

INSTITUTE FOR CLINICAL SOCIAL WORK

CRITICAL INCIDENT STRESS AND DEBRIEFING OF CHILD WELFARE
WORKERS

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ABSTRACT

The purpose of this study was for child welfare workers to identify when they were exposed to a critical incident. It also examined if a critical incident stress debriefing would be beneficial for child welfare workers. Thirty child welfare workers in Northern Illinois participated in a debriefing and a follow-up session. This study used a triadic research design utilizing both quantitative and qualitative methodologies. Participants took inventories to measure trauma symptoms and to identify the type of coping responses before and one month after the debriefing. The debriefing and follow-up session were also audio taped for the qualitative narrative analysis of their critical incident experience. Initial inventories and interviews revealed that workers were profoundly affected by these critical incidents. Such critical incidents can have detrimental effects such as workers experiencing isolation, extreme guilt, and symptoms of acute stress. Workers presented with significant symptoms of critical incident stress and were utilizing avoidant types of coping behaviors. After one month, follow-up inventories and interviews indicated that critical incident stress symptoms were greatly reduced and more engaged forms of coping were being utilized by the workers. Workers reported in the follow-up interviews that the debriefing was instrumental in assisting their coping after the incident. For these child welfare workers the provision of a critical incident debriefing, in a supportive and neutral interpersonal context, contributed to their

reduced sense of isolation and gave them an opportunity to process the incident which they reported contributed to their sense of reduced stress. This study supported the hypothesis that a critical incident stress debriefing is very useful for workers in supporting them in the difficult work that they do. It also supports suggestions that the adoption of such an intervention strategy by the child welfare community would greatly serve front line child welfare workers.

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CHAPTER I

PROBLEM FORMULATION

Researcher's Experience in the Field

To begin this inquiry it is best that I identify my professional history that brings me to this study. For several years I was employed as a county probation officer in a large metropolitan community located in the northern region of Illinois. After working with probation, I have until the present practiced as a clinical social worker in small mental health clinics within the same northern region. During the past several years, I have continued to work with both juveniles and adults who commit criminal offences as well as their families. During this time, a probationer whom I had seen in treatment committed suicide. His supervising probation officer had devoted many years of service to this client. I enlisted the support of colleagues to process this incident for myself. One day I was in contact with the probation officer and realized she too was attempting to integrate and develop some meaning regarding this loss of life. Our investment in this client was obvious and yet, for some reason, she continued to struggle to integrate the incident. Later a parole officer confided to me that recently he had been searching for a missing client and he suspected the client had committed suicide. He noted intruding thoughts about the client at home after he had investigated the client's hotel room. He admitted that this had developed into explicit fantasies of the possible suicide. Picturing the suicide in his mind seemed uncontrollable for him. He reported he was arriving late to work and

constantly thought of vacation and retirement. He wondered about the disturbing thoughts and if he might be burned out. I suggested he was not burned out but had been involved in a critical incident. Normalizing the experience by talking about what a critical incident was and the symptoms people experience after such an incident appeared to help him. He asked me to fax him as much material as I had about critical incident stress. We began to talk about how he and other parole officers integrate or process such experiences and this resulted in my interest in this subject.

General Statement of Purpose

The intention of this study is to examine existing knowledge and theory regarding critical incident stress and expand the knowledge and techniques of critical incident debriefing to child welfare providers. Solomon (1986) defined critical incident as, “any situation in which one feels overwhelmed by a sense of vulnerability and/or lack of control over the situation” (p. 11). In this study, such incidents were those involving child welfare workers and events related to their work with clients. Critical incident debriefing was a brief crisis intervention with workers after experiencing a critical incident. Mitchell and Everly (1995) identify seven major phases of the intervention adopted for individuals or groups. The introduction phase introduces the debriefer to those attending the debriefing, explains the process, and sets expectations. Secondly, the fact phase encourages persons to describe the event from the participants’ perspective and on a cognitive level. Thirdly, the thought phase helps participants describe cognitive reactions to the event with a transition to emotional reactions. Next, the reactive phase identifies for the individual the most traumatic aspect of the event. Fifth, the symptom phase helps

participants identify personal symptoms of distress and transition back to cognitive levels or domains. Sixth, the teaching phase, educates the individual about normal reactions and coping mechanisms. Finally, the reentry phase clarifies ambiguities and prepares the termination.

This study also used the narrative theory regarding crisis and crisis intervention, trauma theory, crisis theory, and theories related to stress to understand the process of reacting to and coping with a critical incident. Such incidents directly involved a worker being a part of the incident or the workers exposure to a client who was involved with a crisis or trauma. In a review of the literature, there are very few studies regarding this type of experience or coping of child welfare workers (Nelson-Gardell, 2003)

This formative study is an initial inquiry to assess the hypothesis that the utilization of a critical incident debriefing intervention can alleviate symptoms of stress and increase healthy coping behavior of child welfare workers exposed to a critical incident. Additional study questions addressed included:

- What do child welfare workers identify as a critical incident?
- To what degree do such individuals evidence critical incident stress?
- How do they cope with such critical incident experiences?

The design of this study is a triangulated design, also known as a multi-method design, measuring the responses of child welfare workers to a self- identified critical incident. The design measured the responses in a pretest posttest manner as workers participated in a critical incident debriefing. The quantitative component involved participants taking a trauma and coping response inventory. The qualitative component of

the design involved recording of the intervention and a one-month follow-up interview while keeping field notes on the part of the research team.

Initially probation officers, police social workers, and child welfare workers were targeted as professionals to make up a representative group of human service providers. Attempts were made to recruit all three groups of social service providers to assess if the intervention of critical incident stress debriefing would actually improve the coping of individual providers and reduce stress symptoms related to their work with clients. However, participants that did volunteer to participate in the study were all workers involved with the child welfare system. No probation officers or police social workers participated in the study.

The child welfare workers were all involved in child protection services either as employees of the state department of child and family services or as subcontract workers for the state. These professionals are constantly facing the possibility of being involved in situations where they must respond to the critical incidents of their at-risk clientele. They also adopt many important and sometimes intense roles in their work with clients. These workers are at times advocates for the safety of children. This can sometimes put them at odds with guardians. At the same time, they can be asked to be the agent of preserving a family known to be at risk of abusing or neglecting children. On occasion, for these workers, working with such high-risk client situations results in either being involved in a critical incident directly or witnessing the tragedy in the lives of these clients. At this point, there are few investigations regarding workers experiences of a critical incident

(Nelson-Gardell, 2003). As will be elaborated in the literature review, general personnel studies tend to focus on burnout of individuals in such positions rather than on assistance to them after being involved in a critical incident.

Significance of the Study

This inquiry is significant to social workers and other professionals who work with high-risk populations. Currently little research has been conducted to address the particular experience, means of coping, and solutions to assist those who experience critical incident stress in child welfare. A formative study such as this one begins to identify critical incident stress as an actual response for workers. Experiencing a critical incident may result in symptoms of critical incident stress for these workers. This study shows that symptoms such as poor health, decrease in job performance, and violation of professional boundaries can be a result of such incidents. Psychological distress in persons who are typically healthy and able to carry out daily functions and self-care may also result from such experiences. This study also demonstrates how an intervention such as the debriefing can assist in reducing such symptoms and promote positive coping behavior for child welfare workers. Further, this study identifies the process of how providers cope, in healthy and unhealthy fashions, with critical incidents and reveals some of the methods that may promote well being. This need to examine coping addresses a gap in the literature pointed out constantly by researchers of work stress and particularly for those who work in the human services field (Dewe, 1993).

CHAPTER II

REVIEW OF THE LITERATURE

To understand the phenomena of critical incident stress and critical incident stress debriefing, particularly as they relate to child welfare workers, the review of literature will flow from a review of critical incident stress and debriefing and then explore several theoretical approaches to stress, coping, trauma and crisis intervention. The review will also examine the work stress literature and later the research directed at those who serve in the human services field. A review of the clinical theories of trauma and crisis is then explored. At this point in the review, it will become evident that there is a lack of information and research regarding human service worker's experience of critical incident stress.

Critical Incident Stress

Since the middle 1980s, there has been increasing awareness, development of interventions, and research devoted to the psychological effects of traumatic events on the individuals exposed to them. The resurgence of this interest is fueled by the same motivations reported by Rapoport (1970): limited resources to provide treatment, greater demand for services, and need for briefer interventions. There has also been an increasing concern and need for interventions with those whose profession or occupational roles

might expose them directly to such traumatic events. Two national events that brought focus to critical incident stress and debriefing involved the Oklahoma Federal building bombing on September of 1995 and the terrorist attacks of September 11, 2001. Lane (1994) noted that concern about critical incident debriefing for traumatic stress finds its beginnings primarily in the history of concern with post-traumatic stress disorder (PTSD) within the military. This military concern with war related stress dates back as far as the Civil War. Lane noted that some recognition of PTSD occurred on D-Day and rudimentary debriefings occurred on the beaches. By the 1960s, police psychologists had recognized the syndrome in police officers after the death of a fellow officer, and began to employ strategies of debriefing borrowed from the military. This interest continued in articles published in the 1970s with concerns that negative psychological consequences were occurring in emergency rescue workers as secondary responders to a traumatic incident (Lane, 1994).

The field of debriefing for critical incidents is heavily influenced by the evolving concepts of post-traumatic stress syndrome and more recently concepts of acute stress disorder. The diagnostic criterion for acute stress disorder is found in the DSM-IV. It includes six major categories of symptoms:

- A. The person has been exposed to a traumatic event in which both of the following occurred:
 1. Event or events that involved actual or threatened death or serious injury, or threat to the physical integrity of self or others;
 2. The person's response involved intense fear, helplessness, or horror.

B. The event is persistently re-experienced in one (or more) of the following ways:

1. Recurrent distressing recollections of the event, including images, thoughts, or perceptions;
2. Recurrent distressing dreams of the event;
3. Acting or feeling as if the traumatic event were recurring;
4. Intense psychological distress at the exposure to internal or external cues that symbolize or resemble an aspect of the event;
5. Physiological reactivity on exposure to internal or external cues that symbolize or resemble an aspect of the traumatic event.

C. Persistent avoidance of stimuli associated with the trauma and numbing of general responsiveness as indicated by three or more of the following:

1. Efforts to avoid thoughts, feelings, or conversations associated with the trauma
2. Efforts to avoid activities, places, or people that arouse recollections of the trauma
3. Inability to recall an important aspect of the trauma
4. Markedly diminished interest or participation in significant activities
5. Feeling detachment or estrangement from others
6. Restricted range of affect
7. Sense of a foreshortened future

D. Persistent symptoms of increased arousal as indicated by two or more of the following:

1. Difficulty in falling or staying asleep
2. Irritability or outbursts of anger
3. Difficulty concentrating
4. Hypervigilance
5. Exaggerated startle response

E. Duration of the disturbance is more than one month.

F. The disturbance causes clinically significant distress or impairment in social, occupational, or other important areas of functioning DSM-IV (p. 431-432).

In the 1980s, there was a movement to explore a more refined understanding of PTSD. One direction in this research movement was to gain a clearer understanding of what the psychological effects of disaster, emergencies, and victimization were on those who have a role in responding to such situations and the trauma of others. This led to clearer definitions of critical incidents and critical incident stress. Maggio and Terenzi (1993) noted that like the definitions of stress in general, some definitions of critical incident stress focus on the actual event while others focus on the individual's reaction to a critical incident. Solomon (1986) defined critical incident as, "any situation in which one feels overwhelmed by a sense of vulnerability and/or lack of control over the situation" (p. 11).

Walker (1990), in a review of crisis care in critical incident debriefing, noted that persons who experience a critical incident respond with a predictable and systematic set of reactions. In his review of the literature, Walker outlined two basic phases of response to a critical incident involving emergency conditions or disasters. First, there is typically a response of disorientation during the initial impact phase of the incident. Also there is

shock, confusion, apathy, and being emotionally labile. Second, in the post-disaster phase there may be survivor guilt or survivor euphoria. There can be participation in physical and psychological reconstruction efforts or symptoms of post-traumatic stress such as recurrent thoughts, dreams, emotional numbness, marked agitation, negative cognitions, hypervigilance, learned helplessness, and conscious and unconscious reenactments of the trauma.

Critical incident stress debriefing is a synthesis between the concepts of cognitive stress theory, crisis intervention theory, theories of post-traumatic stress, and concepts of work stress. Mitchell (1983) differentiated the experience of PTSD and critical incident stress (CIS). The reaction of PTSD is attached to those who are participants in the actual event while CIS refers to those who respond to the needs of the event. The primary concern regarding this dimension of critical incident stress refers to the experience and resulting symptoms for those Mitchell called "secondary responders". By secondary responders, Mitchell meant those individuals exposed to a critical incident because of their occupational role. Mitchell and Everly (1995) defined a critical incident as "any significant emotional event that has power, because of its nature or because of the circumstances in which it occurs, to cause unusual psychological distress in healthy normal people" (p. 271)

As the knowledge regarding critical incident stress evolved, it was applied to many professions and situations outside the traditional emergency-response professions. According to Rose and Bisson (1998), this group includes industrial crews after a severe accident, school students after the suicide of a peer, bank employees after a holdup, spouses of emergency response personnel, trial judges and jurors after a particularly

stressful hearing of a heinous crime, and witnesses to violent crime. An example of this expansion of the use of debriefings can be seen after the shootings at Columbine high school. Debriefings were provided to students at this incident and protocols specific to adolescents were developed afterward (Kirk and Madden, 2003). The emphasis in this expanding work is on fully functioning individuals who because of a traumatic event have the potential to develop symptoms similar to post-traumatic stress disorder after being exposed to a traumatic situation.

Since the September 11, 2001, terrorist attacks there have been an increasing number of studies that have begun to show a mixed sense of the effectiveness of debriefings for those experiencing a critical incident. In addition, soldiers who returned from the peacekeeping assignment in Somalia were found to have not necessarily benefited from the use of such debriefings (Litz, 1997). Some evolving criticisms stemming from the use of debriefings after the September 11th attacks and the experience of such interventions with soldiers in Kosovo have been that such debriefings actually can induce symptoms by suggestion. In non-voluntary group situations, the intervention is thought to actually create a contagion effect or secondary crisis for those not directly involved in the events of the critical incident (Walling 2003). Another criticism is that a one time intervention may not be adequate for all individuals and that more and alternative interventions may be necessary for some people. Because of such criticism it is now recommended that debriefings be voluntary and assess for the need for follow-up and alternative intervention. Various researchers report that not everyone is vulnerable to critical incident stress and that those who went through more training regarding reactions to trauma seemed to cope better (Harbert, 2003). In studies of the Oklahoma City

bombing, however, 23% of civilians and 13% of firefighters suffered from critical incident stress (Walling 2003). These same studies indicate a need for scrutiny as to who might be most vulnerable to critical incident stress to address their needs more readily (Van Emmerick et al. 2002). The effect of a critical incident can be mediated by such variables as the objective and subjective severity of the incident, the temporal duration of the incident, and characteristics of the victim (perceived similarity of the victim to a significant other or self). Other influences can be personality of the helper, viability of coping strategies, ethical and spiritual concerns, and the depth of the relationship formed precritical incident (Lane (1994). .

The history of work-related stress in human services appears to have focused on worker burnout and systemic, organizational issues related to burnout. Critical incidents, in addition, is concerned with either direct or perceived threat of physical harm towards the worker. Critical incident stress can also occur when workers encounter the client experiencing or enacting gross serious neglect or physical harm towards themselves or another. That these would be significant and identified as critical incidents for human services workers seems self-evident. Yet studies on the effect such incidents have on individuals are rare. Recently, Arthur, Brende and Quiroz (2003) collected 1,131 surveys from mental health workers in Georgia regarding their exposure to client violence and its effect on them. They found that clients had psychologically or physically assaulted 61% of respondents during their career and that 29% of those assaulted feared for their lives at least one time in their career. Similar data was reported by Rey (1996) regarding social workers in Nevada.

A second study done by Adams, Harrington, and Motto (2001) surveyed 185 master level social workers utilizing the Trauma Institute's Belief Scale. They found that social workers affected by such incidents were younger workers, to have physical health issues, to have lower salaries, and to feel isolated. They concluded that the symptoms of vicarious trauma were likely a result of the worker's general personality or outlook towards life.

In a study of Illinois correctional officers conducted by Cullen and Wolfe (1985) it was noted that previous literature related to job stress and corrections minimized "job dangerousness" (p. 508) as a significant stressor. This minimization was due to the believed infrequency of actual violence committed against officers. However, in their research they found that just the experience of constant unpredictability of violence and the possibility of experiencing violence was ranked by officers as major work stressors. In this study, one sees how the increased risk or potential for experiencing a critical incident due to an occupational role can cause a stressful response. Even the feared anticipation of a critical incident may result in the escalation of stress.

Research was conducted on those who are mental health responders to disasters and large-scale emergencies. Leavitt (2003) reported evidence that mental health workers responding to the emotional needs of disaster victims often reported feeling shocked, confused, saddened, and very tired. Many became ill or experienced accidents and all participants noticed changes in eating, drinking, and smoking habits. They had feelings of helplessness and commonly reported feeling stressed. Raphael (1991) reported similar experiences for mental health workers who participated in the debriefing of victims. Talbot, Manton, and Dunn, (1992) developed an intervention debriefing plan for persons

who conducted the debriefings for victims and emergency responders. They noted that most literature for mental health providers addresses burnout and that the symptoms of critical incident stress can appear like burnout. In actuality, they are not the same. Critical incident stress symptoms are a response to an event as opposed to the ongoing work stress, typically related to organizational stressors, which can cause burn out. These researchers related that often symptoms could be addressed quickly by assisting the assimilation of the experience.

During a research study on the longitudinal experience of survivors of fire, Baird (2003) noted stress response symptoms occurring for interviewers collecting the data for the study. This researcher found that those conducting the interviews for the study were suffering from what she called “compassion fatigue” (p. 251). Baird (2003) found symptoms of critical incident stress for the research team and used debriefing as an intervention to greatly reduce such fatigue.

Closer to the experience of human service providers are the reactions of therapists to patient suicide. In reviewing this literature, Kleespies, Smith, and Becker (1990) noted the stress for clinical psychotherapy interns when they experienced the suicide, suicidal ideation, or suicide attempt of a patient during their internship training. They reported that such trainees experience symptoms of critical incident stress acutely from one to six weeks after such an incident. They also reported trainees as experiencing disbelief, failure, sadness, self-blame, guilt, shame, and depression. They suggested therapists could be assisted through a process they called “psychological resynthesis” (p. 479). They suggested that resynthesis comprises of three stages. The first stage is psychological resuscitation. This is defined as coping with the initial shock of the patient suicide and

utilizing supportive supervision and the attendance at the funeral of the patient. Secondly, there is psychological rehabilitation. Through case review and supervision, the clinician is assisted with longer-term issues of grief and coping with loss. Finally, there is psychological renewal. In this stage, the individual has completed the grief process and has a renewed emotional reinvestment in new patients.

Contributing to the study of critical incident stress are studies about vicarious trauma. Pearlman and McCann (1990) asserted that counselors who have long-term exposure to clients who have been victimized can experience disturbances in their basic understandings about the world (for example, the world is safe and people can be trusted) and they can experience symptoms of PTSD. McCann and Pearlman called such experiences “vicarious traumatization.” Pearlman and Saakvite (1995), define vicarious trauma as the “transformation in the . . . worker’s . . . inner experience resulting from the empathic engagement with the client’s trauma material” (p. 151). Beaton and Murphy (1995) call such vicarious trauma secondary traumatic stress and define it as “the natural consequent behaviors and emotions resulting from knowledge about a traumatizing event experienced by a significant other or from helping or wanting to help a traumatized person” (p. 53).

Schauben and Frazier (1995) conducted research on the experiences of counselors who worked with sexual violence survivors. They discovered that such counselors who continually dealt with a high number of survivors experienced vicarious trauma. They found such counselors had more disrupted beliefs about themselves than counselors who not exposed to such traumatized clients. They reported that the counselors with more exposure to traumatized clients also had more PTSD symptoms. These symptoms were

not found to be the result of personal violence experiences of the counselor but by the violence communicated by the clients (Schauben and Frazier, 1995). This study also gathered information as to how counselors coped with vicarious trauma. They noted active coping strategies were those activities that tried to do something about their responses, both cognitive and emotional. Examples included engaging support for their experiences, using physical activity to relieve stress, engaging in leisure activity, meditating, and cognitive restructuring. Schauben and Frazier did not find behavioral or emotional disengagement frequently utilized. Interestingly, their sample group was all women. The coping responses these women used that engaged others for support are seen in the literature regarding the differences in how the genders cope with work-related stress (Law, 2003). Women seem to engage others more frequently to cope with stressors. Schauben and Frazier also noted the lack of actual research in the area of how the experiences vicarious trauma affects the worker's sense self, work and total life meaning.

How does the experience of vicarious trauma occur for workers? Some believe it involves the capacity to experience empathy (Davis, 1996; Nelson-Gardel, 2003) In building the capacity of empathy, an infant has an innate ability to mirror the emotional states of another (Davis, 1996). Davis provided the example of the infant in the nursery, who, upon hearing the cries of another infant, begins to cry also. It is believed that the infant mirrors, in a behavioral response, the emotional state of others and a reinforcement loop is soon created between the infant and the caregiver in which the infant learns to attach internal states of affect with certain physical responses. Due to the imitative nature of this learning process, and through the course of continued conditioned response, the individual learns to identify the affect of another and can imagine that affect state within

themselves. Later in adolescence or in the operational phase of cognitive development this ability to relate to the affects of others becomes symbolized in language. Davis believes empathy can take two forms. The first are those affects parallel to the actual state of the observed other. The second is a reactive form of empathy where the individual experiences empathy for another but the affect is not shared by the one being observed. An example is reported by social workers engaged with child victims. The worker is upset by the victimization of the child while the child has no or little emotional response to the abuse or reports the experience as egosyntonic. The vicarious trauma, in this theory of empathy, is the result of the ability to imagine another person's affect states, or what one might experience in such a state, and then, due to a life history of conditioning, to experience similar affect states.

Raines (1990) believes that individuals can experience sympathy for another, which can contribute to a vicarious experience for a worker involved with a client. Sympathy is the preoccupation with the assumed parallel between our own feeling states and those of others. This is not an objective experience but one that reacts to the situation of another (Raines, 1990). This definition of sympathy is strikingly familiar to reactive empathy as defined by Davis (1996).

A third explanation for the vicarious trauma or critical incident stress reaction involves a two-step process based in ego psychology. The first step is the identification with the other person. Identification is an imitative process in which one can imagine about another person and that other person's experiences (Raines, 1990). Scharff and Scharff (1992) defined identification as "the psychological process whereby the subject assimilates an aspect, property, or attribute of the other and is transformed wholly or

partly in accord with the model the other provides” (p. 52). They delineated two types of identification. The first is when the subject imagines the other to be like him or herself; this is called projective identification. The second is when the subject imagines oneself to be like the other; this is known as introjective identification.

The second step of this explanation of vicarious reactions, according to Scharff and Scharff (1992), is the process of incorporation or introjection. In this process one has established identification with another and now incorporates that experience into the self. This introduction into the ego of the sensed experience of another is not necessarily related to one’s own experience (Raines, 1990; Scharff and Scharff, 1992). In the case of vicarious trauma or critical incident stress individuals see others as somehow being like themselves, or themselves being like others. They also experience, witness, or imagine the trauma and its resulting effects. After experiencing these effects in this manner the events are internalized into their sense of self allowing for a vicarious sense of the experience. In the case of critical incident stress, it involves experiences and affects to a degree that disrupts the ego or sense of self of the individual.

Focusing on the actual treatment models for PTSD, Friedman (1995) listed several approaches to treating this stress syndrome: psychodynamic, cognitive-behavioral, pharmacotherapy, group, family, and couples therapy. Friedman (1995) believed in the increasingly differentiated range of the syndrome of PTSD. This range involved normal stress response, acute catastrophic response, uncomplicated PTSD, PTSD co-morbid with other disorders, and post-traumatic personality. This range in the PTSD syndrome required a more careful consideration regarding the treatment approach for individuals coping with PTSD.

Healthy adults exposed to an acute catastrophic event or critical incident may experience intrusive recollections, numbness, denial, feelings of unreality, and hyper arousal. This is thought to be a form of acute stress response. For these individuals, such as emergency response persons, the best treatment is a form of critical incident stress debriefing. The debriefing comprises of these steps: assisting in the description of the event, exploring the individual's response to the event, openly discussing symptoms experienced since the event, and moving toward a resolution in which the individual's responses are normalized and adaptive coping strategies are identified (Friedman, 1995).

Mitchell and Everly (1995) are likely the most recognized designers of critical incident debriefing. Their model is most widely accepted around the world (McNully, 2004). This intervention has components similar to most crisis interventions (Kirst-Ashman, Hull 1995). A critical incident debriefing is meant to be restorative to a previous level of functioning or preventive for the development of acute stress symptoms for those involved in and responding to a critical incident. Mitchell and Everly identify seven major phases of the intervention adopted for individuals or groups. The introduction phase introduces the debriefer to those attending the debriefing, explains the process, and sets expectations. Secondly, the fact phase encourages persons to describe the event from the participants' perspective and on a cognitive level. Thirdly, the thought phase helps participants describe cognitive reactions to the event with a transition to emotional reactions. Next, the reactive phase identifies for the individual the most traumatic aspect of the event. Fifth, the symptom phase helps participants identify personal symptoms of distress and transition back to cognitive domains. Sixth, the teaching phase, educates the individual about normal reactions and coping mechanisms. Stress management skills are

often presented at this phase. Finally, the reentry clarifies ambiguities and prepares the termination. The debriefer is also called upon to assess follow-up needs of participants.

Little research has been completed in terms of the use of critical incident debriefing for child welfare workers. Some have addressed the need of such an intervention in a related human service profession, probation officers. Maggio and Terenzi (1993) published an article suggesting probation offices begin to prepare for such incidents. Maggio and Terenzi, in applying critical incident theory to the role of the probation officer, stated that:

Critical incidents are generally sudden and unexpected. This is relative to timing and the intensity or nature of the incident. A critical incident has the potential to disrupt one's sense of control. Loss of control is a key element in victimization. Probation and pretrial officers spend much of their careers struggling to gain and maintain control over offenders (p. 11).

Maggio and Terenzi (1993), however, limited their discussion to critical incidents that involved actual violence or threat of violence perpetrated against the probation officer or a colleague. This is one very important type of critical incident, but as noted earlier can be seen as a limited definition. Maggio and Terenzi expressed their belief that a probation officer's experience of a critical incident has the potential to disrupt one's sense of belief of being in control. Probation officers, like the counselors of victims of sexual violence, can also have disruptions in beliefs, values, and assumptions concerning how the world and the people in it work. Issues of mortality and fear for their lives or the lives of others can evolve. Maggio and Terenzi believed officers often experience an element of physical or emotional loss in the wake of a critical incident. Finally, these authors note these incidents should not be ignored by the organization in which officers work but do not go into detail as to why ignoring such events would occur.

Having a better understanding of what critical incident stress and critical incident stress debriefing are and how they have evolved in the crisis response professions is an important start to the literature review. It is also important to know how critical incident stress and critical incident stress debriefing is related to the historical and current context of stress, trauma, crisis and narrative theories. This literature review will now focus on these important fields of study and relate them to critical incident stress and critical incident stress debriefing.

Transactional Theory of Stress

Cognitive and perceptual psychologies have been dominant influences in both the research and the literature regarding stress. McGrath (1970) published one of the first reviews of the early stress research. His five underlying themes that guided thinking and research in this area were influenced by cognitive psychology. McGrath's themes are often interactive and they blur into one another.

First, McGrath (1970) identified the notion of "cognitive appraisal". This theme involves the thinking and emotional experiences of individuals and the extent physiological and psychological reactions to a stressor are a function of the perceptions, expectations, or cognitive appraisal that the individuals make of the stressing situation. Secondly, McGrath identified the "experience" theme. This is the notion that stress and its effects can be attenuated with prior experience. Continued exposure or experience with a stressor reduces its effect on the individual's stress reactions. Building on the first two themes, a third theme emerges. This is the notion that the experience of failure on a task or failure to cope with a stressor successfully is stressful in itself. The experience has

a number of detrimental effects and can lead to decreased performance. McGrath called this the theme of “negative experience.” The fourth theme involves the “inverted-U.” This, McGrath (1970) explained, relates to the notion that “stress comes from too much of a good thing- or not enough of it” (p. 71). Stress is influenced by increments and decrements of stimulus. Stress has parameters of intensity, complexity, and uncertainty, and each is capable of assisting in maintaining or moving one away from some optimal zone of stress. The intensity of environmental stimulation is curvilinearly related to the degree of felt stress and to the degree of effectiveness of subsequent performance. The fifth theme is “social interaction.” This theme deals with the information about stress and the attenuating effects of being with others. It is the presence of others under stressful conditions that can mitigate stress dependent upon the context of the relationship and the individual’s perceptions of the interaction. As will be discussed in more detail, the study and experiences of critical incident stress are more aligned with the first theme of cognitive appraisal. However, as noted by McGrath (1970) these themes are often interrelated. This is no less true in the study of critical incident stress and coping. Each of these themes plays a role in how one might experience and cope with a critical incident. Such concepts can prove useful in understanding one’s experience of a stressful incident and how this understanding or appraisal leads to one’s cognitive or emotional responses and means of coping.

Historically, it is difficult to define stress so we begin with the evolution of research on stress. Dewe (1989, 1993) stated, in his review, that there has been much disagreement as to what exactly stress is. He noted that in earlier studies definitions were guided by the underlying notions that a stimulus event resulted in a response, namely

stress. Many researchers attempted to define stress in physiological terms and used physiological responses as a means of measuring stress. Such studies attempted to identify what a stressor was in an objective sense. This theory of stress is known as the “Michigan Model” (Parkes 1990). In the Michigan model, objective stressors, such as identified stressors in the work environment, were matched with specific physiological states and how these states would influence subjective perceptions of the stressor. There was thought to be value in identifying the environment (stimulus) that produced an exact stress response in those exposed to the stressor.

Beginning in the mid 1960s the dominant notion in stress and coping research was that many stimuli could not be objectively identified as a stressor and that individuals were difficult to group in their responses to any particular stimulus. Dewe (1993) noted it was the introduction of the notion that stress is a subjective and perceptual interpretation by an individual that changed the direction of research on stress. Dewe pointed out that in more recent research stress is seen in a more relational manner involving both the environment and the individual. These researchers began to explore subjective cognitive/emotional experiences of stress and the cognitive/emotional mediators of stress and coping. Since the early 1960s the focus of research has involved the cognitive appraisal of stressors and the cognitive, emotional, and behavioral means of coping based on that appraisal.

According to Dewe (1993), appraisal of an event as stressful refers to a sense of perceived demand that taxes or exceeds the physical or psychological resources of the individual. He continued by defining coping as the cognitive or behavioral attempts to deal with, reduce, or tolerate this excess demand (p. 994). Indicating a gap in the

literature, Dewe noted that most research retreats to the “stimulus/response” paradigm and retreats from investigating the interactional aspects of the individual’s appraisal and coping.

It was Lazarus (1974) who first presented the transactional form of understanding stress. It was a major force in highlighting the concepts of cognitive/affective appraisal of the stressor by the individual and introducing the notion of coping as a response to such appraisal. Lazarus (1977) summarized his first decade of thinking about stress by identifying two major themes to his work: “The first was that cognitive processes determine the quality and intensity of an emotional reaction and second that such processes also underlie coping activities which, in turn, continually shape the emotional reaction by altering the ongoing relationship between the person and the environment in various ways” (p. 145).

Lazarus believed emotions and behavioral adaptations reflect the person’s continuing appraisal of the environment as being damaging, threatening, challenging, or “conducive to positive well being” (p. 145). Cognitive appraisal is the force behind the various emotions and is determined by the interplay between the personality of the individual and the environmental context. Lazarus defined subjective stress as a disturbance that involved a subjective affect, physiological changes related to mobilizations for action, and actions having both instrumental and expressive features. Lazarus also suggested that physiological responses to environments were not the creators of appraisal nor did physiological responses create the recognition of an emotional reaction. It was rather the cognitive appraisal and the resulting emotions that induced the physiological responses. Lazarus departed from the notion that there are

clear objective stressors, and supported the notion that it is the individual's appraisal of the environment that accounts for individual differences in response to an environment.

Dewe (1993) continued to build on the cognitive appraisal model of Lazarus, particularly in the study of work-related stress. He built on the notion that the individual and the environment are an interacting system. Dewe explained that stress is an interactive process as opposed to a linear cause and effect, where a particular stressor causes a particular reaction. Lazarus (1974) stated that studies on emotions that focus only on the immediate stimulus situation are unable to tap into the mediating variables of a person's complete life experience. For example, he noted studies that only look at the immediate responses of stress fail to measure how the person might be prepared for the stress-inducing stimuli. Further, such an approach to stress research does not recognize the means of coping with stress developed by the individual prior to the introduction of the current stressful stimuli.

Dewe (1993) summarized this thinking and its 30 year evolution by defining stress as a dynamic cognitive state representing a disruption in homeostasis or creating imbalance that gives rise to a requirement for resolution of that imbalance and the restoration of homeostasis. Dewe, following Lazarus, believed stress does not reside wholly in either the individual or the environment but in the interaction of the two. Stress relates to those transactions between the individual and environment in which the transactions are perceived as challenging or taxing to the person's ability to cope. This threatens well being and necessitates the individual's need to resolve the problem.

The need for resolution leads to the second major concept of stress in the transactional theory of coping. Lazarus (1977) noted that the individual's internal

emotional life is in constant flux and at times one entertains multiple emotions or cognitions related to the environment. He noted these processes can often change quickly. Having appraised the environment as stressful, the individual using feedback from the environment, attempts to “master the environment by overcoming the damage, by postponing or preventing the danger, or by tolerating it.” (p. 149). The individual reappraises the situation in the environment, creating an interactive process. A coping process has now begun. Often emotional coping to perceived stress involves detaching one’s emotions from the stressor and attempts to reduce one’s physiological response to the stressor. Further, Lazarus identified the expression of emotions as a form of coping. He believed increased emotional involvement in the situation was a way to cope with some stressors. Lazarus explained that stress can be anticipated, stressful events can be imagined, and then anticipated responses can be created, thus influencing the environment of stress before it actually occurs. In this instance coping can precede an emotional state and influence its form or intensity.

Building on the work of Lazarus, Latack (1986), further developed notions related to coping. She noted that in her research, “coping is defined as a response to situations characterized by uncertainty and important consequences” (p. 377). Two forms of coping are (a) those cognitions and actions dealing with the problem-focused attempts to alter or manage the situation about the stressor, and (b) emotion-focused attempts to reduce or manage emotional distress related to the perceived stressor. The first can be illustrated in persons making a plan of action and following it, and the second might be represented by thoughts such as “look on the bright side” or decisions to distance oneself from the stressor, such as emotional detachment from those one meant to help.

Latack (1986) expanded on the work of Lazarus by developing three major categories of coping with a stressor. The first is control. This consists of both actions and cognitive reappraisals that are “proactive and take charge in tone” (p. 378). The second is both actions and cognitions of reappraisal that suggest “escape” or an avoidance mode. The third is symptom management, which consists of strategies that manage the symptoms related to stress.

Trauma Theory

Largely influenced by the theories of trauma in ego psychology, several major clinicians developed crisis intervention theory. The background assumptions for these authors is the authority of ego psychology and hence in Rapoport’s (1970) review of the origins of crisis theory, ego psychology is not acknowledged but rather assumed as a given. Later critical incident theory builds on these theories of crisis intervention. A review of the underlying theory of trauma can assist in a better understanding of crisis intervention theory and the concepts of critical incident stress.

Trauma theory has some common themes in the many years of it’s development. An important theme is that trauma is the result of the individual experiencing something real in the environment as overwhelming and disorganizing to the ego and that the individual experiences a sense of helplessness or powerlessness (A. Freud, 1967; S. Freud, 1926; Krystal, 1988). Janet (1930) in his autobiography thought it was the inability of the individual to integrate a traumatic experience that was central to the clinical presentation of “hysteria” and what he termed “psychasthenic” (later called obsessive-compulsive). Janet (1930) credits this development of trauma theory to his

observations of patients in France from 1889 to 1903. Current researchers in trauma theory such as Van der Hart, Brown, and Van der Kolk (1995) acknowledge Janet as one of the early and important theorists of trauma (Van der Hart, Brown, & Van der Kolk, 1995). According to Janet (1930) central to the treatment of such disorders is the recovery and integration of the memories of the trauma, particularly the affects expressed within the context of a caring therapeutic relationship. Janet (1930) believed that if the traumatic event was experienced as overwhelming it resulted in amnesia, somatic reactions, anxiety, intrusive thoughts, and dreams related to the original trauma. In reviewing Janet's work, Buhler (2001) notes that Janet believed such presentations were the result of the frightening event not fitting into existing cognitive schemes. Memories of such experiences are then believed to be lost from awareness and beyond the individuals' self-control. The presenting symptoms then were fragments of the non-integrated experience. Van der Kolk and Van der Hart (1989) later expressed their agreement with Janet and noted that memories determine how the present is interpreted. They demonstrated that memories are stored at levels of linguistic memory, iconic memory, or inactive memory. These levels of memory correspond to Piaget's operational, preoperational, and sensory motor cognitive stages. It is believed that as the brain matures the individual moves from inactive memory (somatic and motor) to iconic memory (perceptual) to symbolic/linguistic memory. The memory of the experience creates a symptom associated with the level in which the memory was encoded. A symptom, then, is actually a non-integrated piece of the trauma experience. In the exchange of therapy one is assisted in reintegrating the experience into symbolic/linguistic level by allowing for the expression of the experience on a cognitive

and particularly emotional level (Van der Kolk, Van der Hart 1989). The similarities of Janet's work to the notion of a trauma being a disrupted narrative or an inability to make narrative sense regarding an event are striking.

In psychodynamic theory, and later crisis intervention theory, thinking about environmental stressors emphasized the internal processes of the individual and often became intertwined with theories of development and trauma. Initially, Freud speculated that neurosis was the result of trauma experienced in the early development of individuals. Freud articulated that hysteria was the result of some experience of a traumatic event. Freud and Breur (1895) wrote the following definition of a trauma event:

In traumatic neurosis, the operative cause of illness is not the trifling physical injury of the effect of fright--the psychical trauma. In an analogous manner, our investigations reveal for many, if not most, hysterical symptoms precipitating causes. . . . Any experience that calls up distressing affects--such as those of fright, anxiety, shame or physical pain--may operate as a trauma of this kind. (p. 5-6)

Traditionally it is thought that Freud moved from a theory of neurosis as trauma based, hence a response to the environment, to one that attributed neurotic symptoms to internal conflicts related to libidinal forces. This appears in Freud's writing of Analysis of a Five Year Old Boy in 1909. Freud also published this conflict theory in the Introductory Lectures on Psychoanalysis in 1917. Freud shifted from the trauma theory of stress or the seduction theory and refocused his thinking that neuroses were the result of the instinct-driven oedipal complex with a focus on intrapsychic mechanisms. Freud, however, maintained both theories throughout his life using the notions of both the "unbearable situation" and "unacceptable impulses."

In attempting to understand the psychological trauma of war, Freud addressed the issue at the 1918 proceedings of the fifth International Psychoanalytical Congress in

Budapest later published in 1955 as An Introduction to Psychoanalysis and the War Neuroses. Freud theorized that the conflict between the superego and the id was such that war neurosis is a defensive compromise to the horror of warfare, states of fear, and extreme aggression. While the threat of war is external to the ego and creates an atmosphere of possible annihilation Freud still deduces that with both war neurosis and traumatic neurosis, repression is the central psychological defense against both anxiety and libidinal gratification. Freud rejected the idea that war neurosis is physiological or organic. Freud felt that the defenses of the ego are functional and that they are created by the structural mind of the individual. Freud later referred to this repression as being mental in nature (Freud, 1918). It seems evident that while Freud shifted his clinical and theoretical focus to notions of unconscious libidinal conflict he did not surrender the idea that adults experiencing environmental trauma would also manifest neurosis.

In 1894, Freud published The Neuro- Psychosis of Defence. Freud, at this time, noted that extreme stressors in the environment can overwhelm the normal functioning of the ego. Extreme stress can create disequilibrium and a reduction of the ego defenses and coping capacity. Due to the degree of trauma and the lack of experience of mastery over it, extreme reactions can occur when faced with other more minimal stressors. This theme continues in the Interpretation of Dreams (1900). Stress reactions are experienced by the individual as automatic and out of one's awareness or control. Freud indicated in Beyond the Pleasure Principle (1920) that repression is a key response to a traumatic situation allowing the individual to not recall the incident. At the same time, the use of repression also sets up the repetition compulsion as an expression of the trauma. While Freud is discussing this issue of repression and repetition compulsion in the sense of an

unconscious conflict, he does recognize that the same psychological events can occur in adults experiencing environmental trauma. Freud recognized the phenomena of unconscious symbolic repetition compulsion, as being due to the individual's inability to be consciously aware of the trauma. Freud is appropriately credited for having seen the beginnings of these psychological complexities as arising from psychosexual conflicts in childhood. However, in various writings he continually notes that the same psychological dynamics can result for individuals experiencing a traumatic event.

Investigation of trauma and its psychological effects developed during periods of war. Freud wrote regarding the events of World War I. Others wrote building on Freud's work regarding World War II. Grinker and Spiegel (1945) wrote Men Under Stress to explain a soldier's psychological reactions to war and to determine how best to assist them during World War II. These authors utilized ego psychology as a theoretical base and felt that psychological reactions to war were responses to fear. The analysis of these reactions is interestingly similar to those in more recent crisis theory. They defined fear as the emotional response to a stimulus in reality that threatens the individual and is experienced consciously. They believed fear is the expression of losing something one loves. Interestingly, Blicch, Dycian, Koslovsky, Solomon, and Weiner (1992) in studying acute traumatic stress in Israel during the Gulf War, found that 78% of casualties during the time of air raid alerts and actual bombings were "indirect casualties." These casualties were the result of individuals responding to fear and, as a result, suffered heart attacks, used emergency supplies incorrectly, or were injured rushing to safety. Such research supports some of the assertions made by Grinker and Speigel that fear can be at the core of traumatic responses.

Grinker and Spiegel (1945) elaborated that anxiety is the anticipation of danger or a signal to the ego that is a reminder of a past trauma and thus behaves as if the trauma were present. Anxiety in this context is seen as an anticipatory reaction of danger and at the same time a repetition of a past event. This would be a utilization of concepts of automatic anxiety, reacting to an unanticipated occurrence, and signal anxiety, anxiety connected to anticipated events. Both are for protecting the ego.

Similar to emergency response personnel and human service workers in crises, soldiers are asked to suspend their individual self-sustaining needs to accomplish the needs of the group. Grinker and Spiegel (1945) noted that it is this necessary affiliation with the group that allows combat soldiers to function. As long as the group is seen as the milieu that protects and is competent to master the dangers that surround the individual, one can feel secure in the identification with this group. It is when this group is not protective and cannot provide security that the individual reduces identification with the group and becomes overwhelmed by a sense of helplessness and fear in their situation. A similar need and reaction can be seen in the experience of emergency personnel as they often have a strong sense of professional identity and pride in their professional work group.

When identification with the group is depleted and the individual is confronted with the sense of helplessness and fear several clinical pictures may present themselves. Grinker and Spiegel (1945) believed that this is due to the ego's increased need to defend against overwhelming fear or anxieties when continually faced with such dangerous surroundings. To cope with these factors the ego uses methods such as complete denial that one is at risk, or identification with another who is perceived as capable of

keeping one safe or who can influence the environment. The authors note this can take the form of a religious experience and expressions of faith.

Grinker and Spiegel (1945) indicated that in some cases the individual still feels the need for the group, regardless of altered belief in its ability to sustain oneself. In addition, some soldiers still carry superego ideals about their cause and remain with the group. They believe that this leads to hostility and resentment toward the group. Such hostility can be openly expressed or might be redirected toward the self, resulting in depression. If the superego cannot allow for expression of the hostility, one might present with repressed hostility or regression.

The parallels to those who work with at-risk clients are obvious. Often such workers identify with their work mission and the institutions developed to address client needs. As a worker discovers that the group cannot protect the worker or their clients in a fashion hoped for the worker may develop similar symptom reactions as soldiers in the armed services. Grinker and Spiegel (1945) remind us that such reactions are a means of coping with anxiety in face of adversity and that the symptoms are the ego's way of "binding" the anxiety to allow the individual to function in some fashion, and so the ego is not completely overwhelmed. Grinker and Spiegel (1945) believed the neurotic symptoms of phobias, conversion reactions, and psychosomatic presentations in soldiers are all a means of protecting the ego from the anxiety or fear related to the loss of an ability to protect oneself.

The intervention Grinker and Spiegel recommend in (1945) is surprisingly similar to crisis interventions recommended sixty years later. The intervention of meeting with the individual to allow for an increase in insight, to neutralize the ineffective methods of

dealing with the anxiety. This talking permits the abreaction (expression of affects) of anxiety and hostility to modify one's self-expectations (superego) regarding the situation. The meeting allowed the army psychiatrist to support the dependency needs of the individual and to estimate the limit of the individual soldier's tolerance for anxiety. It is the ability to express one's anxiety about the situation, particularly with peers who can understand the anxiety, which is most useful in restoring the individual (Grinker, Spiegel 1945). This intervention process is very similar to the concepts and stages of critical incident stress debriefing.

Similar to Grinker and Speigel, researchers continue to suggest that organizations that are responsible for responding to trauma are also responsible for the protection and management of traumatic stress for their workers. This responsibility must still be balanced with accomplishing the goal of responding to traumatic events. Ursano, Greiger, and McCarroll (1996) developed a prevention strategy for disaster relief programs that is very similar to the suggestions of Grinker and Speigel (1945). This involves appropriate training and experience; strong and concerned leadership; management of meanings; management of individuals' exposure to the traumatic situation; management of fatigue, sleep, and exhaustion; buddy care; natural support systems; education of workers regarding traumatic stress and strain; and finally education of health care providers in identifying stress responses.

Utilizing the topographical and structural model of the mind, Menninger presented a psychodynamic understanding of stress and the individual in 1954. Menninger noted that in the structural model one of the functions of the ego is in coping with internal and external stimuli with the goal of achieving some internal homeostatic

state. Drives must be directed and modified, and a comfortable resolution between the drives, the superego, and the reality system (ego) must be established. According to Menninger, when events disrupt adjustments made, the ego must improvise and create adaptations to these stressors to regain integrity for the internal system. A stressor may be internal or external. It is the defenses of the ego that must protect the individual's sense of integrity.

Menninger (1954) orders these adaptations of the ego from minor to severe. The severity is measured by the ego defenses utilized. The first order involves the more minor stressors and results in a conscious awareness of stress and the use of the secondary defenses such as hyper-suppression, or the heightened conscious effort to control and conceal unacceptable impulses, thoughts, feelings, or actions. Additional symptoms noted by Menninger (1954) include hyper-repression or a concentrated effort to not think about the events of the stress episode. Other symptoms are hyper-alertness (an exaggerated awareness of one's environment) hyper-emotionalism (unusually extra emotional), hyper-kinesis (an increase in general body motion or activity), intellectualization (the person engages in excessive abstract thinking to avoid confrontation with conflicting or disturbing feelings), and minor somatic dysfunction (stomach aches, difficulties with sleep or eating, headaches, etc.). The emphasis of clinical literature at the time of Menninger's writing in 1954 acknowledges environmental stressors as important influences for psychological trauma. Clinical exploration became more concerned with the mechanisms and symptoms the ego uses to protect the psychic structure. In the second order of more severe stressors, the ego, utilizes devices that provide a partial detachment from reality, or the stressor. Avoidance that comes to near phobia,

withdrawal by dissociation, displacement, projection, and reaction formation can all be employed. Menninger finds such devices transient and occurring under stress. If they are adopted as continuing devices of coping, pathology of the individual occurs. If the stressor requires more severe coping devices from the ego, Menninger believed we have entered the third order. This is manifested by violence, convulsions, panic attacks, catastrophic demoralization, and some temporary schizophrenic symptoms.

In the fourth level of ego defense, Menninger believed, the ego is exhausted and semi-permanently damaged. One would recognize erratic, disorganized excitement, both verbal and physical. There would also be incoherent mannerisms and some autistic-like behavior. Extreme apathetic inertia such as mutism and catatonic conditions as well as hallucinations could be present. He noted confused amnesia, disorientation, and gross intellectual defects. Finally, in the most extreme order, Menninger found a complete, all-out, wild, furiously violent mania that results in exhaustion and ultimately death.

In this tradition, stress from an external reality is seen as creating a dilemma for the ego to create mental homeostasis or return to a homeostatic condition for the functioning of individual's internal structure. This tradition focuses on devices and defenses of the ego to protect the individual's integrity and the course that leads to the breakdown of the individual's ego capacities. Originating in attempts to understand war trauma, analytical writers utilizing drive, topographical, and structural theory appear less concerned about what the stressors might be, any other moderating conditions, or attempts at coping the individual might experience or utilize. It is their concern primarily to map out the functions and the deterioration of the ego and its defense mechanisms.

In summarizing dynamic theories related to psychic trauma, Krystal (1988) identified two basic forms: the infantile form and the adult form. In the adult form, a traumatic event initiates surrender to the inevitable danger and consists of moving from anxiety to a catatonic state, aphanesis, and to what he called a “psychogenic death.” He noted the symptoms of an overwhelmed ego as numbing of the self-reflective functions, followed by a paralysis of all cognitive and self-preserving mental functions.

In common with infantile trauma, Krystal believed adults can present with a dreaded expectation of the return of the traumatic state. Further, this dread can lead to; regressive states such as dedifferentiation, the reduced or loss of one’s ability to distinguish between self initiated sense of oneself from those of others; deverbilization, the loss of ability to express oneself verbally; somatization, the expression or conversion of affects into physical symptoms; anhedonia, the inability to experience pleasures from activities that usually produce pleasurable feelings; a disturbance in affectivity or ability to acknowledge or experience a full range of affects; impairment in the ability to tolerate affect; and a sporadic continuance in the constriction of cognitive functions.

Crisis Theory

In a review of crisis theory and its origins, Rapoport (1970) noted that crisis theory had its beginnings in two movements dating back to the early 1940s. She indicated that one movement examined response to cataclysmic events. The most often cited of these studies was conducted by Lindemann, in 1944, after he and a team of psychiatrists responded to the disaster of the Coconut Grove fire in Boston. During the early days of World War II, a major fire struck the Coconut Grove nightclub in Boston, Massachusetts.

On the night of the fire, November 28, 1942, the club had approximately 1,000 occupants, many of whom were people preparing to go overseas on military duty. A match, lit by an employee while changing a light bulb, has been considered the possible cause for this tragic fire, which took 492 lives. This is remembered as one of the worst night club disasters in history.

Lindemann (1944) reported the observations made in psychiatric interviews of 101 individuals. He reported the reactions to loss in the following groups of subjects: patients who had lost a relative while in treatment: relatives of patients who had died in the hospital: bereaved disaster victims of the Coconut Grove fire in Boston: and relatives of members of the armed forces. Lindemann identified somatic reactions to grief, such as sighing, a reported lack of strength, exhaustion, loss of appetite, and general lethargy. These symptoms are strikingly similar to those noted for adjustment disorders and post-traumatic stress in today's Diagnostic and Statistical Manual of Mental Disorders (4th ed.). Similarly Lindemann went on to note symptoms such as a sense of feeling one is not connected to reality, and feeling withdrawn and unconnected from other people. He noted a preoccupation of images of the deceased similar to the notion of intruding thoughts reported in the DSM IV.

Lindemann (1944) identified other symptoms such as feelings of guilt and ruminating about what one could have done differently to change the outcome of the events. Some persons after crises, he reported, are restless, irritable, and report feelings of agitation and a pressured need to discuss the loss. Lindemann summarized these symptoms as somatic distress, preoccupation with the image of the deceased, guilt, hostile reactions, and a loss of usual patterns of conduct. Lindemann observed gender

differences with grief. Primary in this regard is the suppression of feelings and the showing of remorse combined with an inhibition to discuss events by male subjects. It is interesting how later research in trauma upholds these observations so well.

Lindemann (1944) also reported instances of distorted grief such as hyperactivity without a sense of loss, the acquisition of symptoms belonging to the last illness of the deceased, and a marked alteration in relationship to friends and relatives. He also identified hostile reactions against specific persons, particularly those perceived to have failed to take preventive action to avoid the trauma, such as police officers, doctors, or rescue workers. Lindemann identified near-schizophrenic states of some individuals or lasting loss of patterns of social interaction and activities that are detrimental to their own social and economic welfare.

Lindemann (1944) was among the first to suggest a brief crisis intervention, which is similar to today's crisis intervention strategies, yet he is given little recognition in today's literature on critical incident theory. He suggested a brief intervention that educates the individual as to psychological and physiological reactions to such traumatic events and facilitates and shares in the work of grief that promotes someone "extricating himself from the bondage to the deceased and finding new patterns of rewarding interaction." Caplan (1964) applied this research in institutions treating child immigrants to Israel who had experienced trauma in war. Caplan's focus was on remedial actions for both individuals and the staff that dealt with them. Parad and Parad (1990) applied similar interventions to a host of populations similar to the proliferation of applications of critical incident debriefings currently.

The second developing theory concerned brief intervention. In the beginnings of psychotherapy, brief treatment was known as assessment and referral, and long-term psychotherapy was the accepted practice (Rapoport, 1970). Building on the developing theories of psychology of Otto Rank (1932) the functional school of social casework theory was developed. Perlman (1957) best articulated what is known as the “problem-solving approach” with clients in Social Casework: A Problem Solving Process. This method engages a client assessing a specific problem and developing strategies of solving present day issues. The most desired outcome of such interventions was still to engage the client in long-term psychotherapy.

As can be seen, those who use crisis intervention theory believe individuals have a reaction to stress-inducing stimuli and subsequent responses to events in this process are geared to some form of restorative coping. Underlying this theory is the assumption of a homeostatic state prior to the experience of stress. Rapoport (1970) noted that such concepts are the result of the theories of “stress” evolving under the influence of the concepts of engineering sciences and the physiological sciences. Concepts from these sciences were adapted to the psychological sciences. Rapoport noted it is believed that the potential for change is a result of the adaptation of the personality to some sense of “disequilibrium” (p. 273). She further challenged the notion of a homeostatic personality by interweaving concepts from stage theorists, such as Erikson, who explored the concepts that the personality is in flux and that crisis in development is the more natural order of things and that people can quite naturally master these crises.

Rapoport also acknowledges the public health movement as contributing to crisis theory, offering prevention strategies rather than simply reactive ones to trauma. In this

model the emphasis is on health promotion, case findings with early diagnosis and treatment, disability limitation, and rehabilitation.

In summarizing the crisis theory of Rapoport, individuals strive to maintain a sense of equilibrium by utilizing various adaptive maneuvers and problem-solving strategies to achieve a sense of basic need fulfillment. In one's life, events occur that disrupt a sense of homeostasis and result in a sense of disequilibrium. The individual engages a personal problem-solving repertoire to restore homeostasis. A state of crisis occurs when these habitual coping strategies do not restore homeostasis and the person remains in a sense of disequilibrium. The stress factors the individual is exposed to require coping mechanisms foreign to the individual. Unconscious unresolved crises of the past may resurface at this time, becoming an extra burden for the individual. Resolution of the current stressors may also assist in the resolution of past issues (Rapoport,1970).

Similar to cognitive theories, Rapoport (1970) noted that in crisis theory one may identify characteristics displayed or reported by the individual in crisis. She reports emotional signs of high anxiety, tension, shame, guilt, and depression. Persons are often confused in their cognitions and Rapoport indicated the individual, "is bewildered and literally does not know how to grasp and understand what is happening to him, how to evaluate reality, or how to anticipate, formulate, and evaluate the outcome of the crisis and the possibilities for problem solving" (p. 281).

Rapoport (1970) noted phases that characterize the crisis. In the initial phase one responds with a sense of helplessness. One often implements habitual strategies of coping and if these are not successful there is an increase in feelings of ineffectiveness. At this

phase three things may occur: “(1) the problem is altered or solved; (2) there may be a redefinition of the problem or a reorganization of expectations and goals in order to achieve need satisfaction in line with reality possibilities; (3) the problem may be avoided through the need resignation and relinquishment of goals” (p. 281). The similarities to Latack’s (1986) control, escape, and symptom management as a means of coping are striking.

Rapoport (1970) explained that there are both adaptive and maladaptive forms of coping. Maladaptive coping involves disorganized activities that attempt to discharge inner tensions, and that are not reality oriented. Such methods might include magical thinking, fantasy, avoidance, and delay. This would seem similar to Latack’s (1986) identified category of escape as a coping mechanism. Adaptive coping mechanisms occur in a process of three general stages. The first is a correct cognitive perception of the situation through knowledge. The second is the management of affect through awareness feelings and appropriate verbalization leading toward tension discharge and mastery. The third is patterns of seeking and using help with actual tasks and feelings by using interpersonal resources. Critical incident stress debriefing emphasizes the same tasks as crisis intervention theory. This creates continuity for critical incident theory with roots in trauma theory and results in critical incident interventions being an extension of crisis intervention theory.

Rapoport (1970) explained the phases of the intervention for those instances in which a brief intervention is required. She noted that the intention of the intervention is not to work through pathology, but to be restorative. This involves “cognitive restructuring and unlinking the present context from past concerns” (p. 290). In the initial

interview one should engage with the client and should set mutually set and agreed upon goals resulting in a contract for the intervention. Rapoport suggested that this initial treatment phase should facilitate a cognitive understanding of the experience of the crisis and the meaning the client gives to the crisis. This reduces unrealistic expectations of the client or regressive transference. A major goal of the intervention is the reestablishment of the clients' sense of autonomy. To facilitate the hope and belief of the client's competence it is suggested the intervention be time limited. One needs to keep in mind that the intervention is not a cure but rather the "restoration and enhancement of functioning" (p. 295).

Later Ell (1996) agreed with Rapoport in spelling out the phases of crisis intervention as: establishing rapport: eliciting the dimensions of the problem or major concerns of the individual: exploring affect related to the crisis: exploring past coping skills and strengths: generating alternate solutions or resources: restoring cognitive functioning particularly concerning self care: and arranging for and implementing follow up. Kirst-Ashman and Hull (1995) in describing a generalist approach to crisis intervention also identified four similar phases to crisis intervention. The first is the assessment phase including: an assessment of what brought the person to the intervention at this time, how the client views or understands the crisis, an assessment of who else is supporting the individual or how isolated the individual is, how the individual has solved or coped with such crisis experiences in their past, and an assessment as to the suicidal or homicidal potential of the individual. The second phase involves planning. Planning assesses to what degree a crisis has interfered with the individual's functioning. If difficulties are assessed a course of action is created to address these issues. The third

phase the authors call intervention. They recommended four elements in this phase: helping the individual gain an intellectual understanding of the crisis, helping the individual bring into the open any present feelings to which the individual might not have access, exploring current coping measures and the suggesting alternative means of coping, and establishing or reestablishing social support systems for the individual. The fourth phase in this general intervention is anticipatory planning. This reviews what has been learned in this intervention as a whole, how to implement plans for future crises, and assesses and arranges for any follow-up needs (p. 247-249).

Rapoport (1970) recommended that crisis-oriented goals be specific and involve the relief of symptoms and that they restore functioning that existed prior to the present crisis. Other goals should be to understand the precipitating events that contributed to the state of disequilibrium and to identify measures one can take for remediation. Ell (1996) recommended the following goals for crisis intervention: returning someone to their former level of emotional, cognitive and behavioral functioning: setting up a referral network: mobilizing the individual's coping skills: providing psychological education: and facilitating communication between the individual and others or organizations involved with the individual. Again the goals identified by Rapoport (1970) and Ell (1996) are very similar to the goals of critical incident debriefing.

Rapoport (1970) acknowledged that the role of the worker in the intervention is active, directive, and authoritative with the goal of the clients maximizing their capacity for autonomous action and decision making. The imparting of knowledge, advice, and anticipatory guidance strengthens coping mechanisms and develops new coping skills. Clients gain the ability to rehearse for mastery of possible future challenges. These

statements assume that this is an intervention designed for those with a previously rewarding level of functioning and previously resilient coping mechanisms. Finally, Rapoport acknowledged that the limitations of such an intervention involve those persons who present as schizophrenic or with personality disorders. She recognizes that many of the symptoms for these individuals are well-organized adaptations to the personality disorder as opposed to being reactive to the crisis.

In an overview of the common characteristics of crisis intervention, Hillman (2002) stated such interventions should involve the development and maintenance of a clear and specific focus. The role of the person conducting the intervention is an active one. Hillman (2002) noted that this type of intervention is very time limited and that the worker is responsible for maintaining an awareness of the time limitations. The crisis worker should encourage individuals to use time outside of the intervention for self-care, self-help, or other out-of-intervention support toward restoration. She identifies that crisis intervention evaluation and intervention are intertwined and are a feedback loop. Hillman (2002) insisted that in crisis intervention there must be flexibility in the use of interventions and time. There should also be a planned follow-up session to the intervention. Most interesting is that the designs of crisis interventions assume that the person presents for restorative intervention due to a sense of disequilibrium. The claim of critical incident intervention is that similar interventions can be utilized to prevent or limit such disequilibrium. It is considered not only restorative but preventive.

Much of crisis theory by authors such as Lindemann (1944), Caplan (1964), Parad (1990), and Rapoport (1970) use concepts of crisis similar to those presented in the cognitive theories of stress presented previously. It is interestingly similar to the

presentation and development of treatment of traumatic stress and critical incident stress. Again it is striking that such related theories are not cross-communicated between clinicians and researchers.

Narrative Theory and Crisis

More recent psychoanalytical thought has introduced the notion of metaphors that guide our thinking about the experiences of individuals. One new metaphor leaves the structural mechanistic metaphor of Freud and employs one of narrative. As of yet, this theory has not been applied to critical incident stress. It is presented here as a theory that could be utilized as a means of informing and understanding critical incident stress. It may offer a new direction in integrating trauma theory, critical incident stress, and the cognitive theories of stress.

Pepper (1942) wrote that we as humans create meaning about our world through the use of metaphors. Sarbin (1996), building on these concepts, suggested that the root metaphors that guide scientific inquiry are animism, mysticism, formism, mechanism, organicism, and contextualism. Sarbin suggested that social science inquiry into human behavior adopt the metaphor of contextualism represented as personal and shared narratives (p.7). This metaphor suggests that a person's life and actions are the result of creating meaning about oneself or a personal self-narrative. One's personal life can be thought of as a story that gives shape to and organizes ones' life. Howard (1991) posited that narratives "slice the world up (or urge us to view the world) from a variety of different perspectives, points of view, and value positions, and thus construct multiple frames of reference through which reality might be grasped" (p. 191).

Mishler (1986) understood narrative to be the “natural cognitive and linguistic forms through which individuals attempt to order, organize, and express meaning” (p.106). According to Borden (1992), these stories about one’s self, which organize our meanings about our living and who we are, need to demonstrate coherence, cohesion, and a direction or movement over time. Sarbin (1996) suggested that in creating a narrative about oneself, one is always the central figure. Once the self-narrative is begun the individual sets out to experience those around him or her to either affirm or to negate the created self-narrative. Self-narratives, then, are negotiated in the context of other narrative stories and can be adaptive to these new influences on one’s personal narrative. Gergen and Gergen (1986) saw the personal narrative as the unconscious, preconscious, and conscious stories of one’s life created to organize one’s experiences and to make sense of life events.

This theory states that people are constantly trying to create meanings about their experiences. We are all engaged in the process of creating a story that creates a sense of ourselves as having cohesion. Palombo (1992) defined self-cohesion as “the experience that results from the establishment of a coherent personal and/or shared set of meanings or a narrative” (p. 260). Self-cohesion, according to Palombo, reflects a sense of intactness, of wholeness, and of vitality of the individual’s inner life. Palombo stated that this sense of self-cohesion “is the narrative that is constituted of the set of coherent systems of meanings that has been acquired during development” (p. 261).

Gergen and Gergen (1986) also suggested that narratives create a story about one’s current well-being and point to a range of potential outcomes. They create a valued condition now and for the future. They distinguish three fundamental narrative

possibilities. The first is the progressive narrative that tells of a movement toward a goal condition. An example might be that if you are polite to others, you will have no enemies. A narrative involving politeness leads to a goal-valued condition of having no enemies. Stability narratives are the second form, where no change is observed relative to the goal condition. A self-statement such as, it does not matter how much you try, you will never amount to much, is such an example. The goal condition is to amount to something, yet one can act and still not achieve the goal state because the narrative story spells out the impossibility of reaching the goal state. The third form of narrative is the regressive narrative that tells the story of movement away from a goal condition. Examples would be: I give up; my goal state will never occur. Or I will destroy myself or my progressive narrative. The authors noted that often these narrative forms are interwoven and interrelated.

Cohler (1982) saw the personal narrative as “the most internally consistent interpretation of the presently understood past, experienced present and anticipated future” (p. 207). The individual needs to experience such life narratives as having congruency and cohesion. According to Borden (1992), it is assumed that in developing a narrative, “The processes work to preserve a sense of coherence and continuity in identity and self, which are seen as critical determinants to mental health” (p.136). In applying the ideas of Gergen and Gergen (1986) to Cohler, Borden suggested three types of responses to a traumatic or crisis event. The first is a progressive account incorporating a movement toward coherence and continuity in one’s sense of self and life experiences after the event. For example, hardships occur but we must learn about ourselves and accept limitations as we continue to strive towards a valued goal state. The second is a stability

account in which no noted significant change in the sense of the self and life experience occur after a significant event. A narrative example would be when one claims that an event did not surprise them, it was to be expected, and he or she plans to continue living in the same fashion. The final form of narrative is the regressive account that moves away from coherence and a goal state or life experience after the event. This narrative says, for example, I will never be able to recover from this trauma and I do not think I can go on living.

In this theory, trauma or crisis is seen as a threat to the continuity of a personal narrative. To maintain the sense of coherence and order one must incorporate the event into a revised life story that makes meaning of the past the current facts, and includes the possibility of moving from regressive accounts to progressive narratives that provide self-coherence in light of traumatic experiences. Borden (1992) believed that, after experiencing unexpected events one must incorporate the event into one's progressive life narrative. Telling and hearing stories serves to organize meaning and restore the narrative, although stories are likely modified or adapted from the narrative prior to the event.

Considering this thinking regarding trauma, a critical incident or crisis event would be a disruption in the self-narrative. Palombo (1992) understood that stress or trauma can be understood as the "discomfort that results from the failures to integrate overwhelming experience that leads to incoherencies that are experienced as feelings of meaninglessness" (p. 261). Factors that contribute to the incoherent narrative might be, "interferences to the conduct of a dialogue, discordance between shared meanings and personal meanings, conflictual motifs operating within the narrative, or failures in the

integration of experiences” (p. 261). Symptoms of critical incident stress after a critical incident might just well be the failure to integrate an experience, creating a confused incoherent sense of oneself. A critical incident could be understood as an experience of one’s environment that leaves one with an incoherent sense of oneself.

Themes in working with narratives for clients who have experienced a trauma have been conceptualized by various researchers. Stern, Doolan, Staples, Szmulker, and Eisler (1999) looked at the reactions of family members when a close relative was diagnosed with a severe mental illness. They noticed in their research that narratives could be of two forms. The first involved traumatic narratives that were considered restitution narratives. These narratives were organized around adjusting to the diagnosis, seeing it as a challenge and seeing a future even with accommodations to previous narratives about the future. The second theme was one of a chaotic narrative. A narrative noted to be with little structure and one with many internal conflicts.

Polkinghorne (1996) noted clients recently diagnosed as HIV positive would develop one of two narratives about their diagnosis. The first was the victimic narrative in which the client felt life was out of their control and that their past and future were under the control of others. The second narrative is the agentic narratives in which the individual came to the notion that they could still take control of their own lives despite the trauma of their diagnosis.

Sarbin focused on the self-narrative possibilities of perception being modified by the narratives of others. In the presence of others’ narrative, one might find an affirming narrative adaptation that can restore one’s sense of self. As Borden (1992) noted, it is in the context of telling and hearing stories that regressive narratives can be adapted to ones

that are more progressive. In this narrative theory, in the intervention of debriefing, the debriefer is one who is present to hear, tell or offer an alternative narrative such as psycho-educational material. One function of the debriefer is facilitating the creation of a restorative narrative which would contribute to a sense of coherence for the individual. For example, an individual can be informed that the disturbing symptoms they experience, which disrupt her or his sense of coherence, are not unusual responses to traumatic situations. Just this much information can often supply a new context that can be restorative to the individual's sense of oneself as coherent and cohesive. In fact, it is likely that the act of debriefing or sharing narratives is interactional between those being debriefed and those debriefing. Both enter the action of debriefing with personal narratives that will be changed, hopefully, in a more coherent and cohesive fashion.

In conceptualizing a crisis intervention therapy, Borden (1992) suggested assessment involves an understanding of narrative experiences. Attention is paid to the construction of a narrative truth that is or is not providing a truth in the service of coherence, continuity, and understanding. Less important is the corresponding historical narrative. The focus involves examining whether a narrative would have qualities for the individual in terms of creating a progressive narrative and have created the same qualities for the narrative in the narrative past, present, and future. The interventionist is called upon to facilitate an understanding of how the individual might have created a personal narrative in response to a critical event considering the pre-event narrative. The interventionist should then draw upon the individual's inner potential resources as a means of mediating the discontinuity created by the event. Borden (1992) suggested such

resources to be other significant life events, enduring personal perceptions of self and others, personal philosophies and beliefs, and previous or current plans and intentions.

In discussing crisis intervention and narrative theory, Mitchell (2003) posits that narratives have both an internal and external coherence. She finds that contradictions within one's own self narrative can lead to a lack of internal coherence and be disruptive for the individual. Further and external disruption of narrative can occur when the individual's self narrative is in contradiction in an irresolvable fashion with other's accounts of the same events. An example might be when a child welfare worker finds that the events that led to an incident with a client was out of their control and then a review panel finds that their work was inadequate and could have prevented these events. The personal internal narrative is in conflict with external narratives. Most importantly, Mitchell (2003) notes that in a therapeutic setting it is in the relationship with another that these conflicts in narratives can be resolved. She notes that this is due to narratives being dynamic, interpersonal, co-constructed in the interaction between the narrator and the listener.

Most crisis and debriefing interventions focus on the meaning making of the individual involved in the crisis and move to a remembrance or normalization process of the previously existing strengths of the individual for coping with adversity and creating progressive self- narratives. These concepts of narrative and narrative reactions to trauma, crisis, and critical incidents seem to strongly explain how one might adapt or begin to cope with such a crisis.

Human Services and Work Stress

The transactional theory of stress appraisal and coping research is often the base from which more refined stress research is developed including that of work-related stress. Most research literature no longer focuses on what causes stress but rather on how stress is moderated or how one copes with stress. This is also true in the arena of work-related stress. The study of work-related stress has a long history and an immense amount of research done on it. Most studies of work stress identify four realms of influence. It is typically within these four realms that research is focused. The realms are: the perception of stress and means of coping at the individual level: the influences of the general socio-cultural environment: those resulting in the interaction of the individual and the organization structure: and demands of the actual work environment. While it is typical that the realms overlap and are interactive it is the interest of this study to examine primarily the first of the four realms. This is the perception of stress and means of coping of the individual.

An increasing concern regarding the impact of working conditions on employee's health and well-being has led to an increase in the energy devoted to the investigation and knowledge regarding work-related stress for the individual (O'Driscoll & Cooper, 1994). According to Dewe (1993), very little is still known after thirty years of research on work stress as to how a person perceives, copes, or manages work-related stress. Locke and Taylor (1991) however, strongly stated that failure to perceive stress or implement constructive coping behaviors or stress management can lead to dissatisfaction, feelings of disengagement from the job, reduced job performance, and significant decrements in a

sense of well-being. Locke and Taylor noted prolonged maladaptive coping can lead to the chronic debilitating form of stress known as burnout. In the study of human service delivery much of the research has been directed towards the phenomena of burnout. Maslach (1981) devised the Maslach Burnout Inventory, just for social service providers. Maslach offered a tri-component picture of what such burnout might look like. He described a multidimensional construct involving feelings of emotional exhaustion, a sense of failure, and a tendency to depersonalize clients.

Cherniss (1980) reported on material gathered in a study related to the process of worker burnout for those in human services organizations. He used a method of a longitudinal study involving extensive interviews with beginning professionals in law, public health nursing, mental health, and in high school teaching. In this exploratory study in the field of work stress for those in human services, he tracked the process of twenty-eight new professionals over the first several years of their careers.

Cherniss (1980) noted that most people find their work to be an important aspect of their lives and a major source of self-esteem, meaning, and identity. He found that professionals are invested in seeing themselves and their profession in a positive and meaningful light. Cherniss found that experiencing oneself as professionally competent and its association with self-esteem to be one of the strongest and most evident concerns of the professionals studied.

Another theme noted by Cherniss (1980) was that workers in human services often report a strong correlation between a sense of competency and job satisfaction, and their perception that they were actually effective in assisting those they were there to help. In this study of job satisfaction in mental health programs Cherniss found that

having clients fail to progress was a major source of job dissatisfaction. Cherniss noted the significant difference between human services work and other professions in that if the worker makes a mistake the client being assisted can also often be negatively affected.

Cherniss (1980) described this sense of attack on one's competence as the "psychology of falling short" (p. 27). He defined this as the situation in which the professional cannot respond adequately to the needs or problems that a client might present. Cherniss reported the narratives of professionals who not only feared they were falling short but believed they were falling short of measuring up to perceived professional standards. A sense of inability to assist their clients in a fashion they felt necessary led to feelings of inadequacy and ineffectiveness. Cherniss believed that this is an unavoidable experience in the field of human services. He observed that whether the professional appraised the shortcoming as a result of one's own inability to respond due to a lack of awareness, skill, or knowledge; a shortcoming in supportive organizations; or an unwillingness on the part of the client to utilize assistance, all workers were left with the feeling of having fallen short or of having been somehow inadequate.

Cherniss (1980) found several general themes on how professionals attempted to cope with this sense of inadequacy. He observed that some developed a strong need for reassurance from others, particularly from colleagues. He also noted some responded with a clearer need for more structure and organizational guidelines. Others responded by increasingly concentrating on being "overly scrupulous in their work" (p. 31). If these coping mechanisms failed, Cherniss noted these professionals became increasingly embarrassed, confused, and perplexed. In concluding his remarks about this sense of need

to see oneself as competent, he stated one should recognize that such feelings of inadequacy will resurface through out a career and that one must come to terms with the existential reality of the limitations of one's ability to intervene. One must continually, in professional practice, make the best decision available that is likely to succeed "and hope for the best" (p. 37).

Cherniss (1980) found that an additional source of stress results from what the client brings to the human service setting. He observed that many new professionals look for a sense of gratification and affirmation from their clients and failing to receive this, become frustrated. Cherniss identified the shock for early professionals that clients will not always gratify the needs of the professional. He noted that activities such as being critical of the worker, being disappointed when unrealistic expectations are not met, lacking motivation or the ability to change, and attempting to manipulate the provider are often met with a sense of shock or even resentment of the client. Cherniss, however, failed to identify these as survival skills of clients who often come from environments in which such qualities are a necessity. Of particular interest to this study were the experiences of early professionals with clients who had performed what were perceived as heinous acts towards others. He noted that clients who had murdered, raped children, or committed other terrible acts, caused significant stress and strain for workers.

Cherniss (1980) identified some general themes about how individuals began to cope with such stress. He observed that some participants moved from a sense of personal involvement to a sense of alienation. Some participants attempted to take a more "objective" and "professional" stance towards their work. Cherniss reported, "They forced themselves to identify less with clients and to empathize less with client's worries

and concerns” (p. 113). They did not take work home and they looked to nonworking activities for psychological fulfillment. Cherniss noted some detachment from the helping role. He posited two types of detachment: One was a positive attempt to increase role effectiveness. The more negative was a means of self-protection from emotional experiences.

Cherniss (1980) also noted that many psychologically withdrew from the job. He also observed positive patterns such as developing outside interests and the decentering of the job as the major source of self-worth or esteem. Some decentered in self-enhancing activities while others turned to more self-destructive behaviors such as drinking, drugging, and sexual acting out. Most significantly, Cherniss found shifts in attitude as a major means of coping. He noted that lowering one’s hopes and aspirations commonly reduced the stress of concerns about competency. He reported that minimizing personal responsibility and shifting self-esteem formulation to other life arenas were extremely positive attitude shifts that can buffer the professional from being overly dependent on work as a means of gratification and life meaning. Cherniss acknowledged the theory that attitudes contribute to the maintenance of psychological equilibrium. They provide meaning and order that can enhance and protect self-esteem or they can do the opposite. Cherniss believed attitudes can enhance or alleviate fear and anxiety. Note that many of the results of Cherniss’ study on professional burnout in human services organizations focus on the individual's appraisal of self and the stressor. The study also includes much information on the appraisal and interaction between the professional and the working systems in which they involve themselves. Cherniss did explore the additional work stresses of assaults on autonomy by the organizations worked in particularly when

experienced as adversarial to professional ideals. Further he identified the double-edged sword of colleagues who increase stress when nonsupportive and yet mediate job stress when supportive.

Cherniss' work is often quoted in literature on burnout and social services. The completeness of his work is very evident and useful. He provided some direction for professionals as they assess their professional well-being. Of particular importance to this study are two major findings about such workers presented. The first is the identification with the profession, and the hopes and aspirations that participation in this professional group will contribute to an important outcome and protect the professional and others from some form of harm. He noted the disruption for the worker if this identification with the group or with the cause begins to fail, particularly if the institutions or groups the worker identifies with fail in some way. This is very similar to Grinker and Spiegel's (1945) studies on war trauma. They showed that if the individual human services worker experiences an inability to protect or serve for various reasons he or she can become disenchanted with the identified profession, institution, or group. The illusion that such an idealized group can still allow for tragedy produces an anxiety state or traumatic reaction (Linton, Webb, & Kommer, 1993).

Secondly, Cherniss identified various personality features and attitudes of human service workers. These aspects of the individuals create a profile similar to rescue response workers. Linton (1995) described emergency response professionals as having a personality profile of being "prosocial." These are individuals with a highly consistent desire to help others regardless of circumstances. Linton believed they are persons with a capacity for vicarious emotional responding with strong concern for the plight of others

and a desire to assist. Linton characterizes such individuals as inner-directed, obsessed with high performance standards, easily bored, highly dedicated, having a strong desire to be in control of themselves and situations, and having a need to be needed.

Linton's (1995) description of the personality of emergency response workers is similar to the human service workers personality reported by Cherniss (1980). Linton (1995) also reported that it is the vicarious emotional responding trait, the concern for the welfare of others, the need to be in control, and the needing to be needed that makes emergency response persons susceptible to great upset when experiencing a critical incident. It seems, then, that if human services workers have a need to identify with an institution, group, or profession combined with the personality traits of vicarious concern, need to assist others, a need to control circumstances, and a need to be needed, then they are susceptible to experiencing great upset or critical incident stress when the identified-with group fails to protect in a critical fashion or when they are involved in a critical incident.

Cherniss' (1980) observations are limited to burnout or chronic stress for human services workers. The scope of this study is more focused on the specific work stressor of a child welfare worker directly experiencing a critical incident or a vicarious experience of a client experiencing a tragic event. Cherniss touched on this issue with professionals who dealt with violent offenders but did not explore it in detail. Further, Cherniss focused on early professionals and their work identity issues. One wonders, what are the effects of such stressors on even more experienced professionals to this more specific stressor? Cherniss is to be congratulated on his focus of documenting coping

skills, both of a functioning and destructive nature, without judgment of the individuals. His suggestions for coping can be very useful for those working in human services.

Since the work of Cherniss (1980) and Maslach (1981), researchers have begun to examine the coping mechanisms of individuals in relation to stress, with great emphasis on moderators of stress. Such research attempts to understand that not all workers, exposed to similar stressful conditions, react as strongly to work stress or do not reach the point of burnout. Many researchers have focused on factors that might intervene or moderate the experience of stress. Parkes (1990) noted that personality traits such as internal locus of control led persons to take more personal, active, problem-solving strategies to deal with stress. Parkes reported that extroverts tend to engage in activities thought to be more effective in coping. Finally, in this area of personality, Parkes identified type A personalities as engaging in more immediate and personal coping styles.

Koeski and Koeski (1989) have explored the role of attitude in relation to burnout. This study arose out of the acknowledgment that the tri-component model was vague and limiting in its understanding of stress, burnout, and coping. In agreement with Dewe (1993), they felt that such measures and definitions had to be reassessed. These researchers also felt that research based on these conceptualizations failed to measure or account for moderators of stress particularly in the arena of the transactional or perceptual processes of stress. In rehashing some of these concepts, these researchers found that emotional exhaustion, rather than being a component of burnout, was, in actuality, a means of coping with stress. They found that often social workers, rather than being burned-out, were actually utilizing their sense of commitment to the work, and support networks as a means of coping and hence, while exhausted, were not, per se,

burned-out. They were still committed, did not wish to leave the profession, and did not depersonalize clients. These are other major components of burnout according Maslach. Like Dewe, these authors wish to reexamine some of the established concepts of work stress as it applies to social services.

Himle, Jayaratne, and Thyness (1993) have studied the effects of emotional support on burnout, work stress, and mental health for both American and Norwegian social workers. The positive and negative effects of support from supervision and coworkers have reinforced the past studies on the role of support and stress. It can work for you or against you depending on whether the support group presents as supportive with optimism for change that can work for you. If the support group simply commiserates with one's sense of disempowerment it can contribute to a spiraling sense of burnout and disempowerment. Current research trends are directed at a more precise understanding of the concepts of stress in the human services work field and a greater understanding of what moderates stressors in a way that prevents workers from experiencing the detrimental long-term and short-term effects of such work stress. The debate regarding whether it is the perceptions of the individual create stress or that the environment that creates stress is being seen less as an either/or question. In fact, the research process parallels the transactional theory of stress. As one perceives stress, one way of coping is to examine the organization and the individual coping and see how they are interrelated. It is necessary to see the impact one has on the other. Research should also reflect the examination of the interaction between organizations and individuals should be reflected in future research designs.

The importance of evaluating the literature on burnout with human service workers is to differentiate between critical incident stress as an acute stress reaction or a cumulative or chronic one. It would appear that chronic episodes of stress in the work setting would lead to a sense of burnout (Cherniss, 1980; Linton, 1995; Mitchell, 1983). Critical incident stress is defined as a significantly different type of acute stressor. Linton (1995) described such critical incidents as different from the chronic stress of emergency responders in that they involve extraordinary professional events that can cause exceptionally strong emotional reactions. The symptom presentation, then, of a human services worker after an extraordinary professional event has a greater likelihood of being an acute stress reaction as opposed to being the result of chronic stress leading to burnout (Mitchell, 1983).

A Summary of Literature and its Relationship to this Study

Interactive cognitive models of stress, trauma theory, crisis intervention theory, post-traumatic stress disorder models, narrative theory, and critical incident stress models of intervention all have contributed to the understanding of critical incident stress and debriefing. Various disciplines parallel each other in their treatment of crisis interventions, yet little interaction in the literature exists. But perhaps most important are their similar themes.

The first theme is that the experience of the stressor is an interactive process between an event, the individual's appraisal of the stressor, and the environment's response to the individual's attempts at coping with what is appraised to be stressful. A second theme is that individuals, who previously exhibited a degree of mastery over their

environment, when exposed to a traumatic stressor can present with a failure to utilize past coping mechanisms and can present with a cluster of psychological and physiological symptoms. These symptoms appear to have similarity across theoretical disciplines and between researchers and clinicians.

A third major theme is that a restorative, brief intervention can facilitate the return of an individual to a previous healthy level of functioning. Across disciplines, this method usually includes a brief intervention with a clear, time-limited contract that has several goals. The first is helping individuals express the experience of the incident at their level of involvement with the incident, what they thought about that, what they felt about the incident, and what bodily sensations they may have had or might still be experiencing. This is followed by an attempt at cognitive restructuring through an educational process that aims to normalize the experience of symptoms, provide reality-based education regarding the event, and offer some form of rehearsal for future coping, whether predicting possible future reactions or providing education and resources for coping with the trauma.

Finally, in the arena of work stress we can see a continued application of these concepts for those whose work roles have exposed them to trauma or potential trauma. Vicarious or secondary critical incident stress has taken on a research life of its own. However, as noted in the review, little research with controlled studies has indicated whether such interventions are useful in the coping of human service workers. Researchers like Hobbs, Mayou, Harrison, and Worlock (1996) call for more studies with control groups and the random assignment of participants to better substantiate that such debriefing does not increase the anxiety of individuals, let alone have no better results

than no intervention at all. This study addresses this gap and tests whether a critical incident stress debriefing utilizing the common elements of the various traditions does facilitate coping with such critical incident stress and reduce perceived symptoms of stress for such human services providers.

Theoretical Framework and Assumptions of this Study

This study utilizes trauma theory, crisis intervention theory, narrative theory, and critical incident theory to create a multi-theoretical lens for this study. The first two theoretical statements or assumptions of this study are based on critical incident stress theory. First, child welfare workers present with personality styles similar to other emergency responding professionals. They have: a desire to be helpful to others: a capacity for vicarious emotional responding: emotional concern for others and their plight; and a tendency to be inner-directed. These workers tend to be dedicated to their profession and their clients, and demonstrate a desire to be in control of situations and themselves (Cherniss, 1980; Linton, 1995; Mitchell, 1983).

Second, due to this capacity for sympathy, empathy (vicarious emotional responding), and the ability to experience identification and introjection, child welfare workers can experience critical incident stress when they encounter a professional event that is extraordinary. The resulting affects contributed to by sympathy, empathy, identification, and introjection can overwhelm their ego or sense of self. This is differentiated from chronic stress and worker burnout by the extreme and crisis oriented nature of the professional event (Cherniss, 1980; Linton, 1995; Mitchell, 1983, Mitchell and Everly 1995).

Utilizing the transactional theory of stress, a third assumption holds that such an experience can be significantly stressful beyond previous coping and response strategies and this leaves the individual in a sense of disequilibrium (Dewe, 1993; Lazarus, 1977). Such an incident has the potential to produce in the individual various symptoms including, but not limited to, the following problems: or expression of affect; restrictive cognition; somatic symptoms; a sense of self as depressed, sad, or deflated; intrusive thoughts; disruptive dreams; startle responses; a sense of pervasive anxiety and fears; problems with cognitive and affective memories; and difficulties with interpersonal relationships or interpersonal withdrawal (Mitchell, 1996; Rapoport, 1970; Van der Hart & Van der Kolk, 1989).

The fourth assumption is that these presenting symptoms can serve several functions. Symptoms can defend the overwhelmed ego of the individual by encapsulating the anxiety of the event and protect it from being incapacitated by the anxiety related to the event (Grinker & Spiegel, 1945; Menninger, 1954). As a result of the event overwhelming the memory system of the ego, related to a disruption at the sub-cortical levels of the brain, the affective and cognitive memories can be stored at a somatosensory level expressed in physical reactions to the extreme stressor or in the perceptual levels of memory. (Grinker & Spiegel, 1945; Van der Kolk, 1994).

Further, the additional presenting symptoms, such as compulsive behaviors or repetition compulsion are seen as a result of the repression of the fully integrated experience or memory of the incident at the levels of cognitions and affects. The symptoms serve as storage of incomplete memory, containing mechanisms for anxiety

related to the event, and the individual's inability to bring the full experience of the event to a symbolic linguistic level of integrated memory (Grinker & Spiegel, 1945; Menninger, 1954; Mitchell, 1995; Rapoport, 1970; van der Hart & Van der Kolk, 1989).

A fifth assumption is that, as a result of this incomplete memory at the linguistic level, the constriction of cognition and blunting of affects in the face of critical incidents combined with the overwhelmed personal cognitive schema and overwhelmed coping strategies of the ego, the individual can also experience the disequilibrium of a disrupted narrative (Borden, 1992; Dewe, 1993; Menninger, 1954; Van der Hart & Van der Kolk, 1989). Due to this vicarious empathy, sympathy, or identification with another person's exposure to a traumatic event, the individual worker's cohesive, comprehensive, and coherent narratives can be disrupted (Borden, 1992; Cherniss, 1980).

The disrupted narrative self-story could range from how the client/worker relationship was supposed to evolve to a major self-organizing theme. Examples of such self narratives that are disrupted might be: one can really assist and help clients at risk: one can be a capable worker that can have impact on the lives of others: one can protect people: clients with assistance have a better quality life: or the world is a safe place in which parents love and protect their children. Being involved with the trauma of another can definitely disrupt the self-narrative. The worker can experience an emotionally intense and disturbing disruption of their self-narrative and an assault on their ego (Borden, 1992; Van der Hart & Van der Kolk, 1989).

It is also assumed that the result of a disrupted narrative and the overwhelming sense of the lack of cohesion can contribute to the symptoms of critical incident stress. The sense of confusion, anhedonia, cognitive and affective constriction, somatization,

intrusive thoughts, and self-defeating behaviors may indicate that the individuals' self narratives have been disrupted. This sense of disruption, like the sense of fear and anxiety in the realm of trauma theory, is a response to a critical incident and the individual's inability to integrate the experience for reasons stated above.

A sixth theoretical assumption of this study is that a crisis intervention, such as Mitchell and Everly's (1995) model of critical incident stress debriefing, serves as an interactive, preventive means to assist the human services worker in developing a restorative narrative, and as a crisis intervention to either prevent the disruption of the ego or restore one to a previous level of functioning. The opportunity for individuals to meet with someone to process current critical incidents allows them to create, complete, or confirm a narrative meaning regarding the incident that can either prevent a disrupted narrative or restore an already disrupted narrative. Allowing the expression of cognitions and affective memories perhaps repressed or at the level of preoperational or sensory motor levels of memory can lead to the preservation or restoration of an adequately functioning ego state resulting in the reduction or prevention of symptoms of critical stress.

The intervention allows an individual to integrate the meaning of an experience at both the cognitive level and the affective level by allowing both to be expressed at the symbolic linguistic level. Like soldiers of World War II, these individuals can be assisted in understanding the role they played in the incident and their method of relating to persons in the future (Grinker & Spiegel, 1945).

The critical incident stress debriefing, utilizing a format of remembering, feeling, and thinking, can be applied to the child welfare serving at-risk clients in the same way it

is used with the emergency respondent in other professions. This would protect those social service workers most at risk of suffering from the symptoms of critical incident stress.

A seventh and more pragmatic assumption of this study is that these symptoms and coping behaviors are measurable in self-report style inventories. The final assumption in this study is that if the intervention results in a prevention or reduction of critical incident stress symptoms and improves healthy coping behavior, this will restore the overwhelmed ego or the disrupted self-narrative.

CHAPTER III

RESEARCH STRATEGY

This study used a multimethod or triangulated design. This type of study utilizes the strengths of both the qualitative methodology and the quantitative methods. A multimethod of measurement gives stronger internal validity, as one is more accurately able to examine the phenomenon under study. This theory of research believes that the two types of measurement may agree in their observation or have opposite results. Each result informs the researcher of the validity of the other method of measurement

The quantitative component of this quasi-experimental study used the interrupted-time-series design with pretest/post-test measurement (Cook & Campbell, 1979). This study is quasi-experimental due to the lack of control group and the lack of random assignment of participants. It examined stress symptoms and coping after a critical incident, and whether the intervention of a critical incident debriefing promotes healthy coping and reduces stress symptoms. The sample subjects included probation officers, police social workers, and child welfare workers. The only group that responded to the study was child welfare workers. Probation officers and police social workers never contacted the research team after attempts to recruit them to the study. The child welfare workers received a critical incident debriefing as presented by Mitchell and Everly (1995). The administration of measurements of stress symptoms and coping behaviors as well as the debriefing intervention was implemented by a trained research team. The dependent

variables were the measured symptom cluster of traumatic stress and the measured coping behaviors, thoughts, and feelings. The independent variable was the intervention of a standard critical incident stress debriefing. This design allowed for the analysis of whether such an intervention is positively related to the increase in positive coping behavior and the decrease in stress symptom clusters.

During the intervention, participants were asked if the intervention could be taped. Permission for taping was sought again approximately one month after the intervention during a follow-up interview. It was expected, based on the narrative theory, that the intervention would result in significant positive outcomes because it would assist in the restoring of the personal narrative. The recordings allowed for the examination of the narratives of participants during and after the intervention. Such re-examination allowed for a qualitative review of the narratives. It was expected that the quantitative and qualitative components of this study would complement each other. If demonstrated, then, the results would show improvement in symptoms of critical stress and positive coping and a shift in the narratives of the individuals.

Research Hypothesis

It was hypothesized that there will be either no significant increase or a significant decrease in the self-reported recurrence of symptomatic critical incident stress reactions as measured by Briere's (1995) Trauma Symptom Inventory (TSI) administered at the initial request for the intervention, at the time of the intervention, and one month after the intervention. Furthermore, there will be either no decrease or an increase of control or

problem-solving coping behavior, and a decrease in the reliance on escape or symptom management as measured by Moos' (1995) Coping Responses Inventory (CRI), measured at the same intervals after child welfare workers have received the intervention of a critical incident stress debriefing as described by Mitchell and Everly (1995) within 48 hours of contacting the research study team. Further, it was expected that these child welfare workers would identify what they thought were critical incidents, and that they would acknowledge that the intervention contributed to their ability in coping after the incident.

Definition of Terms

As noted in the literature review, the various disciplines contributing to the notions of critical incident theory use both similar and dissimilar terminology. For this research project, clarity is essential.

Critical Incident

This study borrowed the definition of critical incident from Mitchell (1983). For the purpose of this study a critical incident was any significant event experienced in the context of work, related to the direct provision of services to clients, as appraised by the subject, which had significant emotional power. These incidents were identified by the individual because of the nature of the incident or because of the circumstances in which it occurred, such that unusual psychological distress in that particular individual was experienced. No time limit of the occurrence of the incident was set as long as individuals reported continuing symptoms of critical incident stress.

Critical Incident Stress

Critical incident stress in this study was defined as the psycho-physiological symptom clusters resulting from an individuals' exposure to a critical incident as defined above. These symptom clusters were more precisely defined by utilizing the symptom checklist developed by Briere (1995), and is delineated in detail under the measurement section of this chapter.

Coping strategies

This study used the work of Latack (1986) to define coping strategies. Coping strategies were defined as those attempts by subjects to either control, escape, or engage in symptom management. Such responses could have been cognitive in nature or they could have included behavioral attempts to respond either to the critical incident or to the symptoms of critical incident stress that may have experienced. These coping strategies are detailed in the measurement section of this paper utilizing Moos' (1993) Coping Responses Inventory.

Child Welfare Workers

Child welfare workers are defined as individuals employed in various capacities to work with individual children and their families both in crisis and on an ongoing basis. Individuals were professionally employed by various social service agencies responding to the needs of families and children in the northern region of Illinois. No differentiation

was made as to the capacity or work role for which the individual was employed, with the exception that they must have been working directly with clients.

Critical Incident Debriefing

Critical incident debriefing was the intervention administered on a one-time basis followed by a follow-up interview for individual subjects who presented for such an intervention. The structure and methods of this intervention were based on the critical incident debriefing procedures developed by Mitchell and Everly (1995). This method is accepted on an international level and involves the seven stages and objectives of intervention including an introduction; fact gathering; expression of thoughts; expression of reactions; identification of critical incident stress symptoms; teaching of normal reactions and coping mechanisms; and reentry and processing of termination. Such an intervention involves many of the elements substantiated in the literature review of the various arenas of study regarding critical incident stress.

Study Sampling

All 32 subjects were volunteers. While the voluntary nature of the study complicates the generalizability of the study, it is a fact that most studies of this nature utilize volunteers and this is the ongoing nature of the intervention. The utilization of multiple employment groups was supported in the literature as a means of substantiating a specific intervention with a particular work stress issue across work situations. If the

intervention is found to be significant across work groups it is more probable that the intervention is significant as opposed to other factors (Cherniss, 1980; Daniel, 2003; Latack, 1986)

Attempts at recruiting Probation Officers involved obtaining the permission and support of chief officers and their supervisors. Contact was made via an introductory letter and through follow-up phone calls and personal appointments with chief probation officers, their supervisory staff, and their officers. A one hour introductory informational seminar was conducted with each probation department officers. A notice was then distributed to officers explaining the nature and importance of the study as well as the requirements of the voluntary participation. This group made no contact with the research team.

Police social workers were contacted through their professional mailing list. This mailing list was obtained with the president and board's permission and support. This researcher attended a meeting of this professional group to present and encourage participation in the research study. The nature and the importance of the study along with the requirements of participation was mailed to the workers and also explained at such a meeting. This group also made no contact with the research team.

Finally, the subjects who actually participated in the study were all involved in child welfare. All were volunteers from various social service agencies in the northeastern region of the state of Illinois. The majority were child protection workers. Potential subjects were contacted by first meeting with agency directors and clinical directors to obtain their expertise and input regarding the study as well as their support in allowing and promoting the participation of their staff in such a study. Local

administrators and supervisors were personally asked by this researcher to encourage participation from their supervisees. Meetings and workshops explaining the study were held with workers. It was hoped that supervisors would be able to identify workers experiencing a critical incident and encourage a referral to the study. Mailings sent through an intra-office mail system encouraged participation in the study. It was also promoted at some meetings of workers.

Instruments (Dependent Variables)

Two instruments measuring dependent variables were administered on two occasions. These two instruments served as the operationalization of the dependent variables of critical incident stress and coping. The first administration of the intervention was approximately 48 hours after contact with the research team and a second follow-up interview took place approximately one month after initial contact. The first measurement used was the Trauma Symptom Inventory (TSI by Briere (1995).

The TSI is a well established measurement instrument in the post-traumatic research literature and is the predominant measurement used. In other studies researching critical incident stress with service providers, the TSI has been the chosen instrument (Schauben & Frazier, 1995). While several other measures exist, Briere (1995) noted that this scale expands from the other scales that use only one or two general constructs of trauma to achieve several scores and also adds a subscale for measuring dissociative symptoms. It also includes three validity scores, an improvement over other such instruments. The TSI is an expanded version of the Trauma Symptom Checklist developed by Briere and Runtz (1990).

This scale utilized four studies to establish its reliability and validity criteria. These studies involved students, clinical samples, and U.S. Navy recruits totaling almost 4000 participants (Briere, 1995). In examining construct validity, Briere noted that persons respond so differently to trauma that construct validity had to be examined by comparing a clinical sample of traumatized individuals to those non-traumatized. All subscales were found to be significantly associated with elevated TSI scores. Convergent and discriminant validity for the TSI were found to be strong when tested against similar responses of both non-traumatized and traumatized subjects to other measures such as the Impact of Event Scale (IES) negative and positive impression management scales and the Minnesota Multiphasic Personality Inventory (MMPI). In addressing incremental validity, Briere found that when compared to the existing scales of the Symptom Check List and the Impact of Event Scale, the TSI found an increased ability to identify additional variance in all sub scores when traumatized versus non-traumatized subjects were compared. Briere noted that this was not a statistically significant amount but by percentage it is nearly double the additional variance of the other measures. In two studies criterion validity was established when the TSI was able to predict post-traumatic stress symptoms or no such symptoms in non-clinical and clinical populations at a 96% rate with symptoms and 91% without symptoms. In clinical samples the percentages were at 89% and 82%.

The TSI is a 100 item multidimensional scale designed to evaluate post-traumatic stress and other psychological symptoms related to traumatic events. It includes ten clinical scales that measure the extent to which persons present with trauma-related symptoms. It has been standardized on a general population of men and women ages 18

to 54 and has shown to be appropriate for all adult combinations of gender and age who can comprehend written material at a fifth-to seventh-grade level (Briere 1995). Briere noted a significant effect for gender in the rating and has modified the scoring of the inventory to adjust for gender differences. In the standardization of the norms for this instrument Briere indicated a variance in scoring between African Americans, Asians, Hispanics, and Caucasians. This variance, however, did not push any group up in the scales above 1.5 standard deviations from the mean of all scores.

The scales include the following: anxious arousal, depression, anger and irritability, intrusive experiences, defensive avoidance, dissociation, sexual concerns, dysfunctional sexual behavior, impaired self-reference, and tension reduction behavior. In addition, the inventory provides three validity scales of response level, atypical response, and inconsistent responses. This design assesses the tendency to deny symptoms or to endorse, over endorse, or to respond to items in an inconsistent or random manner. The need for testing for response validity in this instrument is important because these patterns of reporting of symptoms can serve as a means of coping with a trauma. Finally, this inventory provides 12 items that identify serious potential problems that could arise for participants in the study such as suicidal ideation or behavior, or self-destructive behavior as well as symptoms of psychosis.

The subscale of anxious arousal reflects the extent to which the respondent is experiencing symptoms of anxiety and autonomic hyperarousal:

Individuals with high scores in this scale likely report periods of trembling or shaking, nervousness, jumpiness, feeling “on edge,” excessive worrying, and fears of bodily harm. They frequently describe themselves as tense and may report reacting to stress or sudden intrusive stimuli with fearfulness or an exaggerated startle response.

Such individuals often present as hyper-alert and hyper-vigilant and may describe somatic symptoms consistent with sympathetic nervous system hyper-arousal. (Briere,1995, p.13).

The depression subscale measures respondents depressed mood and depressive cognitions. Persons scoring high will report frequent feelings of sadness and unhappiness and an overall sense of depression. They may have perceptions of themselves as worthless and inadequate, and have a view of the future as hopeless. They may tend to have thoughts about death or dying. Behaviorally, they may note periods of fearfulness and will isolate themselves from others. Suicidal behavior or self-injurious behavior may be associated and identified in this subscale.

The third subscale identifies anger and irritability. Persons scoring significantly high in this scale experience angry moods and irritable affects. The scale taps internal experiences of anger and irritability, angry cognitions such as wanting to hurt people or tell them off, and angry behaviors such as yelling, being argumentative, or picking fights. According to Briere (1995), such persons experience anger as intrusive and unwanted and often feel they are out of their control. Respondents may report pervasive feelings of irritability, annoyance, or bad temper resulting in contextually inappropriate anger reactions.

Intrusive experiences is the fourth subscale. According to Briere (1995), this indicates “the experiences of nightmares, flashbacks, upsetting memories triggered by current events and repetitive thoughts of an unpleasant previous experience that intrude into awareness” (p. 13).

The fifth scale is the defensive avoidance subscale. This scale measures attempts to avoid aversive internal experiences such as painful thoughts or memories. Items such

as item four, “stopping yourself from thinking about the past” and item twenty-three, “pushing painful memories out of your mind” represent this scale. The scale also measures attempts to neutralize negative feelings about an incident. For example, item 87 says, “trying not to have feelings about something that once hurt you.” This subscale detects intentional processes of cognitive and behavioral avoidance as a means of managing distress.

The dissociation scale is the sixth subscale and it measures the respondent’s experiencing of dissociative symptoms. Briere (1995) defines dissociation as “a largely unconscious defensive alteration in conscious awareness, developed as an avoidance response to overwhelming, often post-traumatic, psychological distress” (p. 14). This scale measures features such as cognitive disengagement, depersonalization and derealization, out-of-body experiences, and emotional numbing. Specific symptoms include distractibility, “spacing-out” and feeling out of touch with oneself and one’s body.

The seventh and eighth subscales measure sexual difficulties that arise from coping with critical stress or as a reactive response to exposure to sexual trauma. The sexual concerns scale determines sexual dissatisfaction, negative thoughts and feelings during sex, confusion regarding sexual issues, sexual problems in relationships, unwanted sexual preoccupation, and shame regarding activities or responses. Individuals scoring high can report sexual conflicts, sexual dysfunction, and a general dissatisfaction with their sexual response. Many who score significantly, according to Briere (1995), experience anxiety and fearfulness in sexual matters. Next the dysfunctional sexual behavior scale assesses problematic sexual behaviors. This scale refers to indiscriminate

sexual contact, trouble due to one's sexual behavior, using sex to combat loneliness or internal distress, flirtation or seduction for nonsexual reasons, and sexual attraction to potentially dangerous or dysfunctional persons.

The ninth subscale is the impaired self-reference scale. This scale responds to the individuals' difficulties with an inadequate sense of self and personal identity. This involves problems in discriminating one's own needs and issues from those of others, confusion regarding one's own identity and life goals, an inability to understand one's own behavior, and an internal sense of emptiness, a need for other people to provide direction and structure, and difficulties resisting the demands of others.

The final scale is the tension reduction behavior scale. This scale taps those external behaviors engaged in by an individual as a way to moderate, avoid, or soothe negative internal states. This scale measures symptom behaviors that "act out" negative affect. It particularly identifies the degree for potential behaviors that could signal a risk for hurting oneself or others.

Subjects respond on a four-item interval scale from "not at all" to "fairly often" on all 100 items. These items are then divided by each of the ten subscales and the total of ordinal scale responses for each scale is recorded. This creates a raw score for each of the scales that can be converted to a t-score ($t = \text{total score for the subscale}$). This t-score can then be plotted on a profile graph for each respondent to create a profile of symptoms for each of the scales in comparison to percentile scores of the standardized score. The mean of the t score distribution is 50 and Briere (1995) suggest that t-scores in the profile that exceed a score of 65 are 1.5 standard deviations from the mean and should be

considered significant scores. For the validity scales the t-score should be greater than 89, 72, and 74 for the atypical response scale, the response level scale, and the inconsistent response scale, respectively.

In establishing reliability, Briere (1995), reported the use of specialized clinicians to reduce the scale from 182 statements to 163. Then in testing with clinical and non-clinical populations the scale was reduced to 100 items eliminating those items thought to be redundant or eliminating items least understandable by the average respondent. In summary, the reliability coefficients for the final version of the TSI clinical subscales ranged from .74 to .91 (mean alpha equals .86). The groups mean scores were examined in this study, with a comparison of such mean scores between the participants and normative scores developed by Briere.

The measure used for the second dependent variable was the Coping Responses Inventory (CRI) developed by Moos (1995). This is a brief self-report inventory that identifies cognitive and behavioral responses individuals may use to cope with a recent problem or stressful situation. It involves eight scales summarized as either approach coping styles similar to Latack's (1986) control and symptom management categories, or avoidance coping styles, similar to Latack's escape category of coping. This 48-question inventory utilizes the interval four-point scale ranging from "not at all" to "fairly often". It also includes ten items that determine how the individual appraises a focal stressor. Respondents are asked to focus on one recent particular stressor; in this study it was the stressor that brought them to the study. This inventory is reported as being suitable for assessing individuals aged 18 years and over and can be administered as self-reporting or in an interview (Moos 1995). This particular inventory has been applied to both clinical

and work settings to measure coping. The scale has been applied to problem drinkers and their spouses, depressed patients and their spouses, medical patients and their families, persons living with AIDS, and with both nurses and physicians in neonatal care.

Moos (1995) indicated that the inventory is reliable because it used expert judges to reduce the inventory to the existing 48 questions, eliminating difficult and redundant questions. The remaining questions had to have independent support of the judges and be applicable to only one of the eight subscales. Further, Moos reported reliability across subject groups and indicated the measurements scores consistently over time, in that subjects were followed up with the inventory again after 12 months. In a study of nearly 2000 men and women, Moos reported the inventory showed a moderate level of internal consistency. Face and content validity were controlled for by creating item meaningfulness as mentioned previously, creating a varied item distribution, dropping questions that had no statistical correlation to any subscale, and ensuring that items pertained to only one subscale. The time needed to administer this inventory was approximately 15 minutes.

The four scales for the approach coping style include logical analysis, positive reappraisal, the seeking of guidance and support, and problem solving. Logical analysis measures cognitive attempts to understand and prepare mentally for a stressor and its consequences. Positive reappraisals are cognitive attempts to construe and restructure a problem in a positive way while still accepting the reality of the situation. Guidance seeking and support are behavioral attempts to seek information, guidance, and support, and finally problem solving is defined as behavioral attempts to take action to deal directly with the problem or stressor.

The four categories for the avoidant coping style are cognitive avoidance, acceptance or resignation, the seeking of alternative rewards, and emotional discharge. Cognitive avoidance is not thinking realistically about a problem. Acceptance or resignation is the attempt to react to a problem by accepting it. Seeking alternative rewards are behaviors attempting to get involved with substitute activities and create new sources of satisfaction. Finally, emotional discharge attempts to reduce tension by expressing negative feelings.

Respondent answers were recorded and converted from raw scores to t-scores. The mean t-scores were plotted into a profile for each respondent. Moos (1995) presented a normal mean score of 50 for comparison, making scores of 40 or 61 beyond one standard deviation from the norm. In this study the group mean of the t-scores will be compared between the pretreatment episode and during a follow-up interview one month later. Research groups on whom Moos developed this inventory were very limited as to age and race. This study will also report its findings to add to literature regarding this scale.

The research team collected demographic materials during the initial phone contact. The material was then examined for relatedness to the main effect of the intervention or relatedness to the measures of stress and coping. These demographics included the subjects' date of birth, professional identification, age, gender, racial identification, cultural identification, number of years of employment in human services, number of years in current position of employment, estimated number of similar experiences while employed in human services. Moos (1995) and Briere (1995) also identify marital status, level of education completed, and income range as being

important demographics that might influence the main effect of the study. These data were collected in the first and second interview with the subject.

As mentioned above this study is a triangulated study involving not only quantitative but qualitative components. Both the initial debriefing and the follow-up session were recorded if permission was granted. These tapes were transcribed. Both the initial taping and the follow-up session were then examined using a traditional basic content analysis (Tutty, Grinnell, Williams, 2001)

This content analysis began with counting types of events reported by the participants. Then a thematic analysis began looking for common themes among participants with particular attention paid to self-narratives and possible shifts between narratives as stated in the hypothesis (Berg, 1995). The resulting analysis was then presented to several participants for feedback regarding the completeness of the analysis. This was to ensure that the analysis matched the experience of participants. Finally, this analysis was shown to experts in the field of crisis intervention and debriefing. This was done for feedback on how comprehensive and meaningful the analysis was.

Independent Variable

The independent variable of this study was the utilization of the Critical Incident Stress Debriefing (CISD) developed by Mitchell and Everly (1995). This is a brief early intervention tool designed to allow for the venting of emotions and thoughts related to a critical incident as well as an opportunity to reconstruct and come to a possible new resolution of the incident in a supportive and structured environment. This intervention was administered by a research team consisting of master's-level human service

providers who are also employed in emergency child welfare systems and were trained by a licensed professional social worker certified in the debriefing process.

The trainer had designed such programs for community response teams, trained others in debriefing, and is considered an expert in the field of debriefing interventions. After training, the researchers made up the response team who implemented the debriefings for subjects. This intervention for human service workers and the debriefing team of social service providers matches the procedures and recommendations of Mitchell and Everly (1995). They recommend that such a team consist of persons who can be considered peers of the subjects to allow for greater understanding of the subject during the intervention. The use of a team also helps differentiate any change in dependent variables that would be a result of the intervention rather than the personality of any one person on the team.

This intervention, while designed for groups of response teams, is adaptable for use with individuals, according to the authors. As individuals volunteered for the study they were assigned to a debriefer on the research team. Having arranged the intervention location the debriefer began the intervention with a brief self-introduction. The consent to participate in the study was read again to the individual and signed. Some brief demographics were collected and then the intervention began. (See Appendix E for demographics format)

This intervention is best defined by examining the eight stages of the debriefing process. These stages are presented in table 1.

Table 1. Stages of CISD

Stage	Phase	Objectives
Stage One	Introduction	Introduce process
Stage Two	Facts	Recount the event from worker's perspective
Stage Three	Thoughts	Allow for description of cognitive reactions
Stage Four	Reactions	Allow participant to describe most difficult part of the event
Stage Five	Symptoms	Identify personal symptoms of distress and transition back to cognitive level of experience
Stage Six	Teaching	Educate as to normal reactions and positive coping
Stage Seven	Support and Peer Phase	Develop plan to reconnect with supportive professionals
Stage Eight	Re-entry	Develop coping plan, clarification, follow-up plan

Mitchell and Everly (1995) see the introduction phase as crucial to setting the stage for the other phases of the debriefing. The objectives of this phase are as follows:

1. explain the purpose of the meeting
2. introduce oneself as the facilitator
3. explain the process
4. motivate the participants
5. reduce resistance
6. explain the guidelines of the CISD
7. answer primary concerns, limit anxiety, and discuss confidentiality issues (the assurance of confidentiality is usually a critical point)

The second stage, or fact phase, is intended to start with the material that is the easiest to discuss. This would be a description of the facts of the incident. This is to facilitate the initial discussion, at a cognitive level, of the sequence of events in a less personal manner. Debriefing team members begin this discussion with a statement such

as, “I was not present or aware of what occurred and it would be helpful to get some understanding of what happened by having you tell me about the incident. Tell me what was your job or involvement with what occurred and what happened from your point of view.” Allowing appropriate amounts of time and the building of rapport with the subject are essential during these first two stages and should be maintained upon throughout the interview.

The third stage of the intervention is the thought phase. At this time the debriefer asks the participant to express his or her first thoughts or most prominent thoughts concerning the critical incident. This is the first movement into the internal perceptions of the individual and the debriefer should be prepared for the individual to experience and report some emotions at this point. Support and flexibility in the intervention will be necessary. It is also a sign, according to Mitchell and Everly (1995) that the process is moving along.

The reaction phase is the fourth stage and is a phase likely to be powerful and emotional. During this phase they predict that the debriefer will be less active and the participant will likely be speaking with more depth about the incident. Mitchell and Everly suggest the introduction of a question such as “What was the worse thing about this situation for you personally?” or “What part of this event bothers you the most at this time?” Time should be allowed for the individual to express what he or she found important.

The fifth stage is the symptom phase and is described as a transition phase because it is meant to move the individual from emotional material back into more cognitive-oriented materials. Mitchell and Everly (1995) warn that disruption of the

process at this point could be harmful to the individual. Participants in this phase are asked to describe any cognitive, physical, emotional, or behavioral experiences they have encountered while involved in the incident. The researchers suggest identifying possible symptoms such as trembling hands, the inability to make decisions, intrusive thoughts, excessive silence, or feelings of anger or sadness. The individual should be allowed to reflect on this and report any noted symptoms.

The sixth stage is the teaching phase. In this phase, as in the symptom phase, the debriefer begins pointing out several common symptoms and lets the person know that these symptoms are normal, typical, and expected after experiencing a critical incident. At this point the individual will be introduced to educative handouts regarding symptoms and reactions to a critical incident (see Appendix C). If this information stimulated further responses from the individual, the debriefer will discuss such symptoms in the context of normal reactions to an abnormal situation.

The next stage is the support phase and peer stage and in this model the individual is encouraged to not withdraw but to take advantage of a support system comprising of others who may respond to and understand her or his experience. An additional educational handout presented at this time that suggests 16 ways of coping with stress symptoms. It also suggests how to cope with the difficulties with sleep and intrusive disturbing dreaming, numbing of thoughts and affect, and personal isolation. This phase also promotes the reconnection with professional peers and it is at this point that the individual may appreciate that the intervention is provided by human services professionals. During this phase, which may be very brief, the individual is given support for the difficult yet unique identity of their profession and is encouraged to gain support

of other human services professionals. The debriefer then will ask if the individual has a supportive professional peer group that they might turn to at this time if needed. If they respond negatively the debriefer will review possible resources of supervisors, consultants, or employee assistance programs. If the participant would like a follow-up referral one can be made to a local professional mental health care provider.

The eighth and final phase is that of follow-up. This phase again begins with the debriefer stating that the intervention is coming to an end and explores the emotional and cognitive status of the individual. If the debriefer and the individual agree that more follow-up is needed soon, then a referral is made at that time. The individual is reminded that they may reconstruct the team at the original research number at anytime during the study if they should need further assistance. The debriefing is then respectfully ended.

Procedures

To begin, this project sponsored training for the research team. This team consisted of five master's-level licensed professionals, three women and two men. During this one-day training the protocol for each meeting with the participants was explained and rehearsed. Then a licensed professional, who is nationally certified in critical incident debriefing, conducted educational and experiential training in how to conduct the intervention..

Subjects for this study were recruited from associations, agencies, and departments of probation whose administrators had agreed to participate. Formal meetings were used to further encourage participation. In these recruitment meetings an invitation to participate in the study was distributed (see Appendix A). Participants were

informed of the basic purpose and structure of the study in this invitation, with particular mention of the confidentiality of the study. An informed consent form was distributed at those meetings to inform potential subjects of the nature of the study. When the subjects met for the debriefing the informed consent was read to the participant and the research team member asked if there were questions. These consents were sent directly to and kept by the lead researcher and copies of the consent were distributed to all participants. When a participant called the research voice mail box, a return call was made within one hour. This call occurred after the lead researcher had assigned the individual to a research team member. In the return call the research team member read the consent to participate in the study to the subject and obtained a verbal consent, documenting the time and date of consent.

The team member then set a time for the critical incident intervention, noting that such an appointment could take up to two hours. A mutually agreed upon location and time that insured privacy, safety, comfort, and confidentiality was arranged and individuals underwent the intervention within 48 hours. At the outset of this meeting the consent to participate was again read and the subject was asked whether he or she had any questions regarding participation in the study. At the beginning of the intervention, the subject was asked to complete the measurement instruments of the dependent variables. Arrangements were made for a final interview 30 days after the initial contact for a final interview and implementation of the measures of the dependent variables. At the completion of this final interview the team member asked the subject whether he or she had any questions or input regarding the experience of the study or any known factors that might have influenced coping or symptoms during the past month.

All team members conducting the interviews and interventions were given a packet with an outline of procedures. They were provided a manual for administering the Trauma Symptom Inventory and the Coping Responses Inventory. They also received extra copies of the Consent to Participate form and answer sheets for both inventories. Members were provided with a list of possible mental health providers in case of the need for immediate referral and the phone number of the lead researcher in case of emergencies. Members were supplied with small tape recorders to tape the interviews with permission of the participant.

To protect confidentiality, all data collected were coded by the digital month and day of birth of the subject creating a code for all data gathering (e.g. 712). Names and phone numbers of participants were kept with the team packets until the collection and analysis of data was complete. During the second interview researchers asked participants if they would like a copy of the overview of the results of the study.

Participants who wished to see their profile scores were reminded that only the group scores were of interest in this study. If they had concerns regarding their current stress symptoms or coping they were encouraged to discuss this with the team member. At the completion of data gathering and interventions all packets were gathered from the team and t scores with demographic information were analyzed. The results of the study will be summarized and distributed in written format to all agencies, departments, or associations participating in the study.

CHAPTER IV

FINDINGS

The findings section of this study examines both types of data gathered from this triangulated study involving both quantitative and qualitative analysis. Data included tape recorded interviews, field notes of the researcher, results of the Trauma Symptom Inventory and the Coping Responses Inventory before the intervention and again one month later at the follow-up interview. The findings are presented in the order in which the research was conducted:

- The recruiting and demographics of participants
- What are the critical incidents for this group of workers?
- Do they experience critical incident stress symptoms?
- Do they engage in avoidant/behavioral coping when faced with such an incident?
- Does the intervention of the debriefing assist them with their symptoms and coping?
- Do they experience a narrative disruption during an incident?
- Do they experience a sense of narrative restoration in response to the intervention?

The Recruiting of Participants

The purpose of this section is to summarize from field notes the experience of recruiting subjects. Initially a list of social service providers, police social workers, and probation departments was compiled. A brochure and letter explaining the study was sent to each director on the list. A follow-up call to the directors was made requesting participation and offering brief training in critical incident stress prevention for their staff. One social service agency agreed to the training and three of four probation departments agreed. A presentation was made to the state association of police social workers. Three directors requested a personal meeting and agreed to a presentation about the study only as a part of the agenda in a staff meeting.

It was then, that an official from the Department of Child and Family Services requested a meeting about the inclusion of child welfare workers. The official noted an immediate state mandate to provide critical incident debriefings for workers. This official also explained the northern region of Illinois' lack of experience or resources to meet the mandate. An agreement was made to allow for the participation of child welfare workers in the project. Presentations were made to the district managers of the Department of Child and Family Services and then to each of the area offices in a half-day workshop format.

From the field notes content analysis was used to develop the themes regarding the recruitment of participants for the intervention. Two major themes emerged: institutional resistance and personal invitations.

Institutional Resistance

At one agency the director said that most of their debriefing went on at a bar around the corner. I received no referrals from this agency. After the presentation at the police social work meeting I was called by a social worker who indicated he approved of the study but really could not participate as such a crisis rarely occurred on his job. No referrals came from police social workers.

A large metropolitan probation department refused participation fearing legal issues that could arise from participation. At one presentation to probation officers, even with the support of the county forensic psychologist and the director of probation, I was met with silence. At another probation office I felt a sense of support and officers were much more open to the project. At the third presentation I was questioned closely for the first time about confidentiality. How do they know I would keep their confidences? I replied that the chief officer had agreed to confidentiality and in the study protocol others would not be aware anyone had contacted the researcher. One officer pulled me aside and stated she wished to participate. I attempted to set up an appointment; whereupon she clarified she never has any problem with clients because she stays “uninvolved with clients.” She then indicated she wished to volunteer to do the interventions. No referrals were received from any probation departments.

A presentation was made to the managers of the Illinois Department of Child and Family Services. It was met with some enthusiasm. Several managers have had me as a professor. One manager, however, refused to participate and did paperwork in the small room we were in the entire day. When she was asked about her feelings regarding critical stress and debriefing she stated, “I can’t support it. It’s just one more way we are going to

‘coddle’ these workers. They need to get their work done, not be messing around with this nonsense.” Despite agency support for workers to participate it was later revealed in contacts with management that she would not allow her workers to participate.

Two supervisors from the Department of Child and Family Services volunteered to assist in future presentations. The thinking of this researcher was that they would assist this researcher in interpreting the culture of the family services department to the research team. Secondly, it was hoped that support from those that line workers trusted rather than just upper management would lower distrust of the project and increase participation. While this assured some workers it also caused disgruntlement in some others. This was due to the fact that these supervisors were being paid to go through their graduate education while workers were not. Also some staff disliked these supervisors to the point that they told workers not to participate simply because these supervisors were endorsing it. This researcher heard who was doing this and spoke directly to the individuals involved; they eventually supported the project. The clinical director of a social service agency, who is a friend of this researcher, introduced the project and promoted it with a workshop. Two referrals were received from this agency.

At times this researcher was devastated by the reactions of workers. In some offices the suspicion and distrust was thick in the air. One major issue was confidentiality. Could the records be subpoenaed? The following assumptions about the study caused concern:

1. In ongoing investigations of worker negligence, things said in the intervention could be used against workers.

2. The study would compete with services of the union and the employee assistance program. Union stewards were upset that they were not consulted in the development of the research.
3. Researchers could testify against workers in court.
4. Negligent support workers would have an excuse in future hearings regarding their competence. (This concern was voiced by a supervisor.)
5. Workers could be perceived as incompetent if it became known that they had participated in such an intervention.
6. The authority of supervisors and managers could be challenged or undermined. (This was raised by supervisors and management.)

Personal Invitation

In the end, participants volunteered from agencies in which management and supervisors were supportive of staff taking advantage of such an intervention. In most cases supervisors or other workers promoted the researcher and participants volunteered. Support included an expressed confidence in the researcher, conclusion that the intervention would be beneficial from a clinical standpoint, allowance for workers to have time to participate in the study, and awareness that the intervention was not an attempt to undermine workers authority over workers or cases.

Secondly, the seemingly legitimate paranoia about litigation against workers who might participate was addressed. Before participating many were concerned that they might expose a mistake and be held accountable, or that they might hear of a mistake and have some obligation to break confidence and report fellow workers for negligence. This

was best addressed with reassurances that the information would be coded, and would only be recorded with permission. Only 14 of the 32 participants allowed recording; field notes on the intervention were collected for the rest.

Demographic Data of Participants

The total number of participants was 34 with 2 participants deciding not to participate in follow-up interviews. Because of the lack of the follow-up session these two participants are not included in the reporting of the findings. Both reported schedule conflicts as the reason for not participating in follow-up interviews. Of the remaining interviews 21 were conducted by someone from the 5 member team and 11 were conducted by this researcher. Each subject was met within the 48 hour framework suggested in the procedures.

Participants were recruited over three years. The age of participants ranged from 25 to 58 years. This suggests a fairly normal distribution with regard to the age of participants. Thirteen of the participants were male and 19 of the participants were female. The mean age was 38.5, the median was 37, and the mode was 42. Six were African American, 20 were European American, 2 were Latino, and 4 identified themselves as Other.

The years of work in social service ranged from 1 to 28 years of service. The mean years of service was 10.3, the median was 9.5, and the mode was lower, 4 years. For this distribution there is a spike in numbers at 4 years and 10 years of service. The Illinois Department of Child and Family Services employed 26 of the 32 participants.

Ten participants reported having only an undergraduate degree, and 22 reported gaining a masters level graduate education. Thirty-one worked full time and one participant worked part time. The income levels ranged from \$20,000 per year to over \$50,000 per year. Twenty-one participants reported income levels between \$30,000 per year and \$50,000 per year, making up 65.7% of the study.

Among participants, 17 reported being married, 7 reported being single. Seven were divorced and one reported living with a partner. Among the participants, 12 had no children, 6 had one child, 11 had two children, and 3 had three to five children. In other words, 12 of the participants had no children and 20 had children. In summary, it would appear that this study captured a sample reflective of the workers in the northern region of the state.

Type of Critical Incidents Identified

First this study attempted to understand better what participants, as social service providers, identified as a critical incident. A content analysis examined what the workers identified as a critical incident. In this study nine participants reported the death of a client as the preceding critical event. One of these deaths was considered natural and one was related to a chronic illness. Three involved the violent death of a child by someone related to or known by the child. Two of the deaths were the suicide of an adult parent. Two were the suicide of a child client.

Two participants reported that the incident that brought them to the study were client issues that were dramatically similar to experiences in their own life. Two came to the study due to a recent family incident that was affecting them in their work.

Five of the participants reported working with adult clients who had participated in violent activities ranging from assault to murder. All the acts of violence were directed towards family members who were also clients of the participants. Nine participants reported incidents in which clients had made a serious threat to commit violence against the worker. Five of these workers had actually experienced violence inflicted by the client. One participant reported the arrest of an adopting parent for making child pornography of a client.

Finally, four participants reported conflict with systems within the institution for which they worked. Three involved intense negative experiences in the courtroom and one was a conflict with an administrator. All of these participants were women and in the courtroom situations all were Hispanic.

Data Analysis of Perceived Symptoms of Critical incident Stress and Styles of Coping Related to Critical Incident Stress

A major question of this study was, “Do social services workers actually experience symptoms of critical incident stress after a self-identified critical incident?” A one-sample t test was conducted comparing the normative scores on the trauma symptom inventory (TSI) to scores of the participants. The following symptoms had a significantly higher reporting when compared to normative scores. All statistics were analyzed by using S.P.S.S. statistical software. All data analysis used a confidence interval of 95% ($p \leq 05$).

The symptoms found to be significant on the TSI were anxious arousal, depression, anger and irritability, intrusive experiences, defensive avoidance,

dissociation, tension reduction behavior, and inconsistent response. The areas in which no significant difference existed between the participants and the normative scores were sexual concerns and dysfunctional sexual behavior. Refer to Table 1.

The following section will report the data findings on how participants were coping with the experience of a critical incident with their clients. The first major study question, similar to the analysis of symptoms, is “Did the participants differ from normative scores from the Coping Response Inventory?” A one-sample t test was run to test the hypothesis that participants would show differences from the normative scores.

Participants scored significantly different from the normative scores in the areas of cognitive avoidance, seeking alternative rewards, and emotional discharge.

Participants did not differ from normative scores in the areas of logical analysis, positive reappraisal, seeking guidance and support, problem solving, and acceptance or resignation.

The mean scores for cognitive avoidance, emotional discharge, and seeking alternative rewards were higher than the normative scores. This would indicate that participants were utilizing these avoidance coping behaviors to a greater degree. Refer to Table 2.

Evaluation of Qualitative Data During the Debriefing

Narrative Disrupted

One of the strengths of a triangulated study is that qualitative data can be examined for support of quantitative data. The qualitative data shows a definite

disruption in the participant's narrative. Participants presented with a disorganized meaning of the incident. They were often trying to make sense of it all. Participants reported symptoms related to their experience of critical incident stress. Participants noted numbness, a sense of shock, feeling disoriented, intrusive thoughts, hypervigilance, constricted thinking, anxious arousal, fear, helplessness, sadness, guilt, shame, anger, and somatic reactions.

Shock, Disbelief, Disorientation

Most respondents demonstrated disbelief about their experiences of an incident evidenced by a lack of integration of the experience. One participant experienced the near fatal suicide attempt of a teen client. In the interview it was stated that that the participant was "unable to believe" the incident had occurred and felt a general "numbness" or "shock." The participant indicated "I felt I was in a fog" and "had the feeling I was in a nightmare." Another participant noted that after investigating a case of severe child sexual abuse and child pornography, "I just lost it! I couldn't deal with what I had heard and seen anymore."

Another participant reported similar disbelief and an inability to make meaning of the incident after investigating child pornography at a foster home. This worker stated, "I felt so sad. It's not like this was some horrible family. It's not like [the parents] didn't care about these kids. I couldn't put together what the father had done with these parents who were giving these kids such a good home." One participant related such an inability to integrate an experience when the participant was the first to arrive at the residence of a suicided client. This participant stated, "I just keep thinking it was so unreal. I was so

shocked. I was in disbelief but I didn't doubt. I feel overwhelmed so I just try to shut down anything."

Intrusive Thoughts, Hypervigilance, Anxious Arousal, Fear

Intrusive thoughts, such as dreaming about the critical event, was a major theme reported. One participant noted intrusive thoughts such as dreaming about a suicided youth and in the dream "seeing the client suicide in front of me." This participant also noted intrusive thoughts of imagining the client's suicide. One participant shared a dream of their own child participating in risk behavior after a client committed suicide using the same behavior. This worker noted an unrealistic worry and anger directed toward their own child. Another participant revealed a bad dream about the children in the sex abuse and child pornography case such that the participant awoke crying. It was at this point that the worker's spouse encouraged the participant to seek a debriefing.

One participant reported an incident of being threatened with murder by a client. This client went on to murder a child who had recently revealed to this participant that the client had repeatedly sexually abused the child. After the heinous murder, the client disappeared. This worker noted extreme and realistic fears that the client would attempt to or successfully murder the worker. In this case the participant reported the contagion of this fear among fellow workers. All were taking precautions and demanding increased security in the workplace. This participant reported revisiting the site of the attack and murder of the child. This worker could not explain the need to do this but upon reflection noted it was likely an attempt to believe the events had actually happened.

After being threatened with death by two clients in a three-week period of time one participant noted symptoms of anxious arousal and reported a general feeling of fear, particularly at home. This participant demonstrated a Hypervigilance involving checking and rechecking windows, keeping a cell phone near at all times, and having the spouse follow the worker to and from work. Feeling “tired of being fearful,” was reported by this participant. Other fears were imagining a client’s child growing up to take revenge, or an adult client killing the participant at home. One participant noted responding to fears by yelling and swearing at good friends.

Isolation and Not Being Understood

Another significant theme was one of isolation. Almost all participants withdrew from family members and coworkers. The participant exposed to parents making child pornography of their young children became aware through the intervention that the event had triggered memories of past traumatic experiences. As a result it was noted this worker had been lashing out at their spouse.

Many participants reported withdrawing from their spouses, family members, and coworkers. Crying during the intervention, one participant stated, “I wish I would have someone to bounce this stuff off of.” This worker then related to the investigator,

I feel like I should handle things. I feel I am burning people out. I know you’re getting sick of this (meaning the debriefer) but here’s one more thing. I know talking about this is good but I am afraid people will get sick of me. I don’t think others can really understand the emotions of it all.

Another participant noted trying to cope with the attempted suicide of a teen client by talking with their spouse. The spouse responded weakly, “Why do you let your job get to you?” This worker reported feeling very misunderstood. This worker noted, “My spouse doesn’t really understand my job; it’s difficult to find anyone to understand this job, because they think like that, why do you even do it? That’s what a lot of people think.” This participant admitted to withdrawing from their spouse.

One participant, noting a personal crisis causing conflict in her work with clients, related, “Even my closest friends I haven’t been able to tell. I went to my self-help meeting and I couldn’t even tell them. And I told them a lot of stuff. I couldn’t tell anyone, not even my best friends.” Another participant agreed, “I used to talk to a couple of social worker friends, they were supportive, I don’t know. I guess I have been a bit withdrawn.”

An interesting observation regarding isolation is the disruption in the relationship with the worker’s supervisor for most participants. Participants either noted that they usually had a supportive relationship with their supervisor, or that they thought that being supportive was an expected role of the supervisor. The disruption in this relationship covered a broad range. One participant said that the relationship was severed because of a court-mandated gag order among professionals involved in a murder suicide. Another reported that a former supervisor had left and that the relationship with the new supervisor wasn’t strong enough yet to offer support. Another participant noted the supervisor was on vacation. It had not occurred to one participant to talk to the supervisor

even though in the past the supervisor had been approached for support. Two participants reported their supervisor was on an extended leave and two others noted they did not have a current supervisor.

One participant observed that a significant contributing factor to the incident being overwhelming was that her supervisor was not available to advise her during the unfolding of the incident. She regarded the supervisor as a valuable resource but the supervisor had been called away on another matter and was unreachable. This worker described feelings of being left to cope with a serious and violent situation all alone.

One participant related in the interview the experience of second-guessing the intervention made with a teen client who had attempted suicide. The worker mused, “I kept thinking... if my supervisor would have been there at the time I was going through this then I probably would have known better what to do.” This demonstrates the sense of second guessing oneself and wishing for their regular supportive relationships. This worker reflected that in the past the support had helped a lot. This supervisor was also on extended leave. One participant just did not like or trust the supervisor. Another participant reported a cut-off from the supervisor because of feelings that the supervisor had not supported actions taken with the client and thus could not be trusted.

Guilt, Over Responsibility, Incompetence

Themes of guilt, over responsibility, and feeling incompetent were common. A participant stated this very clearly when relating, “I have thoughts like, “Did I drop the ball here? I felt really guilty like I should have known something was coming or I should have dealt with things differently.” Another participant also related these themes of guilt

and self-doubt after the attempted suicide of a child client. This worker wondered, “Did I blow something off? Did I really do everything I could? I ask myself, how could I have done things differently?”

Further one participant, described feeling incompetent about a case: “ I kick myself around a little bit, that’s why I make snide remarks about oh, you know, I guess I’m incompetent now, so you can’t give me any more investigations.” This participant further revealed waking during the last several evenings repeatedly, “thinking well, I could have done it this way, it could have turned out this way, again, second guessing myself, and you know, wondering how much more I could have done.” After a client parent killed all the family members, a participant reported feeling responsible and guilty about how they handled the case. This was despite the involvement of multiple agencies after the discovery of child sexual abuse and the findings of investigators of no malpractice after the multiple family murders. The second guessing, guilt and isolation the participant felt after these events were exacerbated in that the court enforced a gag order for all workers regarding the events of the case. Attorneys did not want social service providers, police, or court employees to discuss the case. This participant stated, “I feel like this is my fault. That I did something or could have done more and yet I can’t talk to my friends. I feel like I’m on a branch alone.”

Helplessness, Anger and the Desire to Avoid

Feelings of helplessness, anger, and some despair led to thoughts of leaving the social services field. In fact, however, in follow-up none had left the field. After

witnessing firsthand the client's violence directed at oneself and the subsequent arrest of that client, a participant related,

Most of what was frustrating were things out of control, out of my control. I left having feelings like. I don't need this job. When I was leaving the parking lot I was thinking I don't need this, I don't need someone jumping on me and telling me I'm not doing my job and I'm a horrible person; I don't need it.

Another participant noted that after a critical incident experience they were to work on call over the weekend. The worker gave this lucrative overtime away noting, "I did not want anything to do with the department this weekend. I wanted no contact with the office or with lawyers ever again." Another participant while reporting a drop in self-confidence stated, "I even think I should quit it all and go into sales." Many other participants said that they had a strong desire to leave their work for another vocation.

Results One Month After the Intervention

It was also hypothesized that these symptoms of stress would be significantly reduced after one month following the intervention of a critical incident debriefing. The purpose of this section is to report relationships between stress symptoms in the pretest and post-test and relate the major themes collected in the qualitative analysis in the follow-up interview.

A paired samples t test and a paired sample correlation test were used to compare the relationship between pretest and post-test scores for symptoms of stress. In reviewing the results of stress symptoms, as shown in Table 3, it was found that several symptoms had a significant difference in mean scores between the pretest and posttest.

The relationship between the pretest and posttest showed a significant reduction in symptoms as reported by participants ($p < .05$). The significant symptom changes were in anxious arousal, anger and irritability, defensive avoidance, depression, dissociation, intrusive experiences, impaired self-reference, sexual concerns, dysfunctional sexual behavior and tension reduction behavior.

The next question asked if there would be a significant change in coping from the time of the debriefing to the second interview one month following the intervention. Utilizing a paired sample t test with a confidence level of 95%, it was found that the following items had a significantly lower mean score when comparing the pretest and the posttest measurement. These items were cognitive avoidance, emotional discharge, acceptance or resignation, and inconsistent response.

No significant differences were found for logical analysis, positive reappraisal, seeking guidance and support, problem solving and seeking alternative rewards. This would indicate that participants reduced their use of cognitive avoidance, emotional discharge, acceptance and resignation, and the use of inconsistent responses from the time of the debriefing to one month after the intervention. This can be seen in Table 4.

Qualitative Data Analysis in the Follow-up Interview

Narrative Restored

Once again in this triangulated study the qualitative data supports the quantitative data. The following is a reporting of the experience of participants one month after the critical incident debriefing. Five critical questions were asked in this semi-structured

interview. The first was simply, “How are you doing?” The second was, “Has anything significant to you occurred since our last interview?” Third, “What do you believe assisted you the most over the past month?” Fourth, “What, if anything, was most useful for you in the intervention?” Finally, they were asked, “Are there any comments you wish to make or information you believe the research team should know more about regarding your experience?”

The responses were organized around three themes: the relief of symptoms of critical incident stress related to the experience of the intervention, the usefulness of talking in a supportive atmosphere during the intervention, and, finally, the usefulness in talking to create a “new perspective.”

The Reduction of Symptoms of Stress Intrusive Thoughts and Rumination

An important diminished symptom would be the reduction in intrusive thoughts and rumination. A participant reflected, “I’m not so emotional obviously. After talking with you I don’t feel I need to talk about it all the time anymore.” This would indicate a reduction in rumination. The worker continued, “I still wonder if there are things I could have done different but it’s more in mind with I am using that as a way to become better with working with people.” This also would indicate a change in rumination. Another participant stated, “I was able to get some distance on the case and could stop thinking about it all the time.”

Breaking Through Isolating Behavior

Another reduced symptom identified by participants was the recognition of isolation and the re-engagement with others. A participant noted, “I think [the experience of less stress] is because after we talked so many people were there for me and I allowed them to be so supportive.” Another participant related, “I think about how I was backing off from staff. Now I join in with my staff more. Before I was being distant. Now I am joining in and it feels good to laugh again.” Another reported the ability to reconnect with her supervisor for support. One participant said, “I was able to talk with my supervisor several times and that helped. I should have been talking to her all along. I’ve gotten back to working out and going out again with friends.” One participant mentioned that as a result of the intervention, “I didn’t get so angry. I didn’t make them [fellow workers] you know, I didn’t get angry with them and hold a grudge against them. I talked to them about the issues that were bothering me.”

Most participants reported other symptom reduction. One worker noted, “Actually, I am not as freaked out. I am not as upset and I am not afraid that I am going into a depression.” A similar response from another participant was “My irritability is way down and being quick to anger is way down.” Another participant put things this way, “It was a relief to know what I was going through was not abnormal and I wasn’t going crazy.”

Talking Helps

Talking offered a sense of relief to participants and helped them gain a new perspective on things. A sub theme related to the testimony of talking is the relational

way in which the intervention occurred. One participant said “Well, first of all when we talked, I’d say I got a lot of support and encouragement from you [the interviewer]. So I can say the words were less important than the feeling I got from you. I was glad I took the time to come here and listen to you and then get the support from you. Then number two, I thought that you were encouraging so far as allowing me to look at new things, to look at some new options.”

Another participant described similar feelings: “It was very helpful to be able to talk about this without feeling threatened. That was important.” Another participant reported that the intervention allowed for, “acknowledging my feelings. It was very affirming and allowed me to get some distance from the client.”

In summary participants found the atmosphere of non-judgment, acceptance, support, and encouragement to be very helpful and it allowed for the development of new perspectives.

A New Perspective

Another sub theme to how talking helped is the acknowledgement that the intervention allowed for a “new perspective.” This new perspective is perhaps the best evidence that a narrative shift had occurred thorough the process of the intervention. One participant noted, “I guess almost in recognizing that, to even talk about it, that it was even something I could work through, to have the time to talk about. It’s definitely better to let it go. And why not get it out?” This person continued, “The normalcy, it became kind of like a normal thing. After rehashing it and knowing there wasn’t really anything, not a whole lot you can do different.” Another participant, responding to child sex abuse

and murder, reported in the follow-up interview that talking helped. Like other participants, this participant said that talking helped her to “gain some perspective” and it allowed her to get some clinical distance from the client, gave her a sense of affirmation, and a feeling of being at peace after the intervention.

One participant, when addressing the question of what was most useful in the intervention noted, “I think just coming and talking about this because I wouldn’t have talked about this with a colleague or my supervisor and talking about it was the beginning of the break in the enmeshment. This helped me to look at the whole situation in a less emotionally-charged way.” Another participant reflected that in the process of talking, “Something happened as though I had a perspective shift in my professional and personal life.” This participant continued, “It’s about being able to talk and leave some of it. It was out there, said. I could leave some of the burden of it. The feelings didn’t go away but they were more manageable and tolerable when I could acknowledge them. I was able to give some validity to myself. Self-acceptance. I can feel this stuff without being locked into it.”

One participant, having experienced an attempted suicide by an adolescent, was asked the question, “If anything, what do you think was helpful in the previous meeting?” This worker related, “I think it was just finally talking to someone. I didn’t realize how much it was all bothering me and how I had withdrawn from everyone. I realized I can’t be super social worker and that I need support of supervision to keep my balance.”

A final interesting shift in perspective was demonstrated by the recognition that participants were not alone in their experience. Two participants demonstrated this in an interesting shift in the use of referencing pronouns from *I* to *we*. One participant reported,

“We are definitely doing quite a bit and I don’t feel like it’s me alone trying to work with this family. I feel it’s our agency and I even framed it that way, that our agency not just me is there to help.” One participant changed from *I* to *we* in the same paragraph. The worker stated, “I have kept telling myself I did everything I can. I remind myself we have done everything we can. We can’t feel guilty.” The shift in perspective is that the story doesn’t just include *I* but is shared with a larger *we*. This shared perspective seems to bring relief.

Summary of Findings

This study utilized a sample of social service providers who were a good representation of workers in the northern region of Illinois. The study found that participants identified traumatic incidents as:

- the violent death of an adult client
- clients perpetrating extreme violence
- children being victims of extreme violence
- children being used in child pornography
- the violent death of a child
- realistic threats or actual violence directed towards the worker
- shared issues with the client
- conflict with administrators or in court settings

Supporting the research hypothesis regarding symptoms related to the crisis event, it was found that after experiencing what workers felt was a critical incident they scored significantly higher than normative scales on the Trauma Symptom Inventory for

symptoms of anxious arousal, depression, anger and irritability, intrusive experiences, dissociation, and tension reduction behavior. Again supporting the research hypothesis it was found that one month after a critical incident debriefing that most symptoms had dissipated. The experiencing of symptoms and their reduction was also supported by the self-report of participants both during the intervention and in the follow-up interview.

Further supporting the research hypothesis in regard to coping with the crisis event, it was found that when compared to normative scores on the Coping Response Inventory participants were utilizing avoidance coping behavior at the time of intervention. Such behavior as cognitive avoidance, seeking alternative rewards, and emotional discharge were noted to be significant when compared to normative scores. One month later all avoidance behaviors had fallen to a normal level and acceptance and resignation had increased. This shows less reliance on avoidance coping and continued utilization of engaged coping behaviors. Participants' self-report both during the intervention and during the follow-up interviews also support these findings. Most significant was the shift from isolating behaviors following the incident to re-engaging with supportive relationships after the intervention.

It was hypothesized that the debriefing intervention would contribute to the reduction in symptoms and shifts in styles of coping. In interviews participants reported that it was the intervention that assisted them in identifying symptoms. They noted that talking with someone in a nonjudgmental, accepting, supportive, and encouraging atmosphere that allowed for new perspectives was most helpful. It is important to observe that participants described being unable to integrate their experiences in the initial intervention. They reported in follow-up interviews that the intervention assisted them in

being able to create a “new perspective” with regard to their experience. This new perspective allowed participants to reduce avoidance behavior, reduce isolation behaviors, and, for some, act in new engaged coping behavior.

CHAPTER V

DISCUSSION AND CONCLUSIONS

Critical incidents do occur in the child welfare system. Further such events can create critical incident stress symptoms which can be very devastating for workers. While such incidents do happen they are often met with denial both on the level of the individual worker and in the child welfare culture as a whole. Personal narratives of workers were examined as they were disrupted by exposure to a critical incident. The process of restoration of the personal narrative through the intervention of a critical incident stress debriefing is examined. Study limitations, recommendations for further research, and recommendations for the practice field are explicated.

Denial That Critical Incidents Happen

The extreme nature of some of the events reported by workers in this study was shocking and upsetting for the workers. They described events of severe inhumanity and spoke of the distressing reactions they had in response. Especially disturbing was the fact that in most cases the violent behaviors were perpetrated by those who were in relationships of intimacy and trust for the clients they served. While exposed to neglect and abuse of children on a daily basis the events reported by workers in this study were experienced as intense in their brutality.

From the outset of the study it was not expected that in the face of such events which are so disturbing to the worker, that workers did not consider that assistance might be helpful. One reason might simply be that not every worker is affected the same way in relation to these events and as such do not find the need for seeking assistance. However, another possibility would be that the culture of child welfare is affected by the pervasiveness of interpersonal violence in which people, often in intimate familial relationships, are being physically and psychologically abused to the point where workers are numbed. Agencies try to promote themselves as resources that are supportive to families and are about preserving families. It is, however, a culture in which interpersonal violence drives the purpose of these organizations and looms in the background of every daily interaction with others while workers are in the field. These events of interpersonal violence are frequently severe. This denial seemed to permeate the profession of child welfare workers as well as the other helping professions. This denial was evident during trainings designed to recruit subjects for the research as several workers would comment on the lack of necessity for such an intervention. Both probation officers and police social workers were completely unresponsive to the invitation to participate. Members of these groups denied that such events bothered them. They insisted that they do not let themselves get that involved with clients.

Such reactions should not be so surprising if one reflects on the literature regarding soldiers in combat, prison guards, and emergency response personnel (Grinker and Spiegel 1945, Menninger 1954, Cherniss 1980, Maggio and Terenzio 1993, Nelson-Gardell and Harris 2003). The fact that while working in this culture of violence one may be exposed to something even more extreme can create styles of coping we have already

acknowledged in the cultures of violence in the field of combat, in a prison system or a domestic violence shelter (Grinker and Spiegel 1945, Cullen and Wolf 1985, Baird 2003). Fear contributes to this denial and resistance to seeing that they are working in a culture of violence and that such events as a critical incident exist.

During trainings and in hallway conversations it was communicated by workers in the study that admitting to the seriousness of such events and actually talking about them would somehow bring out feelings that would overwhelm them. If they let it “get to them” or if they did not internally push such levels of experiencing away, they would be engulfed in something they could not or wished not to handle. The fear involves the loss of seeing one’s self in this environment of violence as having control over one’s experience and somehow having some control over this high risk environment. In other words, to acknowledge one’s helplessness is far too painful. These issues of control will be discussed in regard to workers who experienced a critical incident later in this discussion.

Wanting control over one’s experience is similar again to the reactions noted in others involved in cultures of interpersonal violence. The literature shows that individuals in such a climate can present with a hyper-repression of their fears of being exposed to severe violence and display a concentrated effort to avoid thinking about the possibility of such events, or to avoid allowing themselves to process their experiences of such events. Just as in other cultures of pervasive violence these workers present with a heightened conscious effort to conceal unacceptable thoughts and feelings about such events. (Baird 2003 ; Cullen, Wolf & Frank 1985; Grinker & Spiegel 1945; Menninger 1954) This denial also manifests itself in the culture’s “John Wayne” syndrome (a phrase

coined by a supervisor). This is a child welfare cultural myth that workers should not be affected by the work they do and this belief is shared by many in the human services profession. Utilizing a critical incident stress debriefing is seen as a weakness and there were fears that colleagues would view seeking assistance as vulnerability. A concern over who would be aware of participation in the intervention and what would others think was expressed. Such means of coping may be what sustains the worker to return to such a volatile climate each day. If such denial perpetuates avoidant coping, however, it will likely result in difficult stress symptoms in the long run (Moos, 1993; Nelson-Gardell & Harris, 2003).

Events Are Extreme

The question of what could be seen as an extreme event in child welfare was raised from the inception of this study. When designing the study many gave the input that these workers see terrible events everyday. Parents hurting and neglecting children, parents experiencing the removal of children from their care, children losing their parents and becoming dependent on a bewildering group of strangers is what these workers face on a daily basis. How could one expect them to identify an event as extraordinary or critical if it is something they experience with frequency? However, these were atrocities they felt went beyond their daily experiences in child welfare.

Often workers reported that they had either never had such an experience over several years of service or that their previous experiences of this nature had happened long ago. While this study presents extreme incidents, it is a given that within the child welfare community such extreme events happen with some frequency. This is why so

much time, money and effort is spent trying to protect clients from such events. But while such events occur with frequency within the system, they do not appear to happen with frequency in the career of each individual worker. This supports the conclusion that these are indeed critical incidents for these workers and are not just a part of the day to day job. And when they do occur the results for the worker can be devastating.

An example would be, after investigating and providing services for a family after a parent tortured and murdered their child, an agency team requested a critical incident debriefing for team members individually and later as a group. One worker involved had been on the job for just one week. Another seasoned worker involved had just returned to child welfare work after several years of absence. This worker noted that this was precisely the type of experience that had made her ambivalent about returning to child welfare. A third worker had been with the department for several years and commented, "I have never seen anything this terrible." The new worker stated that during her interviews for employment she had asked about such incidents and expressed fears about having to be exposed to such events. She was told they very rarely happen and yet she was exposed to such events her first week of employment. In this particular case it was severe enough that, even though the workers had not established a relationship with the family, it was heinous enough to create severe critical incident stress for several team members. While noble and intense actions are taken to prevent such events, the predictability for the individual workers exposure is difficult to establish. Being virtually impossible to prepare for these events can be identified as being extraordinary for the worker.

Defining Worker's Experiences

The study design allowed the workers to identify for themselves the nature of a critical incident. An issue evolved in naming what type of experience the workers were reporting. Initially the inquiry was exploring the vicarious nature of the workers experience. The thinking was that workers form identifications and a sense of caring for clients under at risk conditions. When tragic events happen to these clients the worker would experience a vicarious emotional reaction to these events. Once into the study, however, it became evident that these experiences were not just vicarious. As workers reported incidents, it became obvious that the events often involved the worker directly. Serious threats to their safety were made to several workers by clients. Workers were sometimes present when abuse or violence occurred. Sometimes workers were attacked by clients. These were not vicarious experiences, but were direct experiences similar in nature to those of police officers when in the field. It was after this realization that more emphasis was put on the notion of critical incident stress as a defining word for their experience. Critical incident stress can include the experience of workers reactions to the events in their client's lives and those events that happen to them directly while in the field.

Strengths of the Workers

The workers in this study are people who genuinely desire to help others. They had a concern for the plights of others as well as dedication to their role as a human service worker. They had the capacity for vicarious identification with their clients. They

demonstrated empathy for the clients they served. They were obviously dedicated to their clients and their profession (Cherniss, 1980; Linton 1995; Nelson-Gardel & Harris, 2003).

In agreement with the literature, these participants in the study showed characteristics that were similar to emergency response personnel. There was a strong correlation between their sense of professional competency and positive self-regard, with a sense that they were affecting the lives of clients in a positive fashion. They were responsive to the plights of others. They showed a strong desire to be in control of themselves and the situations they found themselves in. While often doubting their capacity to continue working in social services after the reported incidents, they all remained in the field and are committed to their work (Cherniss, 1980; Linton, 1995; Nelson-Gardel & Harris, 2003).

Critical Incidents and Critical Incident Stress Did Occur

Despite initial resistance, some child welfare workers came forward to report their experiences and to seek assistance. They reacted to the extreme experiences of violent deaths of clients and client's perpetrating excessive violence towards others. They experienced children being victims of severe violence, heinous murders, and child pornography. These events typically were at the hands of those in positions of trust for the children. Additionally, some workers experienced real threats or actual violence from clients against themselves.

Workers described symptoms of critical incident stress reported in critical incident theory and trauma theory. They felt guilty, overly responsible for the events, and

incompetent. Somatic reactions were identified not only in the objective testing but also in self-reports. Problems with sleep, eating issues, headaches, and a bodily sense of restlessness were reported among some of the symptoms. Constricted thinking, shock, disbelief, disorientation, and isolation were also reported (Arthur, Brende, & Quiroz 2003; Mitchel, 1995).

The sense of isolation reported by the workers was an important and significant symptom of stress. This isolation seemed to result from multiple factors. One factor was the worker's personal sense of guilt and feelings of incompetence related to the incident. Often these feelings were attempts to gain control or understanding regarding the incident. If they could blame themselves for the event then they could understand how such a terrible event happened. Thinking in these terms, however, certainly does not encourage one to share these thoughts with others. This internally motivated isolation is also a part of the depressive feelings and shock after being involved in such an event. They often felt that no other person could possibly understand the tragedy they had experienced as a child welfare worker. These notions also contribute to a sense of loneliness and further isolating behaviors.

Not surprising was that support persons outside of the helping professions could not comprehend the worker's experiences and therefore could not assist them in coping with the critical incident. Often people outside of the field did not want to hear about these incidents. They feared the effects hearing about the incidents might have on themselves. In the defense of their usually supportive relationships, workers questioned how they could expect spouses and close friends to really understand or even wish to hear about such awful events that happen to people? In fact, there was often an expressed and

realistic fear that such sharing would traumatize others, burden these relationships and soon burn the relationships out resulting in more isolation.

Often supervisors were not available physically for the worker for a variety of reasons. Perhaps this created an unconscious motivation for the workers to seek out the intervention team. In some cases, however, it was probably accurately perceived that other professionals were afraid of the worker who had experienced the critical incident. These other professionals were afraid that hearing about these events would increase their own fears that such an event could happen to them. It was speculated by the workers that others were already overburdened emotionally by the job and could not be expected to take on the extra emotional burden of listening to their story. When they noticed that some workers were avoiding them they thought that these fellow workers had a fear that listening would bring up unresolved feelings and thoughts about such incidents they had experienced. Perhaps if these fellow professionals listened, it would tap into their fears that if it happened to this worker, it could happen to me.

Some of the participants, in reflecting on why people at work were avoiding them, speculated that they were seen as incompetent and that associating with the participants would reflect poorly on their own competency. They saw that other workers got very busy with their own cases in attempts to assure that they would not have a similar experience. For many such reasons, the result was that the workers in need were left alone in their experiences. These internal and environmental causes of isolation seem to speak to the need for critical incident interventions being valued, promoted and provided within the child welfare community. The needs of the worker after a critical incident will

not be addressed spontaneously within the child welfare community nor in the natural support systems outside of the work environment.

These workers were overwhelmed and their narratives were disrupted as evidenced by reports of shock and disbelief regarding the events they had experienced. They were uncomfortable with their feelings, perceived themselves as incompetent, and felt disoriented. It was hard to put the incident “together and make sense of it,” they reported. Their narratives were not cohesive, comprehensive, or complete for them.

Disrupted Narrative Restored in a Supportive Listening Relationship

These workers found themselves in situations where their previous coping responses did not work for them. The participants reported that it was the intervention of the critical incident debriefing that assisted them in coping with the events of a critical incident. They said that it was the talking through the events, thoughts, and feelings that was most helpful. Talking through the experience with someone who could relate to them and give acceptance was very important in integrating their experience of the critical incident and in helping them to pursue positive coping strategies. It was the supportive listening and the ability to experience encouragement in the supportive relationship with the facilitator of the interventions that was important and instrumental in their ability to have a better understanding of their experience.

Experiencing a relationship in which they felt a sense of empathy was instrumental to them in helping them to feel less isolated and able to make a less fearful assessment of the events that had occurred. This experience is similar to the experience of other people during a crisis intervention. What was helpful in their assessment is that they

felt understood, could tell their story, and came away with a new understanding of their situation. It was obvious that the experience of being listened to by someone who could communicate empathy, understanding, and could listen in a supportive manner was very important to a sense of the intervention being worthwhile and useful (Kirst-Ashman and Hull, 1995)

The “New Perspective”

Participants expressed a “new perspective” regarding their experience, and that this greatly reduced their stress and anxiety. Understanding the developmental process of a narrative in response to a critical incident can be a valuable means to evaluate and understand critical incident narratives. In this developing narrative we can ask questions like, “What is significant about this new perspective? What is the new perspective? After reviewing the findings and the literature a theme of “agency” develops. The “new perspective” seems to involve a sense of shifting “agency” in the crisis narrative. “Agency” is meant to describe ascription of responsibility and control over the occurrence of the events. This ascription of responsibility and who had control over the events appears as a central theme in the shift to a “new perspective” for workers. What makes it difficult to create an integrated narrative is the sense that a worker must have had responsibility and control over these virtually uncontrollable events. This sense of responsibility and control appears much exaggerated. It is the internal conflict regarding the ascription of responsibility and control of the events that contributes to the anxieties for the worker as they sort out and construct meaning about the events. They struggle with the thoughts that they should have been in control of the situation, even though it

was out of their control. Yet to acknowledge events to be out of control is overwhelming like it is to others who have experienced a traumatic situation in other contexts.

These child welfare workers presented with characteristics of being inner directed, holding positive self-perception based on their perceived effectiveness with clients, and as having a strong desire to be in control of themselves and the situations they find themselves in. It seems that they came to the incidents already with a high degree of “self agency” and a high internal locus of control. Narratives like, “I can help people in trouble,” are the self narratives that brought them to the field of child welfare. A critical incident challenges such self perceptions in a dramatic way.

A critical incident is not only damaging because of the empathy and identification with the client the worker might hold. It is also difficult to recover from the critical incident because of a strained ability to integrate the experience into the self narrative because of this strong sense of internal locus of control challenged by the critical incident. Left in their isolation, they may have taken too much responsibility for their experiences and the situations. They find themselves, in attempting to create a cohesive and coherent narrative of the events, taking an exaggerated responsibility for the events. These conditions result in feelings of incompetence and guilt about the situations they have little control over. It also creates guilt and self-doubt about their whole history of feeling they had worked in a competent manner and that they had some control over situations regarding professional experiences. One element that contributes to the disorganized self-narrative is that the incident has brought into doubt the organizing themes of their past and doubts about the future that they would be effective in the lives of clients. Their understandings of how our world works in terms of our civility toward

one another is contradicted. It is devastating to their regular self-narrative of being in control and being able to protect themselves and their clients. An internal anxiety is created as a result of this conflict between the regular narrative and the overwhelming evidence of their lack of control that contributes to the failure to integrate the experience.

Contributing to this sense of personal failure is the child welfare worker's perceptions of the beliefs of the child welfare culture. The child welfare culture perpetuates a climate that workers do have responsibility and control over the events in their client's lives. This culture reflects the dominant cultural need to control tragedy. They work in an environment that attempts to control tragic events from happening. In attempting to protect clients and to prevent future injuries the child welfare system is constantly assessing and planning to manage client behaviors. Further, workers are closely supervised and held accountable to high standards of care in terms of the amount of services they are required to deliver within a rapid time frame. Failure to prevent tragic events may result in media investigations of the agencies involved, internal agency investigations, and investigations by the attorney general. Often these investigations and hearings regarding workers responsibility for events involving clients resemble criminal court hearings. All of this is to ascribe responsibility for the tragic events. Implicit in the culture's response is the message that the worker was responsible for the crisis events. There is the feeling reported by workers that such investigations are not to improve services to families but are actually designed to distance the agencies from responsibility for the events.

An example of this was seen when a child involved in the child welfare system murdered another child. The foster family wished to go to the press to let the public know

this child was not in the foster family's words a "monster." The worker was instructed to tell the family that this would breach the confidentiality of their child client who had committed the murder revealing the child's involvement with child welfare. The worker related that this was not really true but that the agency did not want their relationship to the client known in order to avoid potential law suits against the agency by the victim's family. It was implied to the worker that, if such an investigation occurred it would likely reveal that the worker had made some mistake in predicting the lethality of the client. The worker felt vulnerable and began to second guess what mistakes might have been made. This increased the sense of responsibility that these events were within the worker's control and intensified the worker's sense of guilt and incompetence.

It is interesting that these themes of responsibility, guilt, and questioning of competency also occurred in crisis events in which workers were responders to the events and did not know the victims until the actual event. They still expressed some degree of self searching as to how they might have prevented something in the crisis. Contributing to the inability to integrate into the self narrative these events is the lack of ability to make sense of how much responsibility one should take for the crisis happening. An inability to understand how much control one had over an extraordinary event can be very disruptive.

Creating a Shared Agency Narrative

There is a definite shift regarding this sense of "agency" in the worker's narrative in the second interviews. This shift seems to have occurred when the worker stopped trying to make meanings about responsibility and locus of control on their own. There

was, as a result of the intervention, a shift in the theme of personal narrative to one of a more “shared agency narrative.” A shared agency narrative occurred when workers, through dialogue with others, came to realize that while, they had some control and responsibility over the crisis situation, others also had responsibility and control over the events. In fact, they discovered that they had much less influence over events than others as they had originally surmised. This is not to be confused with developing a narrative of blaming others, but a narrative of balance in the roles of everyone involved in the incident. At times, the shift to a “shared agency narrative” developed in an opposite fashion. Workers may have been blaming others for the events and too fearful to examine their role in the events. The “shared agency narrative” may have shifted from one of giving the entire power to others to one of balance in which the worker also claimed some role in the events. A “shared agency narrative” is coming to a narrative about the events in which one realizes that they were in control of some elements and acknowledging that others were responsible for the events that have occurred. It is both taking personal responsibility for what they did have control over and the holding of others accountable. It is interesting, in trying to solve responsibility and control, workers would take a position of over-responsibility and control or at times defensively blaming others for not being responsible and in control. Typically this blaming of others was directed at the child welfare department. The worker might flip back and forth in this part of the narrative during the same telling of the story in the intervention. At times this appeared as if the worker was displacing the experience of guilt, responsibility, and sense of being out of control onto the welfare department. At other times, however, it appears to be the struggle to achieve a better understanding of the responsibility and control and

results in relief from the feelings of guilt. Often by the post intervention interview workers noted a sense of a more integrated sense of the meanings of the events and a reduction in symptoms.

One major shift was again the balance in the theme of responsibility and control. It seems that workers, in relating their disrupted narratives about these events, came to a balance on the continuum of responsibility vs. blame. Their “new perspective” recognizes that they were not alone in the responsibility or control over the crisis event. In relating their perceptions of the events of others and receiving feedback from others they seemed to have formed a more integrated and cohesive sense regarding this component of the story. Workers reported a more balanced assessment of their capabilities and how much they realistically could have done to prevent the crisis. There is a much more balanced self evaluation that they did do as much as they could to prevent the incident but that they must share the responsibility and the control over the events with others.

Frequently the worker was able to make a much more appropriate assessment of the responsibility of the family or other actors in the lives of their clients. When the victim was an adult, the client was assigned a more balanced ascription of responsibility and control. Examples would be a shift to a greater acceptance that it was the parent that was finally to be held responsible for the killing of family members. Another example would be it was the adult client who must take responsibility for attempting to hurt the worker while the worker acknowledged they might have provoked the response.

Some workers also got a “new perspective” that they were really not the only one involved in the incident professionally. Through the intervention and discussion with others they would come to realize they were a member of a team that was making

decisions that may have contributed to the events. There would be a sense that other professionals were supportive of decisions made both at the time of the events and in looking back at the events. A good example is that of the foster care father who was making child pornography. The worker reviewed the events with others and came to a more balanced understanding that many had been involved in the decision of letting these parents take a child into their home. These decisions were made as a team and not solely by the worker. Workers were often assured by colleagues that none of them could have predicted the events. Both during the crisis intervention and later by colleagues, participants were often challenging their developing narrative. The challenge was that things were less in their control or less their responsibility than they were trying to make it be.

It should be noted that these shifts in perspective were not simply excusing themselves. These appeared to be actual shifts from taking full responsibility for the events to one of a more balanced shared responsibility. Workers still took responsibility for their share in the event. Workers struck a balance in their understanding of how much they were in control of the situations and how much others had control over the crisis event.

Narratives Happen in Relationships

Both the objective inventories and self-report of participants indicated a reduction in stress symptoms and participants directly linked this to being able to talk in a safe environment. It was through the relationship with the debriefer that they developed a sense of acceptance, support and encouragement. That interpersonal context allowed

them to examine and reflect on their narratives of the events. Some of these narratives were conscious and some came into consciousness during the intervention experience. With this restored narrative came a reduction in somatic, behavioral, cognitive, affective, or relational stress symptoms. In their experience the critical incident debriefing contributed heavily to the restoration of their self narrative. This restored or new narrative supports the notion that narratives are dynamic, interpersonal, and acts of communication. Narratives are often constructed in a relationship between the one telling the narrative and the one listening to the narrative. This critical incident intervention appeared to assist the participant in selecting elements of the narrative and in organizing the meaning of events. The intervention creates a potential for assisting the individual's need to make sense of their experience. It is obvious that this making sense of the events occurs in an interactive process with another person who the participant experiences as capable of relating to their experience, has the participant's best interests as a priority, and can be both supportive and encouraging.

Study Limitations

The primary limitations of this study are familiar to the quasi-experimental designs in the social sciences. One limitation is the lack of a control group. This lack of a control group creates issues regarding the internal validity of the study. This limitation makes the study vulnerable to the criticism that time or any other number of factors could have affected the results reported. To create a control group and withhold the intervention would create ethical dilemmas. At some other point in time it would be beneficial to compare outcomes with subjects who did not have access to such a resource. Research

regarding the effectiveness of critical incident debriefings has been conducted with random assignment of subjects and using control groups in other situations and professions (Camfield Hills, 2001; Richards, 2001). To create a control group utilizing another intervention would distract from the hypothesis of this study and involve a comparison of two intervention models. However, the triangulated form of the study design helped address this issue since we could ask participants about their experiences of the events and the intervention.

The second limitation of this study was the lack of randomly selected subjects. This study used a nonprobability sample of convenience. As such, those who are coping the best or who already have healthy support networks may or may not have volunteered and skewed some of the data. To mandate intervention, however, again invokes ethical issues of research and could also result in skewed data. Further, more recent studies show it might be in the participants' best interest if participation in such interventions is voluntary (Van Emmerick, Kamphius, HulsBosch, Emmelkamp, 2002). It is not possible to acquire a random sampling in this study; therefore a quasi-experimental design was selected. This limited the degree to which one could generalize from the data, and limited the analysis of the data.

A third limitation in the study that affects internal validity results from the selection of an interrupted time study design. In this type of design there is little control for issues related to seasonal influences, individual experiences within subjects, history, and other intervening variables that could influence the results. This study did try to address this issue by using member checking. This is the inclusion of the brief, directed interview questions in the second meeting with workers. By directly asking the subjects

in the second interview about these issues it was hoped that if such influences were significant they could be identified and included in the final analysis.

A final limitation affects the quantitative component of this triangulated research design. This limitation is the number of participants. The number of participants was limited to 32 who had experienced traumatic events. This is, however, a good start for such an exploratory study. It does however limit the quantitative findings. None of the demographics considered as possible influential variables in the study produced any significant information. This finding may be more a factor of the small sample sizes for each demographic, which limits the statistical procedures available. A larger sample size might show these variables have some significance in studying vicarious trauma.

Recommendations for Future Research

The first recommendation for future research is not unique to this study. It addresses the limitations of the study just identified, including the lack of a control group, the lack of random assignment to the intervention, and the size of the participant group. However, these limitations are not ethically easily overcome. To withhold such an intervention brings about ethical questions not easily resolved.

Current research in the area of critical incident stress and human service workers focus on what is a critical incident (Bell, 2003). This type of research needs to be pursued. It is also necessary to replicate this study with a much larger sample of participants. This may reveal that some of the demographics found insignificant in this study may actually influence the experience of critical incident stress. One demographic

that would prove of special interest might be one of gender differences in the experience of a critical incident and resulting symptoms and forms of coping.

A new avenue of studying critical incident stress is emerging. This is the study of positive outcomes regarding being exposed to a critical incident. Some studies suggest that attributes such as a greater appreciation of family relationships may occur after such an event. Further, some people have reported a greater sense of spirituality, a greater need to express benevolence, and a desire to help others after exposure to trauma as a result of a critical incident event (Affleck, 1996; McMillen, 1999). A new study question might be if social service workers actually have some positives result from the experience of a critical incident.

Finally, some recent reactions against the use of critical incident debriefing after the terrorist attacks on September 11, 2001 have suggested that the debriefing induces symptoms for people and that the intervention can be traumatizing. With closer scrutiny it may be speculated that causes of these negative outcomes might be the result of the misapplication of the intervention. In the 1990s we saw the commercialization of this crisis intervention. Corporate employee assistant programs and other agents marketed the intervention and then misapplied the intervention. It has been noted that employees after 9/11 who were never directly exposed to the events were mandated into group interventions with those who were directly exposed. The result was that those group members who were not directly exposed to the tragic events developed vicarious trauma and symptoms of stress. It was also criticized that interventions were not adequate as a one time, one session intervention. It is criticized that the intervention opens up difficult emotions and then provides no follow-up for those who may need more.

In actuality it seems these events have led to some rules about the application of the intervention and perhaps the direction for future research. One major rule would seem obvious and that is that intervention participation should be voluntary and not mandated. Care should be taken when deciding who should participate in the group intervention given their level of exposure to the events and on a basis of who needs to really hear about the events. Research in the future might begin to refine how the intervention is best used in which situations. Future research might look into when is it most effective to have a group intervention as opposed to an individual intervention. Is there a different outcome in group interventions when supervisors are not present as opposed to being present? Is one session enough? It would seem that multiple interventions at times are necessary and that a strong belief in the availability of follow-up care for some individuals be demonstrated and provided.

Implications of this Study for Social Work Practice

Despite the limitations of this multimethod study, this study does have many implications. Human service workers do experience critical incident stress or vicarious trauma when exposed to traumatic events occurring in their relationships with the clients they serve. This study also gives evidence that these workers experience physical, behavioral, cognitive, affective, and relational symptoms of critical incident stress. Further it was demonstrated that workers do have a disrupted self-narrative.

The study is valuable because it demonstrated that in an accepting, supporting, and encouraging relationship, the utilization of the crisis intervention of a critical incident

debriefing can contribute to the reduction of stress symptoms. The study demonstrated that telling the crisis narrative in such an intervention contributed to a decrease in stress symptoms and a restored self-narrative.

A major implication then is that those in human services should be aware that critical incidents exist and need not be denied. Further, these events have a significant impact on workers. Those in human services should acceptance of the fact that human service workers can experience critical incident stress or vicarious trauma when working with at-risk clients. Those in human services need to promote the knowledge that these are normal responses to abnormal circumstances.

An important implication of practice involves the need to address the very culture of child welfare as it operates in a culture of interpersonal violence. The culture of denial that critical incidents exist must be addressed. This involves the denial of individual workers and by the organization as a whole. The institutional resistance to assistance in this study was most surprising. Even after educational training about the effects of critical incident stress, the normalizing of critical incident responses, and the possible benefits of the critical incident debriefing, a strong resistance to participation remained. While agency directors and upper management were initially skeptical they seemed to respond to the educational process and see the benefit intervention could have for their workers. It was in middle-management level of direct supervisors and direct workers, resistance was most evident. It was found that the child welfare agencies were closed systems that were suspicious and resistant to outside influences.

One major reason for resistance was authority. Whose authority was the research team undermining? Resisters may have been asking themselves the following questions:

Would the research team undermine my authority as supervisor? Would the research team give my worker directions in case management when this is my authority? If I am the union steward and this is an employee benefit, why wasn't I included in the decision to allow the study to take place? Why should I as the union steward support this if I wasn't consulted? Concern about turf rather than access to a resource for workers was expressed surprisingly quickly.

Suspicion of the motives of workers was also stated during educational meetings regarding the study. Some workers and supervisors perceived the participants as malingering and that the intervention was "coddling" the worker. An attitude pervaded that workers should not be pampered but should be out in the field with clients. The difficulty of the work of child welfare workers was dismissed most often by supervisors. Many perceived workers as children who needed to be prodded into work. A lack of empathy for the difficulty of the work was evident. Even supportive middle managers would secretly relate that workers always complain and that employees would take advantage of such an intervention as a way to "get out of work."

The influence of supervisors on their workers' ability to perform is an important resource. In the end, participants volunteered from agencies in which management and supervisors supported staff to take advantage of such an intervention. In most cases when supervisors or other workers promoted the project or the researcher, the participants volunteered.

The support included the following:

- an expressed confidence in the researcher

- communicating a conclusion that the intervention would be beneficial from a clinical standpoint
- allowing workers to have time to participate in the study
- an expression that the intervention was not an attempt to undermine participants' authority over workers or cases

The answer to this culture of denial and resistance was to educate and develop relationships of trust with upper managers, middle managers, and line staff. As these relationships developed and workers started to hear about the benefits of the debriefing they began to refer others to the debriefing team. By cultivating relationships of trust with workers, acceptance of the debriefing process developed. A reputation of dependability and effectiveness made debriefing more acceptable to workers than when a mandate came from an institution, agency director, or upper management.

Administrators need to be made aware that due to the sense of vulnerability experienced on the part of the worker it is less likely workers would utilize the intervention if it is administered by those within the service delivery system. Workers related that, if the intervention were internally administered, they would be suspicious and concerned about their confidentiality and ability to truthfully participate. Workers noted that if the intervention were administered by those in management, their fears were heightened regarding if they would be judged as incompetent and that the manager would use the experience in decisions regarding performance reviews or promotion. If the intervention would be administered by fellow workers, they still voiced a concern regarding confidentiality and being judged professionally. Some workers expressed the concern that they would be inhibited in sharing about their personal lives being

influenced by the critical incident if the intervention was administered by someone within the social service agency.

A lack of awareness of such issues might relegate the administration of the intervention to supervisors or other agency managers. This decision could be due to budgetary reasons or a response to fears that those from outside the agency would have too much influence on workers or undermine the authority of management. It appears to be that one of the roles of the research team was to educate management about the issues of vulnerability of workers and develop relationships of trust with supervisors and managers in order to address such issues. It would seem likely that such education and development of relationships of trust would need to be addressed by those who become responsible for providing critical incident debriefings within social service agencies.

Summary

The purpose of this study was to allow child welfare workers to identify when they were exposed to a critical incident. It also examined if a critical incident stress debriefing would be beneficial for child welfare workers. Thirty child welfare workers in Northern Illinois participated in a debriefing and a follow-up session. This study used a triadic research design utilizing both quantitative and qualitative methodologies. Participants took inventories to measure trauma symptoms and to identify the type of coping responses before and one month after the debriefing. The debriefing and follow-up session was also audio taped for the qualitative narrative analysis of their critical incident experience. Initial inventories and interviews revealed that workers were profoundly affected by these critical incidents. Such critical incidents can have detrimental effects

such as isolation, extreme guilt, and symptoms of acute stress. Workers presented with significant symptoms of critical incident stress and were utilizing avoidant types of coping behaviors. After one month, follow-up inventories and interviews indicated that critical incident stress symptoms were greatly reduced and more engaged forms of coping were being utilized by the workers. Workers reported in the follow-up interviews that the debriefing was instrumental in assisting their coping after the incident. For these child welfare workers the provision of a critical incident debriefing, in a supportive and neutral interpersonal context, contributed to their reduced sense of isolation and gave them an opportunity to process the incident which they reported contributed to their sense of reduced stress. This study supported the hypothesis that a critical incident stress debriefing is very useful for workers in supporting them in the difficult work that they do. It also supports that the adoption of such an intervention strategy by the child welfare community would greatly serve front line child welfare workers.

APPENDIX A
STUDY TABLES

Table 1
One-Sample Test Comparing Participant Pretest Symptom Scores to Normative Scores

	N	Mean	Sig. (2-tailed)	Mean Dif.
Anxious Arousal	32	60.9063	0.000*	10.9063
Depression	32	58.0000	0.000*	8.00
Anger and Irritability	32	58.0938	0.002*	8.09
Intrusive Experiences	32	60.0938	0.000*	10.09
Defensive Avoidance	32	57.1875	0.002*	7.18
Dissociation	32	62.6875	0.000*	12.68
Sexual Concerns	32	51.5313	0.395	1.53
Dysfunctional Sexual Behavior	32	51.7188	0.386	1.71
Impaired Self-Reference	32	61.5313	0.000*	11.53
Tension Reduction Behavior	32	58.3125	0.000*	8.31

Note : * p. < 05, two-tailed.

Table 2
T-Test Between Pretest Coping Scores and Normative Coping Scores

	N	Mean	Sig. (2-tailed)	Mean Dif.
Logical Analysis Pretest	32	49.4375	0.810	-0.560
Positive Reappraisal Pretest	32	48.6563	0.451	-1.340
Seeking Guidance and Support Pretest	32	52.7813	0.120	2.780
Problem Solving Pretest	32	51.2500	0.436	1.250
Cognitive Avoidance Pretest	32	57.1563	0.007*	7.150
Acceptance or Resignation Pretest	32	50.7500	0.583	0.750
Seeking Alternative Rewards Pretest	32	53.0620	0.023*	3.060
Emotional Discharge Pretest	32	59.2188	0.000*	9.210
Response Level Pretest	32	50.1563	0.946	0.156
Atypical Response Pretest	32	51.6875	0.327	1.680

Note: * $p. < 05$, two-tailed.

Table 3
Paired Samples T Test of Stress Symptoms Pre and Post Intervention

Pair #	Stress Symptom	N	Mean Paired Difference	Significant (2 tailed)
Pair 1	Anxious Arousal Pre Anxious Arousal Post	30	11.625	.000*
Pair 2	Depression Pre Depression Post	30	9.333	.000*
Pair 3	Anger and Irritability Pre Anger and Irritability Post	30	9.566	.003*
Pair 4	Intrusive Experiences Pre Intrusive Experiences Post	30	9.336	.000*
Pair 5	Defensive Avoidance Pre Defensive Avoidance Post	30	9.000	.000*
Pair 6	Dissociation Pre Dissociation Post	30	11.766	.000*
Pair 7	Sexual Concerns Pre Sexual Concerns Post	30	5.233	.002*
Pair 8	Dysfunctional Sex Bhv. Pre Dysfunctional Sex Bhv. Post	30	4.100	.041
Pair 9	Impaired Self – Reference Pre,	30	12.266	.000*

Note: * $p < .05$, two-tailed.

Table 4
Paired Samples T-Test Between Pretest and Post-test Coping Scores

Pair #	Coping Strategy	N	Mean Paired Difference	Significance (2 tailed)
Pair 1	Logical Analysis Pre Logical Analysis Post	30	0.666	0.809
Pair 2	Positive Reappraisal Pre Positive Reappraisal Post	30	1.200	0.592
Pair 3	Seeking Guidance and Support Pre Seeking Guidance and Support Post	30	-1.033	0.621
Pair 4	Problem Solving Pre Problem Solving Post	30	2.066	0.394
Pair 5	Cognitive Avoidance Pre Cognitive Avoidance Post	30	11.566	0.000
Pair 6	Acceptance or Resignation Pre Acceptance or Resignation Post	30	4.833	0.033
Pair 7	Seeking Alternative Rewards Pre Seeking Alternative Rewards Post	30	-0.600	0.759
Pair 8	Emotional Discharge Pre Emotional Discharge Post	30	5.766	0.002
Pair 9	Response Level Pre Response Level Post	30	-14.900	0.285
Pair 10	Atypical Response Pre Atypical Response Post	30	2.266	0.276
Pair 11	Inconsistent Response Pre Inconsistent Response Post	30	5.800	0.000

Note: *p. < 05, two-tailed

APPENDIX B

AN INVITATION TO PARTICIPATE IN A STUDY INVOLVING INTERVENTIONS
FOR HUMAN SERVICE WORKERS EXPERIENCING CRITICAL INCIDENT
STRESS

AN INVITATION TO PARTICIPATE IN A STUDY INVOLVING INTERVENTIONS FOR HUMAN SERVICE WORKERS EXPERIENCING CRITICAL INCIDENT STRESS

This is a study regarding the application of a critical incident stress debriefing intervention being provided for human service workers who have experienced a critical incident involving their work environment or more specifically while engaged with the clients they serve. Such an incident might entail acts or threats of violence directed towards the worker or the client, suicidal behaviors on the part of clients, similar events occurring for close associates, implementing interventions that are extremely intrusive (removal of a child from a home), emotionally difficult investigations or crisis interventions, or critical incidents occurring for clients with whom a worker has a significant investment.

The research team consists of both second year MSW students at Aurora University, George Williams School of Social Work, Licensed Human Services Professionals, and Micheal Weuste, Doctoral Student at the Institute for Clinical Social Work and Faculty member at the Aurora University MSW program.

Critical incident debriefing is a brief behavior/cognitive intervention with persons who have experienced an emotionally charged incident, typically a crisis situation. Its purpose is to reduce the difficulties or stress symptoms associated with such an incident. This intervention has become standard for emergency workers responding to trauma incidents and has been shown to reduce stress symptoms and increase productive coping strategies. The usefulness in preventing burnout and problematic work related behaviors that can manifest themselves after experiencing a critical incident is well recognized and documented.

This study wishes to expand this useful intervention to the field of human services where workers are often exposed to critical emotional experiences involving their work with “at risk clients.” To accomplish this end, it is the intention of this study to present this intervention to local agency workers, probation officers, and police social workers as a base study sample for examining this intervention to increase healthy coping and reduce stress related symptoms.

Participation in this study would involve allowing for workers in these various field occupations to self identify as having experienced a critical incident related to their employment and volunteer for the study. This study will occur over a three month period and those persons volunteering would be asked to participate.

Those participating in the study would receive an intervention and would also be interviewed by phone on one occasion one month after contacting the study. After contacting the research project they would make arrangements with a research team member for an intervention within forty-eight hours after the first contact with the study.

The intervention would take place at a mutually agreed upon location that is private and preferably not at the location where the incident occurred.

This intervention would include an opportunity to review the incident with a neutral professional colleague trained in debriefing methods, process the critical incident, education with regards to critical incident stress symptoms, identify healthy and less productive means of coping with stress, and finally to develop a coping strategy that utilizes the individuals coping strengths. Please be aware that this intervention is meant to be preventative or restorative in nature and builds on previously utilized coping patterns of the individual as well as being suggestive of other behaviors. This is not a pathology based intervention but is built on promoting the use of existing strengths.

If workers participating in the study feel an escalation in coping difficulties, more extensive services will be facilitated by the research team. The anonymity and confidentiality of all workers will be kept, however, the results of the standardized interviews will be utilized with all identifying material protected. Please note this study is to address the needs of the worker and not the client and is not meant to be a consultation about the specific case or client.

It is the intention of the study to give the results back to all participating agencies for their knowledge and feed back about the intervention and its potential usefulness. If at a later date consultation about the intervention for agency consideration is desired arrangements can be considered.

It is hoped that with your support and participation in this study a valuable intervention for work related traumatic or critical incident experiences and the resulting symptoms can be reduced for many workers and positive coping behaviors to prevent stress related symptoms encouraged and promoted.

Sincerely,
Micheal Weuste
LCSW, LMFT, CADAC

APPENDIX C
INFORMED CONSENT FOR PARTICIPATION
IN A RESEARCH PROJECT

INFORMED CONSENT FOR PARTICIPATION IN A RESEARCH PROJECT

We would like you to participate in a research study titled “Critical Incident Stress Debriefing for Human Service Workers.” This study is intended to gain a better understanding regarding if a critical incident stress debriefing similar to those employed with other emergency responding professionals will prevent or reduce symptoms of critical incident stress and enhance individuals’ ability to cope with the incident and the resulting stress reactions. This intervention has been shown as useful to other persons responding to emergencies but as yet has not been researched in its use with human service workers who work with client populations “at-risk.” If shown to be useful such an intervention may become more accepted and provided to workers when they encounter a critical incident in their work environment or when providing services for clients.

This research is being conducted to meet the requirements of Micheal Weuste’s Ph.D. in Clinical Social Work at the Institute for Clinical Social Work. Micheal Weuste is a licensed clinical social worker in the state of Illinois. The research team consists of second year MSW students and LCSW social workers.

You have been selected for participation in this study due to your employment in working in the human services arena with high-risk clients. Your participation in this study while greatly appreciated is completely voluntary and if you do participate a decision to withdraw at any time will be respected and held in confidence.

If you decide to participate your involvement will require some degree of commitment. Your participation will involve calling a voice mail number after experiencing what you consider a critical incident related to your employment. A critical incident may involve, but is not limited to, acts and threats of violence directed towards you or a client, suicidal behaviors or severe ideation on the part of a client, similar events occurring for close associates, implementing interventions that are extremely emotional or intrusive (removal of a child from a home), emotionally difficult investigations or crisis interventions, or critical incidents occurring for clients with whom you have a significant emotional investment.

After contacting the research project and leaving information as to how you might be contacted within the next few hours, you will be contacted by a research team member. At the initial phone contact you will be asked to arrange an appointment for an intervention. At the debriefing you will also be asked to answer an inventory regarding stress symptoms and coping behaviors. The debriefing will occur within twenty-four to forty-eight hours after your initial contact with the research team. This will occur at a mutually arranged time and site between you and the debriefer. This intervention will involve approximately a minimum of two hours. Again such interventions have been shown very useful in other professions and your participation could lead to its development in application to your profession. All information collected will be immediately coded and all information shared will be kept in strict confidence with the exceptions of criteria meeting the mandated reporting requirements regarding child abuse

or intentions to commit violence. It is expected that the intervention of a debriefing will educate and inform participants in recognizing symptoms of critical incident stress and identify patterns of coping. All participants are expected to receive some benefit from participation.

Possible risks might involve the exposure of intense emotions and the revelation of personal issues that may provoke strong emotional reactions. It should be noted that it is the intention of the intervention to facilitate adapting to such reactions. If you should experience such difficulties after the debriefing you are advised to contact the research team, at the number below, for help in facilitating your receiving more intensive services. You should also know that at any time you may quit the study with no consequences and such participation will be held in confidence. All participation will be held in confidence and any questions you may have should be answered at any time by any of the research team or Micheal Weuste. A second risk is the exposure to questionnaires of symptoms and coping. These questionnaires are of a very personal nature but are established in the field of study of trauma and coping. Again it is the group scores of interest in this study and the responses to the questionnaire are confidential and coded to insure your confidentiality. Only summary data of the groups as a whole will be made public.

At the end of the project a summary of the findings will be made available to all institutions and individuals that participated in the study. You may indicate your interest in receiving such information by informing the research team members at any time. Again, please be aware that you may ask questions or halt or limit participation in this research at anytime without consequence.

We hope together we can build interventions for those of us who work with clients at risk to better help us cope with the experiences of critical incidents when working with such a clientele.
If you have questions please contact:

Micheal Weuste
LCSW, LMFT, CADC
20 N. Lancaster
Aurora IL (630) 538-0013

Please read the following paragraph, and if you agree to participate, please sign below.

I understand that any information about me obtained from this research will be kept strictly confidential. I do understand that my participation is voluntary and I may terminate my involvement at any time without penalty. I understand I am required to participate in one thirty-minute interview on the phone and asked to participate in a crisis intervention of a minimum of two hours. I know that if I have any questions regarding this study I may contact Micheal Weuste at 630 538-0013 or contact The Institute for Clinical Social Work at 312 726 8480.

Signed _____ Date

APPENDIX D

IT'S O.K. TO FEEL THE WAY YOU DO...
HANDOUT

IT'S O.K. TO FEEL THE WAY YOU DO... HANDOUT

You have just had a very difficult experience. It is very common for people to experience emotional and physical aftershocks when they have passed through a horrible event. Don't be worried. These are normal reactions, of normal people, going through a normal recovery, from a very abnormal situation. It's O.K. to feel the way you do...

Some times these emotional and physical aftershocks (or critical incident stress reactions) appear immediately after the traumatic situation. Sometimes they may appear a few hours or few days late. And, in some cases, weeks or months may pass before the stress reactions appear.

The signs and symptoms of stress reactions may last a few days, a few weeks, or a few months, and occasionally longer, depending on the severity of the traumatic event. With the understanding and support of loved ones or other peers the stress reactions usually pass more quickly. Occasionally, the traumatic event is so painful that professional assistance from a counselor may be necessary. This does not imply mental illness or weakness. It simply indicates that a particular event was too significant for one to manage entirely on their own.

Here are some of the symptoms and very common signs of a critical stress incident for the individual.

Physical Reactions

Fatigue, Problems with Sleep
Nausea, Muscle Tremors
Dizziness, Profuse Sweating
Headaches, Problems Digesting

Cognitive Reactions

Problems with Concentration
Difficulty with Problem Solving
Difficulty with Decisions
Difficulty Naming Things or doing familiar
Tasks, Memory Loss, flashbacks of Incident
Constantly Thinking about the Incident

Emotional Reactions

Nervousness, Feeling Depressed
Extreme Guilt about the Incident
Fears, Emotional Numbing, Irritability
Identifying with the Victims

APPENDIX E
INSTRUCTIONS FOR RESEARCH TEAM

INSTRUCTIONS FOR RESEARCH TEAM

Before a phone interview please examine the contents of the folder provided for each subject. It should include a sheet for demographics, a book for you to read for both the administration of the Trauma Inventory and the Coping Inventory, and four score sheets. Two of the score sheets are for each meeting with the participants.

Be sure to call at the designated time. Before you begin the interview greet the subject and thank them for participating. During the initial interview introduce yourself, remind them of the confidential nature of the study and again read them the consent to participate. If they do consent, mark down on the demographic form the date and time of consent. On the folder will be a blank for the recording of their coded subject number. Please fill in the month and day of birth digitally to create the code. **IMMEDIATELY ARRANGE FOR THE INTERVENTION APPOINTMENT.** Please arrange with them an appointment at one of the offices arranged for and attempt to be very flexible in arranging the time with their convenience in mind. Remember that this intervention needs to occur within forty-eight hours after their initially contacting the research team.

After greeting the individual at the time and place for the intervention have the participant sign the consent form. If the participant is still going to participate begin by informing them that you will be asking many questions and their complete frankness is appreciated. Ask them not to over think their responses. Now, remind them that some of the questions are personal but are supported in the research as important factors to understand in this study. Remind them of the confidentiality of the study.

Begin questions with the demographics form provided. Remember to ask only the blanks indicated for the specific interview among the two you are conducting. Then, during the first interview begin with the TSI and then the CRI. In interview two reverse the order of administration.

If subjects have a response to the inventory, remain empathic and supportive. Remind them that you have more questions and request to continue. If the subject is stating they wish not to continue thank them and respectfully end the interview. If they request assistance please have them contact the lead researcher, Micheal Weuste, at the original research phone number, 630-256-0237. If you have any questions contact Micheal Weuste at that number.

Now you can begin the intervention as you were trained moving through each of the phases of the critical incident debriefing. At the end ask if the individual has any questions or responses at this time. Arrange a phone appointment for the second interview scheduled one month after their initial contact with the research team.

During this follow up phone interview inquire how the individual is doing and if they have any questions. Then again administer the two inventories reversing the order.

Then ask the questions indicated on the questionnaire form. Again ask the participant if they have any questions or comments. Thank them for their participation. Remind them that until August 1, 1998 they can still contact the study at 630-538-0013.

!!!!!!!THANK YOU FOR ALL YOUR HELP!!!!!!

APPENDIX F
DEMOGRAPHIC AND QUESTIONNAIRE DATA

DEMOGRAPHIC AND QUESTIONNAIRE DATA

CODE _____ NAME _____

WORK PHONE _____ HOME PHONE: _____

AGE: _____

GENDER: M F

MARITAL STATUS _____

RACE 1. African American

2. Latino

3. Asian American

4. Native American

5. European American

6. Other

EDUCATION:

1. High school

2. College

3. Graduate

NUMBER OF CHILDREN _____

HOURS WORKING: Full time Part time

AREA OF COLLEGE OR GRADUATE STUDY: _____

YEARS IN SOCIAL SERVICES ____ YEARS IN CURRENT POSITION ____

BRIEF NARRATIVE OF CRITICAL EVENT: (what happened, when, who involved)

HAS ANYTHING LIKE THIS HAPPENED TO YOU BEFORE?: (Note # of times)

APPROXIMATE INCOME: 1. 15,000- 20,000

2. 20,000- 30,000

3. 30,000-40,000

4. 40,000- 50,000
5. 50,000- UP

DEMOGRAPHICS (page two)

SECOND INTERVIEW

1. HAS ANY THING SIGNIFICANT TO YOU OCCURRED SINCE OUR LAST INTERVIEW?:

2. ARE THERE ANY COMMENTS YOU WISH TO MAKE OR INFORMATION YOU BELIEVE THE RESEARCH TEAM SHOULD KNOW MORE ABOUT REGARDING YOUR EXPERIENCE?:

3. WHAT DO YOU BELIEVE ASSISTED YOU THE MOST OVER THE PAST MONTH?

4. WHAT IF ANYTHING WAS MOST USEFUL FOR YOU IN THE INTERVENTION?

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