress, intrusion, avoidance, acute and long-term emotional impact. Results from an analysis of variance (ANOVA) revealed that participants reporting frequent exposure to treating child victims of violence scored significantly higher on measures of intrusion, avoidance, and overall subjective distress, than participants indicating moderate or rare exposure to such trauma. Such findings support the notion that the more frequent one is exposed to treating children victimized by violence, the greater potential there is to experience distress, intrusive thoughts and feelings, and periods of avoidance. No significant differences were found between participants indicating either frequent, moderate, or rare exposure to child victims of violence, in regards to acute or long-term emotional effects. A possible explanation which may account for this finding may be that the groups representing 'EXTENT' (frequent, moderate, and rarely) were assigned by the researcher and not qualitatively or conceptually defined as it pertains to the actual nature of the extent to which these
caregivers are exposed. Nevertheless, it is important to remember that when professional caregivers are exposed to or treat traumatized children, there is a potential for the professional helper to experience an intense emotional response which may increase the helper's vulnerability to stress and other physical and/or psychological symptoms.

Question 4 was aimed at identifying those symptoms which were most frequently reported by the sample as well as the degree to which those particular symptoms bothered or distressed the professional caregivers. More than 50% of the sample reported 'a little bit' to 'extreme' distress or problems with feeling low in energy or slowed down, feeling critical of others, and feeling easily annoyed or irritated. In examining the symptoms which were reported by the majority of the professional caregivers in this sample, it is important to consider the nature of their work, as well as their organizational environment. Generally speaking emergency and hospital personnel work extremely long shifts which may be a contributing factor to the reported symptoms. A second contributing factor may be the environment in which they work which is generally fast-paced and demanding of their energy. Therefore, it is likely that long and strenuous hours on the job which require the professional helpers to be constantly ready and able to respond to a multitude of emergency situations may contribute to participants feeling low in energy or slowed down, critical of others, and easily annoyed or irritated.

Question 5 and 6 were aimed at assessing long-term emotional impact and its' relation to two variables: perceived social support and years in one's occupation. While it was expected that those participants reporting greater overall satisfaction with one's perceived social support would be less likely to exhibit longer-term emotional effects, there was no significant correlation found between total scores on the Social Support Behavior Survey R-3 and total scores obtained on the long-term Emotional Impact Scale. It was also hypothesized that greater time in one's occupation would lead to a greater likelihood of experiencing long-term emotional effects. Again, there was no significant correlation found between these two variables. This particular finding suggests that in
regards to long-term emotional impact, time spent in one's occupation does not appear to be an influencing factor. It was assumed that increased years in emergency or health care work would increase the extent to which one is exposed to traumatizing events, thus creating the potential for experiencing long-term emotional effects. It is possible that a more meaningful relationship would have emerged from the analysis if extent of exposure was considered. However, it is also important to consider that perhaps as a result of the professional caregiver's experience in treating traumatized persons over time, he or she may develop effective means of coping and responding to traumatic situations, thus minimizing any possible long-term effects. Another possible influence to consider in relation to long-term emotional effects is the degree of preparation or training one has in regards to responding to a variety of traumatizing events.

Several other interesting findings emerged from the correlational analysis. Results indicated strong correlations between intrusion and acute emotional impact ($r=.43; p<.05$), avoidance and acute emotional impact ($r=.47; p<.05$), and between overall subjective distress (TOTIES) and acute emotional impact ($r=.50; p<.01$). These three particular findings have several important implications. First, these finding suggest that the intrusion of thoughts and feelings, as well as the active avoidance from thinking about a particular event may most likely be apparent in the acute phase of a stressful or traumatic event, such as treating a victimized child. Secondly, the intense emotional distress which may be occurring in the acute phase, coupled with the defense mechanism of suppressing one's emotions and avoiding distressing thoughts may prevent the caregiver from effectively processing and integrating the event into their basic assumptions about themselves and the world.

The correlational analysis also produced a high correlation between acute emotional impact and long-term emotional impact ($r=.55; p<.01$). Koopman, Classen, Cardena, and Speigel (1995) attempted to explain the possible link between Acute Stress Disorder and Post Traumatic Stress Disorder. They proposed that the failure to integrate
and work through the feelings surrounding a traumatizing experience in the acute phase may increase the risk of developing post traumatic stress symptoms. Koopman et al., (1995) further suggested that the "dissociation" or psychological distancing (avoidance) may play a major role during Acute Stress Disorder in creating the conditions for later manifestation of the symptoms of Post Traumatic Stress Disorder.

Results also indicated a high correlation between intrusion and long-term emotional impact (r=.58; p<.01), and between avoidance and long-term emotional impact (r=.45; p<.05). Total scores obtained form the Impact of Event Scale were significantly and positively correlated with total scores from the Long-Term Emotional Impact Scale (r=.59; p<.01). These findings suggest that professional caregivers are vulnerable to both short and long-term emotional distress.

Limitations of the Present Study

The results of the present study may be limited by several factors. First, the relatively small sample size limits the generalizability of the results. In addition, since the sample population was drawn from one metropolitan hospital, it may not accurately represent the entire population of professional caregivers especially those who work in hospitals outside of an urban environment.

Secondly, the rate of completion was considerably low. Of the 200 surveys which were distributed to mailboxes and individuals, only 34 of the surveys were used in this study. Some of the questionnaires were not fully completed, particularly the SCL-90-R which was the last instrument in the survey. The low return rate (17%) as well as the lack of completion may have been due to the length of the survey which discouraged people from participating in the study. Some of the professional caregivers reported that the survey was too long. Surveys were distributed to caregivers either in their mailboxes or they were personally asked to full out a survey during their shift. This may have also been a contributing factor due to the fact that they could not finish the survey in its entirety while they were working. Yet another possible explanation is one that was proposed by
Myerson (1990) (as cited in Moran & Britton, 1994, p. 583), who argued that missing information may be more likely when such responses are socially undesirable.

**Professional Implications**

The implications for the present study's findings are important for professional caregivers and the organizations in which they work. There is no doubt that professional caregivers in the face of a traumatic event display remarkable resilience. Nevertheless, professional caregivers are human beings who are not immune to the painful images, thoughts, and feelings associated with exposure to traumatic situations, especially those involving children. The findings in this study highlight how helpers use emotional distancing and activity to keep from being overwhelmed by the emotional consequences of a situation involving a traumatized child.

Work with traumatized children requires specific coping mechanisms because it stirs up significant thoughts and feelings. It is important for the caregiver to process, both alone and with others, the reactions elicited by this type of work and to understand that one must acknowledge, express, and work through traumatic experiences if one is to prevent or ameliorate some of the damaging effects of this work. Further, caregivers must also be aware of any continuing impact of their own traumatic experiences or prior losses and how to manage them in order to ensure healthy personal and professional functioning.

The cumulation of traumatic or stressful experiences, maladaptive coping strategies, and a perceived lack of social support, may contribute to the depletion of a helpers' emotional resources, thus requiring more formal methods of social support. Support programs, training, and the use of critical incident stress de-briefing have been identified as effective strategies in fostering the well-being of individuals and contributing to an organizations' overall health and productivity. Professional caregivers who have the ability to actively share stories, impressions, and reactions through meetings and conversations with colleagues and others, may be able to better manage the after-effects of trauma work, and thus reduce the potential for long-term psychological effects. Social
support is a communication process, and in order for there to be an exchange of support, both the individual and the organization must be aware of its needs, so that potential sources and types of support can be identified and prevention and intervention strategies be implemented.

An additional consideration of this study is the fact that for several of the professional helpers who participated in this study, dealing with casualties due to violence is a daily event. It may be necessary to evaluate the need for a specific protocol to address the issue of chronic violence, its effects on individuals, communities, and society as a whole. Several researchers and practitioners have identified programs and interventions necessary to insure the well-being of a helper who is confronted with the stress associated with a traumatic event. Such practices include: organizational commitment, training, critical incident stress debriefing, organizational support services, and community support (Sewell, 1993). These same mechanisms offer a starting point for effectively confronting the stress brought on by repeated exposure to traumatized children (or other individuals). The first step in confronting the stress brought on by a confrontation with a traumatized child, begins with a recognition by the organization's administration that it has a responsibility to limit and manage such stress. With that recognition should follow the acceptance of responsibility and a commitment to actively deal with the issues. This commitment implies the creation of a supportive organizational climate, and the development and implementation of support programs and training (Sewell, 1993).

Several of the findings of this study highlight the need for greater understanding of the unique and complex stressors facing professional caregivers, as well as the diversity of reactions and psychological consequences which accompany such work. Understanding the emotional and cognitive processes which occur in response to a traumatic event, allows for the development and implementation of interventions which may serve to mitigate the caregivers' acute distress and further prevent the development of longer-term difficulties. The identification of the unique stressors facing professional caregivers allows
for the creation of organizational practices and the development of specific programs which can prepare the individual caregiver to more effectively confront the stress associated with their work, specifically with traumatized children. Stress management and coping skills which are acquired through experience or developed through education would enhance one's ability to successfully manage such stress, minimizes the deleterious and cumulative effects, and maximizes the positive experiences of their work.

The nature of my position as an intern in the Social Work Department allowed me to observe and interact with the staff in the emergency department and pediatrics intensive care unit, thus allowing me to gain a great deal of knowledge and insight into the experiences of the professional caregivers which could not be obtained from the survey. In response to the study, while many of the professional caregivers indicated strong feelings in response to treating a child victimized by child abuse or gang violence. Several explained that dealing with injured children in general, whether it's a child overcome by a fatal brain tumor or a child victimized by violence, elicits strong emotional reactions, and raises existential questions about one's own life and loved ones. It should also be noted that the responses reported by the professional caregivers in this study are probably not restricted to situations involving children, but may be applicable to other extremely stressful situations. Nevertheless, the findings in this study confirm that work with children traumatized elicits strong emotional responses even in the most experienced professional helpers.

**Suggestions for Future Research**

Further research in this area is needed in order to investigate the unique stressors which confront professional caregivers who work in settings where cumulative trauma is frequent. In addition to examining the effects of cumulative trauma, research must continue to look at the complex dynamics and additional stress that confronts the professional caregiver who treat traumatized children.
I received valuable information from my interactions with staff members in the emergency department and pediatrics intensive care unit, as staff members shared their personal stories and the particular experiences or incidents which had a considerable impact on their lives both professionally and personally. These anecdotal accounts were crucial in enhancing my understanding of the unique and complex challenges facing professional caregivers on a daily basis. However, the essence of their experiences can not be captured quantitatively from a scale of measurement. Therefore, it is suggested that future research in this area include a research design which incorporates both quantitative and qualitative methods. In addition, while there are certainly a number of measures which seek to assess subjective stress associated with a particular traumatic event, it was difficult to find an instrument which sought to examine the subjective stress, coping mechanisms, or effects associated with repeated exposure to trauma which is characteristic in emergency situations and settings. Therefore, an assessment tool is needed which can examine the cumulative effects of trauma on emergency personnel and health care providers, and is sensitive to the complex interaction of personality, social, environmental, and organizational factors and the relation to traumatic stress. There is also a need to further develop and refine measures of acute and long-term emotional effects of trauma in order to help identify the symptoms which may be causing distress. Furthermore, there is a need to be able to identify those individuals' manifesting acute or long-term stress reactions, so that appropriate interventions and services can be provided to enhance the short and long-term functioning of professional caregivers who are exposed to and treat traumatized persons.

The results from this study also indicate a need to improve our understanding of the psychological impact of traumatic experiences, on early reactions and the relationship to more long-term effects. In addition, to considering the degree of exposure one has to traumatic events and the accompanying reactions, it may also be helpful to consider the intensity of response. Examining individual differences may also be helpful in furthering
our understanding of professional caregivers' responses to cumulative trauma. For example, those individuals who have unresolved past traumatic experiences of their own may most likely need particular forms of help prior to and after a traumatic event which is salient to the caregiver's own past traumatic experience.

In the last decade, there has been an increasing focus on the effects of traumatic events on the other "secondary victims", or professional helpers who intervene and respond to a crisis or traumatic event. However, most of these studies have been the result of an agreed trauma-inducing occasion, frequently a large-scale disaster or crisis which is a highly public event. The aim of this study was to gain an understanding of the experiences of professional caregivers who are repeatedly exposed to trauma, specifically children traumatized by violence. The instruments used in this study have been used similarly in other studies which seek to examine the psychological effects of a traumatic event or experience. However, the results of this study highlight the need and importance to recognize the stress responses, coping strategies, short and long-term effects which confront the professional helper who is repeatedly exposed to traumatic situations.

Clearly, this is a population which has been overlooked in the area of traumatic stress. Continued research efforts are needed to examine the psychological effects, coping strategies, social support, organizational response, and interventions which are associated with professional caregivers who are repeatedly exposed to traumatized individuals. There is no doubt that the information provided here needs further study before firm conclusions can be made. It is hoped that the reported observations will prompt more formal research in this newly developing field of research.
APPENDIX A

LETTERS OF PERMISSION
October 31, 1995

Heather Carlson
3928 North Pine Grove
Apartment 2E
Chicago, Illinois 60613

Heather,

Nice speaking with you. I hope the enclosed items are useful for your project. I believe an adaptation of the cancer-patient form of the SSS will provide you with the most important data.

The disk, from my Mac, has three files in WORD for WINDOWS 2.0: the cancer form of the SSS, the usual clinical version of the SSS, and the social support model presented in the article. I hope you can get them off the disk in usable form!

If you need help, want to bounce questions or thoughts off someone, or are looking for support (!), holler. My e-mail address, which is the easiest way to catch me, is LBROSENFELD@UNC.EDU

I look forward to hearing about the progress of your work.

And, if, without trouble, you can get people who have cancer and are in/not in a cancer support group to complete the cancer-patient version of the instrument, well, does "undying gratitude" ring a bell?

Sincerely,

Lawrence B. Rosenfeld
Director of Graduate Studies
Department of Communication Studies
February 5, 1996

Heather Carlson
3928 North Pine Grove, #2E
Chicago, Ill 60613

Dear Heather Carlson:

Thank you for your interest in the Impact of Event Scale.

You may reproduce the scales and articles. As long as you cite his authorship, Dr. Horowitz gives you permission to use the scales.

The cutoff points for scoring the IES are as follows: Low = below 8.5; Medium = in between; and High = 19 or more.

We would appreciate receiving the results of your use of the scale(s), if you would like to share them with us.

If you have any scientific or scoring questions, please write to Dr. Horowitz at the letterhead address.

Cordially,

Gerald Richards
Program Manager
APPENDIX B

LETTER TO PARTICIPANTS
Dear Research Participant:

My name is Heather Carlson. I have just recently completed coursework for the Master of Arts degree in Community Counseling from Loyola University Chicago and I am currently working on my Master's thesis. Knowing there are many demands on your time, I will make this letter as brief and concise as possible. I have chosen to investigate the traumatic stress experienced by professional caregivers exposed to children injured or killed by violence. In an effort to address the special issues and experiences of professional caregivers and crisis workers dealing with child victims of violence, this study seeks to examine the acute and long-term effects and the prevalence of physical and emotional symptoms related to the traumatic nature of these occupations, as well as the degree of social support received.

Participants willing to complete the questionnaire must meet the following criteria:
1. occupation is that of a professional caregiver (emergency service personnel, healthcare or mental health care professional such as a physician, nurse, social worker, or other emergency room personnel) AND
2. have been exposed to or treated children physically injured or killed by violence.

If you agree to participate in this survey research, I can assure you that the questionnaires will remain both confidential and anonymous. The estimated time required to complete the questionnaire is approximately 15 to 20 minutes. Completion of the questionnaire implies one gives informed consent to participate in this research study.

After completing the enclosed questionnaire, please put the questionnaire in the attached white business envelope, seal it and then put it in the box which is located next to the mailboxes marked "Completed Surveys". If you have any questions or comments, feel free to contact me by mail at the address above or by phone at 312-338-2076 or you may contact my research advisor, Dr. Elizabeth Vera at 708-853-3351. Thank you for your time and effort.

Sincerely,

Heather R. Carlson
APPENDIX C

QUESTIONNAIRE
Demographic Information

1. Sex: __________________
2. Age: __________________
3. Racial/Ethnic Background: ____________________________
4. Marital Status: ____________  5. Number of Children: ____________
6. Occupation: ____________________________
7. Number of years in this occupation: ____________________________

8. Please specify how often you are exposed to children physically injured or killed by violence.

9. Please describe your role in dealing with children physically injured by violence.

Impact of Event Scale

Instructions:
Below is a list of comments made by people after stressful life events. Please check each item, indicating how frequently these comments were true of you DURING THE LAST SIX MONTHS AND AS IT PERTAINS TO THE EXPOSURE AND/OR TREATMENT OF CHILDREN PHYSICALLY INJURED BY VIOLENCE. If they did not occur during that time, please mark the "not at all" column.

<table>
<thead>
<tr>
<th>FREQUENCY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not at all</td>
</tr>
</tbody>
</table>

10. I thought about it when I didn't mean to.  1  2  3  4
11. I avoid letting myself get upset when I thought about it or was reminded of it.  1  2  3  4
12. I tried to remove it from memory.  
13. I had trouble falling asleep or staying asleep, because of pictures or thoughts about it that came into my mind.  
14. I had waves of strong feelings about it.  
15. I had dreams about it.  
16. I stayed away from reminders of it.  
17. I felt as if it hadn't happened or it wasn't real.  
18. I tried not to talk about it.  
19. Pictures about it popped into my mind.  
20. Other things keep making me think about it.  
21. I was aware that I still had a lot of feeling about it, but I didn't deal with them.  
22. I tried not to think about it.  
23. Any reminder brought back feelings about it.  
24. My feelings about it were kind of numb.  

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>25. Shock</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>26. Guilt</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>27. Shame</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

**Acute Emotional Impact**

Please rate the following reactions or feelings in relation to your exposure to children injured by violence, and according to their impact on you during the past six months.

0- No Impact  
1- Very Mild Impact  
2- Mild Impact  
3- Moderate Impact  
4- Strong Impact  
5- Very Strong Impact  
6- Extremely Strong Impact
28. Disbelief 0 1 2 3 4 5 6
29. Feelings of Incompetence 0 1 2 3 4 5 6
30. Feelings of Failure 0 1 2 3 4 5 6
31. Anger 0 1 2 3 4 5 6
32. Depression 0 1 2 3 4 5 6
33. Self-blame 0 1 2 3 4 5 6
34. Sadness 0 1 2 3 4 5 6
35. Relief 0 1 2 3 4 5 6
36. Fear 0 1 2 3 4 5 6
37. Discouragement 0 1 2 3 4 5 6
38. Helplessness 0 1 2 3 4 5 6

**Long-Term Emotional Impact**

Please rate the following items according to the long-term impact of your exposure to children physically injured or killed by violence. Please use the same rating scale as you did for the items above.

39. Increased concern over competence to care for children injured by violence. 0 1 2 3 4 5 6
40. Increased anxiety when treating children injured by violence. 0 1 2 3 4 5 6
41. Increased feelings of helplessness when treating children injured by violence. 0 1 2 3 4 5 6
42. Guilt about a child's death. 0 1 2 3 4 5 6
43. Increased acceptance that children die as a result of violence. 0 1 2 3 4 5 6
44. Repeated thoughts of children injured or killed by violence. 0 1 2 3 4 5 6
45. Diminished sense of personal effectiveness as a professional caregiver. 0 1 2 3 4 5 6
46. Increased sensitivity to children affected by violence. 0 1 2 3 4 5 6
Coping and Utilization of Support Systems

Please rate the extent in which you received or sought support from the different groups listed below on a scale from 0 to 6:

<table>
<thead>
<tr>
<th>Group</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>47. By co-workers</td>
<td>0 1 2 3 4 5 6</td>
</tr>
<tr>
<td>48. By supervisors</td>
<td>0 1 2 3 4 5 6</td>
</tr>
<tr>
<td>49. By Friends</td>
<td>0 1 2 3 4 5 6</td>
</tr>
<tr>
<td>50. By Family members</td>
<td>0 1 2 3 4 5 6</td>
</tr>
<tr>
<td>51. By Significant others</td>
<td>0 1 2 3 4 5 6</td>
</tr>
<tr>
<td>52. Counseling</td>
<td>0 1 2 3 4 5 6</td>
</tr>
<tr>
<td>53. Crisis-debriefing team</td>
<td>0 1 2 3 4 5 6</td>
</tr>
</tbody>
</table>

Social Support Behaviors Survey
Form R-3

Instructions:
The following statements ask about your satisfaction with the help or support you currently receive from others. Please read each statement and indicate, using the following scale, your level of satisfaction. Please answer all the statements.

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very Unsatisfied</td>
<td>Somewhat Unsatisfied</td>
<td>Neutral</td>
<td>Somewhat Satisfied</td>
<td>Satisfied</td>
<td>Very Satisfied</td>
<td></td>
</tr>
</tbody>
</table>

To what degree are you satisfied with the people you count on to:

1. _____ be on your side in difficult situations.
2. _____ challenge your way of thinking about how to complete your tasks.
3. _____ provide you with the things you need to complete your tasks.
4. _____ reassure you that you are a worthy and valuable person.
5. _____ listen to you without judging what you say.
6. _____ give of their time to help you complete your tasks.
7. _____ understand the difficulty of the tasks you must complete.
8. ______ truly care for you.
9. ______ share your viewpoint of the world around you.
10. ______ get you to think about and question your values.
11. ______ share their knowledge to help you complete your tasks.
12. ______ help you gain a new outlook on your emotions.
13. ______ provide feedback about how you complete your tasks.
14. ______ listen to your concerns and problems.
15. ______ provide you with financial aid in time of need.
16. ______ listen to your innermost thoughts and feelings.
17. ______ comfort you when you feel emotionally upset.
18. ______ challenge you to become better at completing your tasks.
19. ______ listen to you without giving advice.
20. ______ give you gifts and presents.
21. ______ do a favor for you.
22. ______ give you advice or assistance in making decisions.
23. ______ understand and appreciate your point of view.
24. ______ challenge your beliefs.
25. ______ appreciate your skills and abilities.
26. ______ congratulate you for a job well-done.
27. ______ help with finances when you are ill or injured.
28. ______ challenge you to be creative and involved in your tasks.
29. ______ appreciate your skills and abilities.
30. ______ share your beliefs about what is right and what is wrong.
31. ______ acknowledge the effort you put into your tasks.
32. ______ question the appropriateness of your feelings.
33. ______ agree with your philosophy of life.

Symptom Checklist-90-R

Instructions:
Below is a list of problems people sometimes have. Please read each one carefully and circle the best that describes how much that problem has distressed or bothered you during the past 6 months.

0- Not at all
1- A little bit
2- Moderately
3- Quite a bit
4- Extremely

1. Headaches 0 1 2 3 4
2. Nervousness or shakiness inside 0 1 2 3 4
3. Repeated unpleasant thoughts that won't leave your mind. 0 1 2 3 4
4. Faintness or dizziness 0 1 2 3 4
5. Loss of sexual interest or pleasure. 0 1 2 3 4
6. Feeling critical of others. 0 1 2 3 4
7. The idea that someone else can control your thoughts. 0 1 2 3 4
8. Feeling others are to blame for most of your troubles. 0 1 2 3 4
9. Trouble remembering things. 0 1 2 3 4
10. Worried about sloppiness or carelessness. 0 1 2 3 4
11. Feeling easily annoyed or irritated. 0 1 2 3 4
12. Pains in heart or chest. 0 1 2 3 4
13. Feeling afraid in open spaces or on the streets. 0 1 2 3 4
14. Feeling low in energy or slowed down. 0 1 2 3 4
15. Thoughts of ending your life. 0 1 2 3 4
16. Hearing voices that other people do not hear. 0 1 2 3 4
17. Trembling 0 1 2 3 4
18. Feeling that most people cannot be trusted. 0 1 2 3 4
19. Poor appetite. 0 1 2 3 4
20. Crying easily. 0 1 2 3 4
21. Feeling shy or uneasy with the opposite sex. 0 1 2 3 4
22. Feelings of being trapped or caught. 0 1 2 3 4
23. Suddenly scared for no reason. 0 1 2 3 4
24. Temper outbursts that you could not control. 0 1 2 3 4
25. Feeling afraid to go out of your house alone. 0 1 2 3 4
26. Blaming yourself for things. 0 1 2 3 4
27. Pains in lower back. 0 1 2 3 4
28. Feeling blocked in getting things done. 0 1 2 3 4
29. Feeling lonely. 0 1 2 3 4
30. Feeling blue. 0 1 2 3 4
31. Worrying too much about things. 0 1 2 3 4
32. Feeling no interest in things. 0 1 2 3 4
33. Feeling fearful. 0 1 2 3 4
34. Your feelings being easily hurt. 0 1 2 3 4
35. Other people being aware of your private thoughts. 0 1 2 3 4
36. Feeling others do not understand you or are unsympathetic. 0 1 2 3 4
37. Feeling that people are unfriendly or dislike you.
38. Having to do things very slowly to insure correctness.
39. Heart pounding or racing.
40. Nausea or upset stomach.
41. Feeling inferior to others.
42. Soreness of your muscles.
43. Feeling that you are watched or talked about by others.
44. Trouble falling asleep.
45. Having to check and double-check what you do.
46. Difficulty making decisions.
47. Feeling afraid to travel on buses, subways, or trains.
48. Trouble getting your breath.
49. Hot or cold spells.
50. Having to avoid certain things, places or activities because they frighten you.
51. Your mind going blank.
52. Numbness or tingling in parts of your body.
53. A lump in your throat.
54. Feeling hopeless about the future.
55. Trouble concentrating.
56. Feeling weak in parts of your body.
57. Feeling tense or keyed up.
58. Heavy feelings in your arms or legs.
59. Thoughts of death or dying.
60. Overeating.
61. Feeling uneasy when people are watching or talking about you.
62. Having thoughts that are not your own.
63. Having urges to beat, injure, or harm someone.
64. Awakening in the early morning.
65. Having to repeat the same actions such as touching, counting, or washing.
66. Sleep that is restless or disturbed.
67. Having urges to break or smash things.
68. Having ideas or beliefs that others do not share.
69. Feeling very self-conscious of others.
70. Feeling uneasy in crowds, such as shopping or at a movie. 0 1 2 3 4
71. Feeling everything is an effort. 0 1 2 3 4
72. Spells of terror or panic. 0 1 2 3 4
73. Feeling uncomfortable about eating or drinking in public. 0 1 2 3 4
74. Getting into frequent arguments. 0 1 2 3 4
75. Feeling nervous when you are left alone. 0 1 2 3 4
76. Others not giving you proper credit for your achievements. 0 1 2 3 4
77. Feeling lonely even when you are with people. 0 1 2 3 4
78. Feeling so restless you couldn't sit still. 0 1 2 3 4
79. Feelings of worthlessness. 0 1 2 3 4
80. The feeling that something bad is going to happen to you. 0 1 2 3 4
81. Shouting or throwing things. 0 1 2 3 4
82. Feeling afraid you will faint in public. 0 1 2 3 4
83. Feeling that people will take advantage of you if you let them. 0 1 2 3 4
84. Having thoughts about sex that bother you a lot. 0 1 2 3 4
85. The idea that you should be punished for your sins. 0 1 2 3 4
86. Thoughts and images of a frightening nature. 0 1 2 3 4
87. The idea that something serious is wrong with your body. 0 1 2 3 4
88. Never feeling close to another person. 0 1 2 3 4
89. Feelings of guilt. 0 1 2 3 4
90. The idea that something is wrong with your mind. 0 1 2 3 4
APPENDIX D

IMPACT OF EVENT SCALE
Name: IMPACT OF EVENT SCALE
Scale abbreviation: IES
Questionnaire ID#: 101

Directions: Below is a list of comments made by people about stressful life events and the context surrounding them. Read each item and decide how frequently each item was true for you DURING THE PAST SEVEN (7) DAYS regarding ____________________________.

If the item did not occur during the past seven days, choose the NOT AT ALL option. Circle the number of the response which best describes that item. Please complete each item.

(1) Not at all  (2) Rarely  (3) Sometimes  (4) Often

<table>
<thead>
<tr>
<th></th>
<th>Not at all</th>
<th>Rarely</th>
<th>Sometimes</th>
<th>Often</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I thought about it when I didn’t mean to.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>2. I avoided letting myself get upset when I thought about it or was reminded of it.</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>3. I tried to remove it from memory.</td>
<td>3</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>4. I had trouble falling asleep or staying asleep, because of pictures or thoughts that came into my mind.</td>
<td>4</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>5. I had waves of strong feelings about it.</td>
<td>5</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>6. I had dreams about it.</td>
<td>6</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>7. I stayed away from reminders of it.</td>
<td>7</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>8. I felt as if it hadn’t happened or wasn’t real.</td>
<td>8</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>9. I tried not to talk about it.</td>
<td>9</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>10. Pictures about it popped into my mind.</td>
<td>10</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>11. Other things kept making me think about it.</td>
<td>11</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>12. I was aware that I still had a lot of feelings about it, but I didn’t deal with them.</td>
<td>12</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>13. I tried not to think about it.</td>
<td>13</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>14. Any reminder brought back feelings about it.</td>
<td>14</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>15. My feelings about it were kind of numb.</td>
<td>15</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>
REFERENCES


VITA

Heather R. Carlson is a native of Illinois. She attended The University of Iowa, where she received her Bachelor of Arts degree in Psychology in May, 1993. In August, 1993 she began her graduate studies in Counseling Psychology at Loyola University Chicago.

Throughout her collegiate career, Ms. Carlson was involved in a variety of leadership positions. Ms. Carlson served as The University of Iowa’s Educational Development Director for the fraternal system and traveled throughout the state of Iowa to present health-related topics to junior high, high school and college students. Ms. Carlson has experience in public speaking and has been a presenter at The University of Iowa’s Women’s Empowerment Conference for the past two years. The author was also involved in research which led to publication and presentation at the Midwest Psychological Association Conference.

Ms. Carlson has gained clinical experience through a variety of internships which included counseling positions at an outpatient mental health clinic, hospital, and consulting firm. Currently, Ms. Carlson is enrolled in Columbia College’s Interpreter’s Training Program. She is employed as a clinical staff therapist in Chicago, Illinois where she performs individual and family therapy and specializes in counseling the hearing impaired.
THESIS APPROVAL SHEET

The thesis submitted by Heather R. Carlson has been read and approved by the following committee:

Elizabeth M. Vera, Ph.D., Director
Assistant Professor, Counseling Psychology
Loyola University Chicago

Suzette Speight, Ph.D.
Assistant Professor, Counseling Psychology
Loyola University Chicago

The final copies have been examined by the director of the thesis and the signature which appears below verifies the fact that any necessary changes have been incorporated and that the thesis is now given final approval by the committee with reference to content and form.

The thesis is, therefore, accepted in partial fulfillment of the requirements for the degree of Master of Arts in Community Counseling.

March 15, 1996
Date

[Signature]
Director's Signature